About the publication

Information wants to be free. Information also wants to be expensive. Information wants to be free because it has become so cheap to distribute, copy, and recombine — too cheap to meter. It wants to be expensive because it can be immeasurably valuable to the recipient. That tension will not go away. It leads to endless wrenching debate about price, copyright, "intellectual property", the moral rightness of casual distribution, because each round of new devices makes the tension worse, not better. zufuizf

— Stewart Brand The Media Lab - Inventing the Future at M.I.T.

The tension underlying the value of information translates into two predominant software paradigms: Free and Open Source Software (FOSS) and proprietary software. The criteria for differentiation are based on control over the software/information. With proprietary software, control tends to lie more with the vendor, while with Free and Open Source Software, it tends to be more weighted towards the end user. But even though the paradigms differ, they use the same copyright laws to reach and enforce their goals. From a legal perspective, Free and Open Source Software can be considered as software to which users generally receive more rights via their license agreement than they would have with a proprietary software license, yet the underlying license mechanisms are the same.

However, as legal systems differ throughout the world there are significant differences in how Free and Open Source Software licenses are treated in different countries, and it can be difficult to obtain reliable information on national interpretations. The IFOSS Law Book engages with this issue by providing a clear yet thorough analysis of Free and Open Source legal matters by national legal experts. The first edition covered thirteen countries. This second edition adds four more countries, bringing the number to seventeen and new editions will expand over time to explore more. The purpose of the IFOSS Law Book is to provide a clear, compelling and simple way for legal professionals, students and academics, and broader policy makers, to contextualize the ramifications and imperatives of the field in their own nation, and in the nations of others. This lofty goal is supported by necessity; the very nature of Free and Open Source Software assumes collaboration to drive value, and such collaboration is by the nature of the Internet not confined to national borders, yet it is simultaneously defined in legal terms by their differing systems, laws and interpretations of best practice in the management of creative goods.

The IFOSS Law Book does not endeavour to be the sole required reference for legal aspects of Free and Open Source Software. Rather, it is intended to become the place where legal experts confronted with a legal question under a foreign jurisdiction can turn for an understanding on how Free and Open Source Licenses are treated under that law. From this starting point, experts can seek specific information or seek the advice of a local legal counsel. In short, the

IFOSS Law Book is positioned as a bench mark reference that helps people quickly contextualize the key issues in the field.

Finally, it is important to point out that the IFOSS Law Book is not written for those who endorse FOSS for ideological or practical reasons. The publication is targeted towards all those that encounter FOSS in their profession.

Free Software or Open Source Software

The Free Software and the Open Source Software movements largely pursue similar goals and endorse similar software licences. But historically, both movements carry different emphases. Where the "Free Software" movement focuses on the rights (the four freedoms) which Free Software provides to its users, the "Open Source Software" movement points to its Open Source Definition and the advantages of peer-to-peer software development. The IFOSS Law Book does not endorse any emphasis. It uses the term Free and Open Source Software (FOSS) to cover both Free Software and Open Source Software.

FOSS licences

The goals of FOSS are realised through licences governed by copyright law. These licences tend to take an unusual form compared to traditional proprietary documents. Instead of providing a narrow grant of use with a long list of exceptions and restrictions, FOSS licences provide a broad grant of use with few restrictions. These licences are often divided into three categories: non-Copyleft, weak-Copyleft and strong-Copyleft. It is the analysis of these licenses under local copyright law by local legal experts that lies at the heart of the IFOSS Law Book.

Working method

This law book is a product of its time. Its management is distributed across three countries and two continents, while its contributors are linked through technology as much — if not more — than their formal legal positions and firms. The two threads underlying the organization of the publication are that the book itself will provide a neutral and lasting reference, while the local chapters will be developed in a flexible enough manner to accurately reflect the state of the art regarding interpretation for the nation in question. As such the book actually has two forms; an "evolving" form based at http://www.ifosslawbook.org/ that sees each chapter continually refined and provides a mechanism for any reader to contribute notes and clarifications as necessary, and a "complete" form that is physically published through Open Source Press, Germany.

Like any work of reference, this book is intended to be accurate and trustworthy, and it employs several methods to deliver the highest level of fidelity in this regard. The first and foremost is the careful selection of chapter authors. All of the initial authors are experienced, driven professionals sourced from the

European Legal Network, the largest network of its kind, and the primary global resource for Free and Open Source Software legal knowledge as of 2014. The second method is to openly and continuously invite the broader network to review, comment and improve the chapter texts, positioning the publication in clear terms as an open reference intended to benefit all. The third and by no means least important method is to ensure that third party experts — be they legal professionals, technical experts or from another field altogether — can easily register and provide feedback on chapters and the book itself through the main website.

The governance of the IFOSS Law Book is currently limited to a handful of parties. As the publication progresses, it will develop a formal governance structure based on maintaining objective analysis, improving its potential for sustainability and ensuring fair representation for diverse legal and social systems. This governance will be drawn from existing contributors, the network from which they originate and from the example set by other publications in this field. As with all other aspects of this publication, contributions towards its development is welcomed from all interested parties.

The IFOSS Law Book currently provides three forms of information for each country covered:

- An introduction to software protection (in general) in the nation
- A general analysis of FOSS under local legislation
- A overview of local FOSS cases (if any)

The second edition is edited by Ywein Van den Brande, Shane Coughlan and Till Jaeger.

License

The IFOSS Law Book as a whole is published under a CC-BY-ND license. The text can be freely copied and shared by any party under these conditions. Physical copies may be purchased, but it is also available at no cost in electronic form at our website.

Conclusion

FOSS is no longer a new, challenging and unproven method regulating the creation, use and redistribution of creative goods for digital purposes. In the past twenty five years it has matured into an accepted, proven and compelling proposition for commercial and non-commercial entities alike, delivering value in terms of both productivity and economic activity. As it has matured, so too has the legal understanding regarding its use on a nation by nation basis. The first edition of the IFOSS Law Book contributed hereto with a comprehensive overview of the understanding of FOSS under the legislation of thirteen countries.

It is with this in view that the editors present this second edition of the International Free and Open Source Software Law Book (IFOSS Law Book) that covers four more countries. We hope and expect that it will provide a useful and trusted source for users and advisors seeking information on Free and Open Source Software issues under foreign legislations.

Enjoy the book.

Ywein Van den Brande — Shane Coughlan — Till Jaeger July 2014

A history of FOSS law and licensing

author:[Engelfriet,Arnoud]

Surprisingly, programmable computers are older than copyright law: Charles Babbage's analytical engine of 1837 predates the Berne Convention for the Protection of Literary and Artistic Works (1886). However, unlike the Convention, Babbage's mechanical contraption designed to perform mathematical calculations never became a real-world success. Several special-purpose machines, such as the Hollerith tabulating machine, did sell on the market in the late 19th and early 20th century. The first computers in the modern sense only became available in the 1950s, thanks to ground-breaking research by John von Neumann and Alan Turing in particular.

Companies such as IBM that provided these computers as part of what we to-day would call "solutions": businesses were provided with specially-programmed computers to support certain business activities. Customers would pay for continued support and new programs as part of the deal, but no one would consider buying or selling computer programs by themselves. Users would get together to share their in-house software developments with others, eventually leading to the building of pools of software. This was actually encouraged by most vendors, as it stimulated the sale of hardware that could use this software. One might thus say that the idea of free and open source is as old as the computing business itself.²

Age of the shrink-wrap

New developments in computing power over the next decade caused a fundamental shift away from this model. A landmark event occurred in 1969 when IBM unbundled its hardware and software activities, effectively giving birth to the

^{1&}quot;(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^217}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

software industry as such.³ A further stimulus for this market came from the personal computer, a low-cost alternative to the "big iron" mainframe computers that were mainly in use at the time. In the early 1970s, several do-it-yourself kits became available that allowed hobbyists to build their own personal computers, and in 1977 the Commodore PET and the Apple II appeared on the market as the first ready-to-use computers.⁴ With hardware and software products separated, software as such was ready to develop as a market. But many software vendors were concerned about the viability of this market, as it was unclear which legal protection they would receive.

Debate among lawmakers and lobbyists led to various proposals, ranging from copyright and patent law to a *sui generis* right specifically designed to protect software. After much debate, a consensus emerged that copyright would be the most appropriate legal means.⁵ The USA was the first to adopt copyright protection for software.⁶ The European Economic Community followed in 1991 with its Software Directive,⁷ which was largely based on the US law but with more liberal provisions on reverse engineering. With copyright protection firmly in place, software vendors were able to sell their software "as a book" (to quote from the Borland software licenses) by charging royalties for each copy sold.⁸ This created a large market for software, sometimes called the "Age of the Shrink-wrap" because of the way that software was made available: in large, shrink-wrapped boxes.

Software distributors did something peculiar in this market: while software was offered "as a book", they did not actually sell the software. They included long legal documents that solemnly declared that the software was merely licensed and that the user had no rights other than as provided in this license. The legal validity of these licenses has been hotly disputed but today seems to be grudgingly accepted in the general case. Two areas of particular attention in these licenses are the restriction of statutory rights, such as the right to reverse engineer the software, and the disclaimer of all warranties and liabilities.

The right to reverse engineer is a peculiar one. As a general rule, buyers of a product are expected and permitted to examine what they buy and to discover

 $^{^335}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

⁴15 U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

 $^{^{5} \}rm For}$ example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^6{\}rm The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

 $^{^7} World$ Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

⁸The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

⁹The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of_1976.

how it works. Copyright (or patent) law may restrict the building and selling of cloned products, but the investigation itself is not restricted. For software, these licenses would put this expectation on its head. No one was permitted to discover how the licensed software works — not even if a compatibility issue or a serious bug arose. This gave the licensor a very comfortable position, as he could now charge maintenance fees for any and all work to be done on the software. Legislators did try to introduce at least some right to reverse engineer software for compatibility purposes, but these clauses are generally regarded as weak and risky to invoke. ¹⁰

Free software and the GPL

As soon as software by itself started to become a viable market, access to software in its human-readable source code form was becoming more and more difficult. Software companies regarded their source code a treasured business secret (in today's terms: their intellectual property) and severely restricted its access and distribution to third parties. For famous MIT hacker Richard M. Stallman, this "hoarding" of software was simply unacceptable. Software should be freely available to all, and its programmers should not be able to set legal or other restrictions on other people's use of the code. ¹¹ In 1983, Stallman quit MIT and founded what would become the Free Software Foundation (FSF), an organisation dedicated to creating and stimulating software that would be freely available to all.

To help achieve this goal Stallman drafted the *GNU General Public License* or GPL, a software license that allows anyone to freely use, distribute and adapt the licensed software at no charge. The only restriction he added was that any adapted or extended version of the software could only be distributed under the GPL as well. This ensured the continued availability of the source code to anyone who came in contact with the software. With this license, he turned copyright on its head—an early name for the model is *copyleft*.

Fifteen years later, Stallman's work was shown to be a resounding success. Almost single-handedly he had written most of the software needed to program and use a general-purpose computer. Only one significant part was missing: the kernel, the key part of a computer operating system that controls all software and interfaces with the underlying hardware. Operating systems are expensive and difficult to develop, but in 1991 a Finnish second-year computer science student announced he was going to create one as "just a hobby, won't be big and professional". His creation Linux (mixing his first name Linus and Unix according to hacker tradition) would become one of the most valuable pieces of software ever written. Torvalds chose to use the GPL, calling it "one of the very best design decisions" he ever made. 12

¹⁰Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

¹¹17 U.S.C. §102(a).

¹²17 U.S.C. §411(a).

Legal entanglements around BSD

If not for a legal battle around free software elsewhere, Linux might not have been. The Berkeley Software Distribution (BSD) was a collection of extensions, patches and add-ons to the Bell Labs Unix operating system created at Berkeley University. Based on the principles of free and open source software, the BSD had already been available since about 1978. Over the years, BSD morphed into a complete operating system, culminating in the so-called Networking Release 2 in June 1991. All code was available under the BSD license, allowing anyone to use it provided credit was given to the original authors.

AT&T, owners of the Unix copyrights at the time, felt that this release infringed on its copyrights and filed a lawsuit against the university. In a counterclaim, Berkeley alleged that AT&T had used BSD code without adhering to its license, as credits and copyright notices had been removed. In the suit dragged on until a settlement was obtained in 1994. By that time however the development of BSD had slowed down significantly, allowing Linux to gain developer attention. Torvalds has observed he would not have created Linux if the BSD operating system had been available to him at the time.

The rise of open source

With the Linux kernel available, the free software movement finally was in a position to make significant growth and maybe overtake the "proprietary" world. However, it only had limited success. Over the years, the FSF had developed a rather confrontational attitude towards companies that did not subscribe to its ideas, which made companies hesitant to adopt free software. A related complication was that the GPL was often misunderstood by lawyers, creating a false belief that using any piece of GPL software in one's product would require the "freeing" of the entire software stack.

In 1998 Netscape Communications announced that it would release the source code of its Web browser. This spurred a group of prominent free software developers to promote free software principles under the newly-coined term "open source": collaboration between programmers world-wide who jointly improve software in a way that no individual company could achieve. ¹⁷ The Open Source Initiative (OSI) was subsequently founded as a public benefit corporation, which amongst other things offers a certification program for open source software licenses. ¹⁸ Their trademark application on the term "open source" was refused. Certified licenses now wear the label "OSI Certified Open Source".

The choice for the term "open source" has not been well received by the free

¹³17 U.S. Code §102(a).

¹⁴17 U.S. Code §201(a).

¹⁵17 U.S. Code §201(b).

 $^{^{16}} Id.$

 $^{^{17}17}$ U.S. Code §101.

¹⁸17 U.S. Code §204.

software community. The main point of criticism is that "free software" focuses on freedoms for all users, while "open source" waters down the focus to just community-driven development.¹⁹ In recent years the term *free and open source software* or FOSS has arisen as a neutral alternative, a practice which this law book also adheres to. A lesser-used variant is *free/libre/open source software* (FLOSS), which uses "libre" to clarify the meaning of free as in "freedom" rather than as in "at no charge".

Legal validity

There are hundreds of FOSS licenses, although they can be grouped roughly into three categories. The first category is often referred to as the academic licenses, which basically require that credit be given and the authors are shielded from warranty claims. The second category provides copyleft—the requirement that source code be made available to users, including derivative works. The third category is somewhat of a compromise: weak copyleft requires that source code of the software itself (and modifications to it) are shared but larger works may be kept proprietary. Most FOSS today is licensed under the GPL, the canonical copyleft license.²⁰ The BSD license is the most popular academic license. Netscape used the weak-copyleft Mozilla Public License when releasing its browser in 1998.

Much has been written about the legal validity of FOSS licenses in various jurisdictions.²¹ Legal debate focuses mostly on the copyleft provisions: what is the scope of a "derivative work" and how far can a license extend the obligation of relicensing under a copyleft license? Other legal areas of contention are the limitations of liability and the interpretation of rights and obligations under international law. However, the number of lawsuits worldwide challenging these licenses can be counted on the fingers of two hands. The aforementioned lawsuit around BSD may well be regarded as the first, at least in spirit.

In 2002, it looked like the GPL would have its day in court when the GPL-licensed MySQL database became subject of a lawsuit between owner MySQL AB and the US software company Progress.²² Progress had allegedly created a derivative work of MySQL by adding support for its own database format. However, after MySQL obtained a preliminary injunction, the parties settled before the question could be addressed by the court.

The Software Freedom Law Center has filed several lawsuits against misappropriation of GPL code. Several cases have been filed focusing on Busybox, starting with *BusyBox vs Monsoon* in 2007.²³ However, all cases so far have

¹⁹17 U.S. Code §201(a).

²⁰17 U.S. Code §101.

²¹1-6 Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.

 $^{^{22}}Id.$

 $^{^{23}}See$, Id.

been settled out of court. Few others have brought cases. Two notable examples are $SCO\ vs.\ IBM$ and $Wallace\ vs.\ FSF$. The less said about those legal disasters the better. 24

An important milestone was the 2008 JMRI lawsuit, focusing on model rail-road train software licensed under the little-used "Artistic License". In a much-welcomed ruling, the US Federal appeal court ruled that the principle of open source licensing was a valuable goal that copyright law ought to support. ²⁵ In addition, the court held that the source code sharing obligations were limitations of the copyright license and not mere covenants to the license. This distinction is important, as violating a license limitation allows the full force of copyright law to be used against the licensee. A mere covenant has to be addressed as a contract breach. ²⁶

In Germany, Linux kernel hacker Harald Welte did manage to achieve several legal successes against companies using his GPL-licensed netfilter software. Notably, Welte obtained injunctions against D-Link, Fortinet and SMC (Skype).²⁷ Subsequently, German courts had little trouble accepting the GPL as a legally binding license agreement and enjoining those who did not adhere to its terms.²⁸ Welte founded the *GPL-violations.org* project in January 2004 to raise public awareness of the infringing use of free software.²⁹ The project has reported numerous successful settlements and a 100% success rate in enforcing its licenses.

Towards the future

FOSS shows no sign of slowing down. Linux is widely in use in embedded environments (mobile phones, televisions, cars, robots) and the open source Firefox web browser is the most popular alternative to Microsoft's Internet Explorer. Most of the infrastructure of the Internet runs on open source software.

Licensing-wise, FOSS is here to stay. There is consensus that the principles of FOSS are legally sound. FOSS licensing is also being recognized as valuable by policymakers. Lawsuits in the coming years may address some of the open issues, such as the scope of derivative works and liability for FOSS developers. More is to be expected from voluntary compliance and a growing maturity in how the legal community approaches FOSS licensing principles. We have come a long way already.

Belgium

author:[Van den Brande, Ywein]

²⁴1-6 Nimmer §§6.02, 6.03.

 $^{^{25}}Id.$

 $^{^{26}1-6}$ Nimmer §6.03.

²⁷17 U.S.C. §201(a).

 $^{^{28}}$ 1-6 Nimmer §6.06(A).

 $^{^{29}}Id.$

Introduction to software protection under Belgian law Body of law

Copyright protection of software is regulated in Belgium under the Software Act of 30 June 1994³⁰. This law transposes the Council Directive of 14 May 1991 on the Legal Protection of computer programs (91/250/EEC) into Belgian national law (hereinafter referred to as the "Software Directive")³¹. The Software Act is the lex specialis with respect to the general Belgian Copyright Act as lex generalis³². This means that the general Copyright Act will apply to software, to the extent that the Software Act does not contain any specific provisions.

Software Act: Object of protection

Computer programs (including the preparatory material³³) are protected by copyright and are equivalent to literary works within the meaning of the Berne Convention for the Protection of Literary and Artistic Works³⁴. According to article 2 of the Software Act only original computer programs benefit copyright protection. Computer programs that are not original don't benefit copyright protection. The ideas and principles behind computer programs or technical interfaces are explicitly denied copyright protection³⁵.

The originality requirement means that the computer program needs to be an own intellectual creation of the author. No other criteria may be used to determine whether the program can be subject to copyright protection³⁶. There is no legal definition of the originality requirement. Legal doctrine established that the amount of work involved is not relevant. A computer program is only deemed to be the own intellectual creation of the author if the personal stamp of the author is visible in the work. Therefore it is required, but not sufficient, that the author has freedom of choice when he creates his work. If the author has no choice but following a path that leads to one single outcome, no originality is involved. Thus, merely registering or copying the reality or executing a functional routine is not considered to be an original intellectual activity in

 $^{^{30}\}mbox{``(Congress shall have the power...)}$ To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^{31}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

 $^{^{\}hat{3}2}35$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{^{\}bar{3}\bar{3}}15$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

³⁴For example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{35}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

 $^{^{36}}$ World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

the sense of the Copyright Act³⁷. Where Belgian legal doctrine stresses the need that the personal contribution of the author must be sufficiently intensive ("Le droit d'auteur ne devrait s'appliquer qu'à des créations qui révèlent un niveau d'inventivité personnelle d'une certain intensité"³⁸), they agree that the threshold as applied by the courts is fairly low³⁹.

Authors/Beneficiaries

The general Copyright Act provides that the copyrights on a work belong to the author, whether the author is an employee or not⁴⁰. Article 3 of the Software Act however, provides that where computer programs are created by one or more employees or functionaries in the execution of their duties or following the instructions given by their employer, the employer will be deemed to be the right-holder of the economic rights in the computer programs so created, unless expressly provided otherwise⁴¹.

Article 2.3 of the Software Directive provides that "the employer exclusively shall be entitled to exercise all economic rights". The wording "entitled to exercise" creates a certain ambiguity: is the employer the owner of the economic rights or merely the mandatory of his employees? Case law confirmed that the Belgian lawmaker has chosen for the first interpretation⁴².

Exclusive rights

According to article 5 of the Software Act the economic rights comprise the exclusive right of (a) the permanent or temporary reproduction of a computer program by any means and in any form, in part or in whole, (b) translation, adaptation, arrangement or alteration of a computer program, and (c) distribution of the computer program, including the rental and lending, of the original computer program or copies thereof to the public. This is a slight diversion of the Software Directive, as article 4(c) of the Software Directive only mentions the rental of computer programs.

Exceptions to exclusive rights

Article 5(c) of the law expressly provides that the first sale in the European Community of a copy of a program by the rightholder or with his consent shall exhaust the distribution right of that copy within the Community, with the exception of the right to control further rental of the program or a copy thereof.

 $^{^{37} \}rm{The}$ final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

 $^{^{38} \}rm The~U.S.$ Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_of_1976.

³⁹Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

 $^{^{40}17}$ U.S.C. $\S 102(a).$

⁴¹17 U.S.C. §411(a).

⁴²17 U.S. Code §102(a).

The other exceptions are set forth in article 6 of the Software Act:

- (1) In the absence of specific contractual provisions, no authorization by the rightholder is required for acts necessary for the use of the computer program by the lawful acquirer in accordance with its intended purpose, including error correction.
- (2) The reproduction by way of a back-up copy by a person having a right to use the computer program may not be prevented, insofar as that copy is necessary to use the program.
- (3) The person having a right to use a copy of a computer program is entitled, without the authorization of the rightholder, to observe, study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program if he does so while lawfully performing any of the acts of loading, displaying, running, transmitting or storing the program.

This article basically restates the three exceptions of article 5 of the Software Directive.

Article 7 of the law explains in detail in which circumstances no authorization of the right holder is required to reproduce and/or translate a computer program in order to obtain the information necessary to achieve the interoperability of an independently created computer program with other programs⁴³.

The law expressly provides that article 6, section 2 and 3 and article 7 are compulsory law⁴⁴. Hence, contractual provisions to the contrary are deemed not to exist.

However, the exercise of these statutory rights is often difficult in practice because the licensee generally has no access to the source code of the application and it is not obvious to enforce access legally⁴⁵.

Moral rights

Article 4 of the Software Act specifies that the moral rights on software are regulated by article 6bis 1 of the Berner Convention. This Convention acknowledges a minimum protection, namely the paternity right and the right to oppose to modifications and applications which might affect the honor or reputation of the author⁴⁶. These two rights remain in force after the transfer of the proprietary rights⁴⁷ and following the death of the author, at least⁴⁸ until after expiry of the proprietary rights⁴⁹.

⁴³17 U.S. Code §201(a).

⁴⁴17 U.S. Code §201(b).

 $^{^{45}}$ Id.

 $^{^{46}17}$ U.S. Code $\S 101.$

⁴⁷17 U.S. Code §204.

⁴⁸17 U.S. Code §201(a).

 $^{^{49}17}$ U.S. Code §101.

The right of distribution has not been specified in the convention⁵⁰. Nevertheless, some authors argue that this right also must be recognised as a moral right on software⁵¹ as in the absence of a specific regulation in the Software Act, the general regime⁵² for literary works needs to be applied.

Moral rights are generally considered to be inalienable. This does not mean that it is impossible to renounce moral rights 53 . It means that the global renouncement of the future exercise of moral rights is void, also concerning moral rights on software 54 . However, some authors wonder whether the principle inalienability of moral rights is desirable for technological applications such as software 55 .

Term of protection

The same term as for works of literature and art applies: 70 years as of January 1 following the death of the author⁵⁶. In case of co-authors, the protection of the work lasts until 70 years as of January 1 following the death of the longest living author.

Copyright assignment

The law⁵⁷ provides that the copyrights in works (other than software) made by employees in the course of the execution of their usual tasks are not automatically transferred to the employer. A written clause stipulating the transfer in the individual employment contract, the applicable statute or collective agreement is required. If the transfer relates to the exploitation of the work in a form that is still unknown, the employee is entitled to a share in the gain. Article 3 of the Software Act however, provides that where computer programs are created by one or more employees or functionaries in the execution of their duties or following the instructions given by their employer, the employer will be deemed by law to be the right-holder of the economic rights in the computer programs so created, unless expressly provided otherwise in a contract⁵⁸. The moral rights are not transferred.

The exploitation rights on works can be freely transferred, e.g. in case of works made for hire. However, contracts on the transfer of copyrights do have some particularities under Belgian law. First of all, they must be in writing and be clear. When a clause is unclear, it will be explained restrictively and to the

 $^{^{50}}$ 1-6 Melville B. Nimmer, Nimmer on Copyright $\S 6.03$. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.

⁵¹ Id.

 $^{^{52}}See,\ Id.$

⁵³1-6 Nimmer §§6.02, 6.03.

⁵⁴ Id

 $^{^{55}1\}mbox{-}6$ Nimmer $\S 6.03.$

⁵⁶17 U.S.C. §201(a).

⁵⁷1-6 Nimmer §6.06(A).

 $^{^{58}}Id.$

advantage of the author. The extent of the transfer (what rights, duration, methods of exploitation and compensation) needs to be described. Another particularity is that the assignment of rights in future works is only valid for a limited period in time⁵⁹. A transfer of copyrights in future works that is temporally unlimited is not valid. Therefore under Belgian law, the wording "for the entire term of copyright protection" is more effective than "temporally unlimited". Further it is mandatory to stipulate the genre of the work that is the subject matter of the transfer⁶⁰. The term genre is ambiguous and often leads to confusion. Is it meant to serve in a peer-to-peer environment, strictly on a mobile device, or merely as documentation? All these exploitation methods and uses of the same work may qualify as different genres under Belgian law and should be named in the agreement. The transfer of rights with respect to still unknown exploitation methods is void under Belgian law⁶¹.

In order to control the copyright situation better, it may be useful to collect all copyrights concerning a FOSS project within one organisation.

Special measures

The Software Act refers to the general Copyright Act regarding the measures to enforce copyrights. Besides these general measures, a specific criminal sanction has been created for those who bring into trade or possess for commercial purposes a copy of a computer program, of which they know or can reasonably presume that it concerns an unlawful copy, as well as for those who bring into trade or possess for commercial purposes tools which are exclusively aimed at facilitating the unlawful removal or avoidance of technical means which protect the computer program⁶².

Unprotected software and public domain software

As set forth above, only software that is original in the sense that it is an intellectual creation of the author benefits copyright protection. Non-original software does not come into consideration for copyright protection and can, in principle, be used freely 63 .

Under Belgian law, public domain software is considered as software to which the author has given up all rights and on which nobody is able to enforce any rights. This software can be used, reproduced or executed freely, without permission

 $^{^{59}}Id.$

⁶⁰17 U.S.C. §103(a).

 $^{^{61}17}$ U.S.C. §101.

⁶²¹⁻³ Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S.
340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp.
2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

⁶³Lothar Determan, Dangerous Liaisons—Software Combinations as Derivative Works? Distribution, Installation, and Execution of Linked Programs Under Copyright Law, Commercial Licenses, and the GPL, 21 Berkeley Tech. L. J. 1421, 1430 (2006).

or the payment of a fee⁶⁴. Public domain software can in certain cases even be presented by third parties as own work, and by modifying the original work, third parties can take certain versions of the public domain software out of the public domain again⁶⁵.

Legal theory states that the author of FOSS, contrary to the author of public domain software, has in no way whatsoever given up his rights on his work⁶⁶. FOSS supports on the rights of the author (the copyright) to impose FOSS license conditions⁶⁷. Under Belgian law, FOSS is considered as software to which users generally receive more rights via their license agreement, than they would normally have with a proprietary software license⁶⁸. However, the FOSS license conditions need to be respected by the user.

Analysis of FOSS under Belgian law

The FOSS license deviates so much from conventional license agreements that under Belgian law it needs to be considered as a sui generis license agreement⁶⁹. However, it is still based on the same mechanisms.

Copyrights

Although FOSS can be written by one person or be owned by one legal entity 70 , generally speaking, after some time the software is the result of the work of several authors who can make claims to it. The question is whether later additions create a collaborative work (a work created by collaborating authors), or whether the original software is the end work and every contribution created during the further development of the software, a derivative work. The legal consequences are different.

Qualification of FOSS

For it to be work that was created following collaboration it is not necessary for every co-author to have contributed equally⁷¹. In the case of FOSS this is rarely the case. Nor is it required that the co-authors worked on it at the same time. In most cases this will not be the case. However, to be a co-author, the contribution needs to be copyright protected. The provider of an idea is

⁶⁴ *Id*.

⁶⁵1-6 Nimmer, §6.05.

⁶⁶17 U.S.C. §103(a).

 $^{^{67}}Id.$

⁶⁸1-3 Nimmer §3.02.

⁶⁹ Id

 $^{^{70}17}$ U.S.C. § 101.

⁷¹⁻³ Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

not a co-author, nor the person who corrects a technical error or merely follows instructions 72 .

It is also necessary that the work was made by two or more people who created the software in consultation, from the same mind. Prof. Berenboom⁷³ summarises it as follows: The thing that characterises a co-author is the intimate entanglement ('intimité) of his contribution with the contributions of other authors, which is expressed by the indispensable character in the entire work: without this contribution the work would certainly not have seen the light of day, and it would have been different.'

Whereas the first version of the software, if written by several people, can in many cases be qualified as a work created following a collaboration, this seems much less the case for the later versions, which are based on the original work, without, however, there being any "consultation" between the authors. These later versions will be qualified as derivative works. Therefore, in terms of the legal consequences, a distinction needs to be made between the rights of the original co-authors and the rights of people who carry on based on the original work.

Rights of the original co-authors

Unless the components of the software can be clearly distinguished, it usually concerns "indivisible works"⁷⁴. This concerns work whereby it cannot be concluded clearly what the individual contribution of every author is, e.g. when two authors write a text together.

In the case of indivisible works the authors are free to regulate the exercise of the copyrights by agreement. This freedom goes very far⁷⁵. The co-authors can agree how the program is made public (e.g. as "FOSS") and how decisions regarding the copyrights are made, e.g. by normal or special majorities, or give one of them the right to make all decisions regarding this work⁷⁶. They can also reach all kinds of agreements relating to the moral rights⁷⁷, such as under whose name the work will be published.

If the co-authors have not reached an agreement, neither of the authors is allowed to exercise the copyright separately. Unanimity is required. In the absence of unanimity the court decides. The court will decide equitably and according to custom. The court will take into account good faith⁷⁸ and apply it to the (verbal) agreement which in fact constituted the basis for the collaboration and the production of the software. You don't work together accidentally.

⁷²17 U.S.C. §201(c).

 $^{^{73}1\}text{-}6$ Nimmer $\S 6.05.$

 $^{^{74}}Id.$

 $^{^{75}}Id.$

 $^{^{76}}Id.$

⁷⁷ *Id*.

 $^{^{78}}Id.$

Belgian law stipulates one exception. Every author has the right to, in his name and without intervention of the other authors, institute legal proceedings for an infringement of copyright and demand damages for his part⁷⁹. This right also implies the right to stop an infringement⁸⁰. However, in some cases the lack of unanimity may result in the inadmissibility of this claim, e.g. if heirs of a programmer are unable to agree as to whether to institute a claim⁸¹.

Authors of derivative works

After some time FOSS will, in most cases, be a derivative work or a composed work. Derivative works and composed works are works the originality of which is supported on existing work(s), of which original characteristics are copied⁸².

The author(s) of the derivative or composed work are the only persons with a copyright on their work. This is an independent and full copyright, which is restricted, however, because the derivative or composed work cannot be operated without the consent of the holder of the copyright on the original work. For usual FOSS licenses this consent is not a problem, subject to respecting the terms and conditions (e.g. regarding further distribution of the derivative work)⁸³. Both authors can enforce their own copyrights in court.

The assignment of copyrights

In order to control the copyright situation better, it may be useful to collect all copyrights concerning a FOSS project within one organisation. The existence of this organisation will simplify the management and enforcing of the joint rights⁸⁴. The collective management of copyrights is perfectly possible under Belgian law, and is usually, but not necessarily, regulated by the fiduciary transfer of copyrights. The fiduciary transfer means that the party to whom the copyrights are assigned shall not act for himself but on account of others who have transferred the rights (the original authors)⁸⁵.

Moral copyrights

FOSS originated in the United States, and therefore attaches less importance to the moral rights of the author⁸⁶. The Open Source Definition specifies that the author of software distributed under a FOSS license cannot oppose the use of the software by certain people and groups⁸⁷ or for certain areas of application⁸⁸.

⁷⁹17 U.S.C. §106.
⁸⁰1d.
⁸¹17 U.S.C. §109(a).
⁸²2-8 Nimmer §8.12.
⁸³Computer Assoc., 982 F.2d at 714.
⁸⁴See, 4-13 Nimmer §13.02(B).
⁸⁵See, Computer Assoc., 982 F.2d at 715.
⁸⁶Id.
⁸⁷Apple Computer, Inc v. Microsoft Corp., 35 F.3d 1435, 1445 (9th Cir. 1994).
⁸⁸See, Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 819 (1st Cir. 1995).

Whether an author is able to give up all his rights on a work is a difficult question under Belgian law in view of the principal indefeasibility of the moral rights⁸⁹. Although renouncement of moral rights is possible in principle⁹⁰, the global renouncement of the future exercise of moral rights is void, also concerning moral rights on software⁹¹.

The author of a work distributed under the FOSS license shall therefore probably be able to oppose any use of his work by people or groups or for certain purposes which affect his honour or reputation, based on his moral rights.

Moral rights are reflected in derivative works⁹². The author of the original work will therefore, based on his moral rights, not only be able to oppose the use by third parties of his work, but also the use of derivative works which affect his honour or reputation.

Enforcing FOSS licenses

The question whether a FOSS license can be enforced under the Belgian legal system depends on whether a valid license was issued. The essential questions are: (i) between whom is a license reached, and (ii) has the license been validly reached?

Contracting parties

If one author makes his work available under a FOSS license, the answer is clear: the license is reached between the licensee and the author. In case of different co-authors, it becomes more complicated. With whom the licensee reaches a contract depends on the mutual agreement between the co-authors.

In most cases FOSS will be the work of several authors who did not work in joint consultation. After all, FOSS is usually realised via a chain of authors who all contributed to the realisation of the program. In so far a new author makes an original contribution to the work, a derivative work is produced⁹³. The licensee of the eventual work will need to have the consent of every author in the chain who made an original contribution to the eventual work, starting with the author of the first work. This consent can be direct, or indirect by giving consent in the FOSS license to the next author to modify and distribute the work.

Most FOSS licenses solve this by creating a contractual bond between the licensee and all authors in the chain⁹⁴. GPL version 3, for instance, contains

⁸⁹ See, Id. at 815.

⁹⁰4-13 Nimmer §13.03(F).

⁹¹ See, Order Re Copyrightability Of Certain Replicated Elements Of The Java Application Programming Interface (hereinafter Order) found at http://www.groklaw.net/pdf3/OraGoogle-1202.pdf.

⁹²¹⁷ U.S.C. §102(b).

⁹³1-2 Nimmer §2.02.

⁹⁴⁴⁻¹³ Nimmer §13.03(B)(2)(a).

the following clause: Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License⁹⁵ and GPL version 2: each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor⁹⁶.

In this way the user of the software obtains a license of all authors in the chain. This chain of licenses is valid under Belgian law.

Validity of the FOSS licenses

An author chooses a FOSS license because he wants to distribute his work and make it available to others -possibly with certain restrictions. For him it is important that he can enforce these restrictions.

Conventional IT agreements are entered into by the explicit acceptance of the terms and conditions by the licensee following the signing of the terms and conditions, by opening the packaging, by clicking or selecting an "I agree" button or by any other action from which acceptance can be deducted. These methods to reach a licensing agreement have been sufficiently tried and tested and, at least between commercial parties, are generally considered to be valid⁹⁷. FOSS licenses which were concluded in the same way will be valid.

Typically, in a FOSS environment, however, software is made available with the simple specification on a website or in the source code of the software that it concerns FOSS. The license usually does not need to be explicitly accepted. Having to click and confirm every time could in some cases interfere with the use of the software. The Open Source Definition opposes demanding explicit agreement with the license conditions with the aim of confirming the agreement between licensor and licensee⁹⁸.

The question is whether in these cases a valid license is entered into. The answer to this question is affirmative⁹⁹. The reason is that the user of a copyright protected work needs to be able to indicate the grounds on which he is able to use the work. Using the software without the author's consent implies a copyright infringement¹⁰⁰. This implies that everyone who wants to use software which they find via the internet, needs to actively look for a license. If the user cannot prove he has a license¹⁰¹, he must refrain from using it. Renouncement of copyrights is not suspected but needs to be proven. The mere availability of a work on the internet does not mean it becomes public domain. It is doubtful whether a user would benefit from disputing the existence of a FOSS license. If the user disputes the conclusion of the FOSS license, this implies no legally

 $^{^{95}\}mathrm{Computer}$ Assoc., 982 F.2d at 708.

⁹⁶ See, BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

⁹⁷See, 4-13 Nimmer §13.03(B)(3).

 $^{^{98}}See, 4-13$ Nimmer \$13.03(F)(2).

⁹⁹4-13 Nimmer §13.03(F)(2).

¹⁰⁰See, Computer Assoc., 982 F.2d at 715.

¹⁰¹See, Computer Assoc., 982 F.2d at 715.

valid copyright license was granted and the user therefore is not allowed to use the software 102 .

However, not all infringements of license agreements are copyright infringements. An infringement only is a copyright infringement if the violation affects the exclusive rights of the author protected by copyright. Violations on clauses that are not based on the exclusive rights of the author do not consist copyright infringement. Typical examples hereof are the non-payment of royalties, insufficient exploitation of the work and the violation of non-competition obligations¹⁰³. These consist mere contractual infringements. This raises the question of the validity of copyleft clauses: is violation of the copyleft clause automatically a copyright infringement? The answer is yes, as set forth under nr. 1.3.5.

Waiver and liability

Typically, FOSS licenses contain very strong exoneration clauses, which discharge the author from all liability¹⁰⁴. The reason for this is that FOSS is often made available without a fee, as a result of which the author generates insufficient income to pay for liability insurances and legal costs¹⁰⁵. Although this reasoning is certainly valid for the amateur programmer, it applies much less for professional programmers who built their business model around FOSS¹⁰⁶. Professional suppliers of FOSS or related services often provide guarantees¹⁰⁷.

One can wonder whether these exoneration clauses comply with the general validity requirements under Belgian law. These requirements are: (i) that the clause does not conflict with public order or compulsory law, (ii) does not cover up personal fraud or an intentional act of the debtor and (iii) does not take away every significance of the entered into obligation or the contract¹⁰⁸. In this sense it is important to look at how the licensor presents the product. For a product that is presented as finished and ready for use, the exoneration clause will be considered invalid much sooner, than for a product for which the licensor clearly formulated a reservation¹⁰⁹.

In so far the three aforementioned conditions have been complied with, exoneration provisions will be enforceable in principle, unless the stipulating party could be considered as a professional seller. The professional seller is deemed to know the defect in the software, and in pursuance of article 1643 of the Belgian Civil Code, contractual provisions of non-indemnity for hidden defects have no effect if the seller knew about the defect at the time of the sale. The professional

 $^{^{102}\}mathrm{Order}\ supra$ Note XXX

¹⁰³See, Id. at 710.

 $^{^{104}4-13}$ Nimmer \$13.03(B)(4).

 $^{105 \,} Id$

 $^{^{106}\,}See,$ John William See v. Christopher Durang and LA. Stage Co., 711 F.2d 141, 143 (9th Cir. 1983).

 $^{^{107}} Id.$

 $^{^{108}}Id$.

¹⁰⁹Mist-On Sys. v. Gilley's European Tan Spa, 303 F. Supp. 2d 974, 978 (W.D. Wis. 2002).

seller of FOSS will therefore be liable in principle, unless he can provide proof of invincible ignorance. In practice this proof will be hard to provide. The fact that the software was provided for free is no defence, but it can be part of the proof that the author doesn't qualify as a professional seller. However, as also professional sellers provide software for free, more proof will be needed.

The copyleft principle

Principle

A characteristic found in different (but not all¹¹⁰) FOSS licenses is the so-called "copyleft" principle. FOSS licenses which incorporate the copyleft principle¹¹¹, lay down by contract that everyone in the chain of consecutive users, in return for the right of use that is assigned, needs to distribute the improvements he makes to the software and the derivative works he makes under the same conditions to other users, if he chooses to distribute such improvements or derivative works. In other words, software which incorporates copyleft FOSS, needs to be distributed in turn as copyleft FOSS. It is not possible to incorporate copyright protected parts of copyleft software in a proprietary licensed work.

The copyleft principle can restrict the commercial possibilities of the software ¹¹². Sometimes warnings are issued for the dangers that companies run if a negligent or vindictive employee were to incorporate a piece of copyleft code in the code of proprietary software. In theory this could mean that the company would be obliged to make its proprietary software available under a copyleft FOSS license. Although caution is necessary, one can ask oneself whether these worst-case scenarios are realistic under Belgian law ¹¹³. The sanction for incorporating copyleft code in proprietary software will usually be restricted to a prohibition to distribute the software which is in breach ¹¹⁴ or the obligation to remove this piece of code from the program. If the unlawful use has caused damage to the author, this damage will need to be reimbursed, but not more than the actually suffered damage.

Validity

The question relating to the validity of the copyleft clause coincides with the question whether an author is able to validly lay down how derivative works need to be distributed. The answer to this question is affirmative. The author of the original work has no rights on the derivative work, but based on his rights on the original work is able to permit or prohibit the distribution of the derivative work. A derivative work can therefore only be operated subject to the consent of the copyright owner of the original work. The Visscher and Michaux phrased

¹¹⁰4-13 Nimmer §13.03(B)(4).

¹¹¹Mist-On Sys., 303 F. Supp. 2d at 976 (W.D. Wis. 2002)

¹¹²Computer Assocs., 982 F.2d at 709-10.

¹¹³BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

 $^{^{114}}See$ v. Durang, 711 F.2d at 143.

this as follows: L'auteur ou les auteurs de l'oeuvre dérivée sont donc "pieds et mains liés" vis-à-vis du ou des auteurs de l'oeuvre première¹¹⁵.

Based on his copyrights an author is entitled to lay down the use of his work for a particular use, or link certain conditions to it. This right to determine the destination of a work was recognised in legal theory 116 based on an interpretation of article 1 of the old Belgian Copyright Act of 22 March 1886. As the old article 1 is an almost literal copy of article 1 of the current Copyright Act, this legal theory also remains valid under the new Copyright Act¹¹⁷. The right to determine the destination not only applies inter partes, but erga omnes¹¹⁸, provided that the third parties, in all reasonableness, should know what the destination is 119. The author can therefore lay down the copyleft condition based on his right to determine the destination of his work.

Certain authors claim that FOSS doesn't need the right of destination for its validity as the author can enforce the FOSS license directly on his economic copyrights¹²⁰. Even though there is a certain merit in this reasoning, one must be cautious. A license infringement does not automatically imply a copyright infringement as this reasoning seems to imply. The non-payment of royalties e.g. is not a copyright infringement, but a "mere" contractual infringement 121. The right of destination is a useful tool to explain why the copyleft clause touches the exclusive rights of the author 122. The right of destination has its use in explaining the extent of the economical copyrights of the author. The right of destination is not a new right, but is part of the economical copyrights set out in article 1 of the Copyright Act^{123} .

All rights are subject to abuse, including the copyright. An author can therefore not randomly exercise his economic and moral rights. A lawful tangible or moral interest needs to be proven. However, exercising his copyrights cannot be considered as an abuse of rights as such. Only in exceptional cases will an author who invokes his copyrights be guilty of an abuse of rights¹²⁴. Licensing a work under a copyleft restriction will in principle not constitute an abuse of right, considering that the author, in general, will be able to prove a legitimate moral or tangible interest. A legitimate moral interest could be wanting to keep his work within the FOSS community, also in a derivative format. Companies which have constructed a business model around distributing software under copyleft restrictions will usually be able to prove a legitimate interest.

However, if an author were to define the license conditions by saying that the

¹¹⁵Computer Assoc., 982 F.2d at 715. ¹¹⁶See, 1-2 Nimmer §2.03(G). ¹¹⁷17 U.S.C §105. $^{118} \rm http://copyright.gov/help/faq/faq-definitions.html.$ $^{119}See,\ Id.$ ¹²⁰See, Computer Assocs., 982 F.2d at 710.

¹²¹http://www.copyright.gov/help/faq/faq-general.html.

¹²²4-13 Nimmer §13.03(F)(4).

¹²³http://creativecommons.org/licenses/publicdomain/.

¹²⁴17 U.S.C. §102(b).

copyleft principle is not only reflected in what is considered a derivative work in copyright terms, but also in other works, this could be considered as an abuse of rights in certain cases¹²⁵. This could be the case for instance if a license were to lay down that work which has been stored on the same carrier as the licensed work needs to be distributed under a FOSS license¹²⁶.

The Software Act specifies: The first sale in the European Union of a copy of a program by the copyright owner or with his consent results in the exhaustion of the right to control the distribution of that copy in the European Union, with the exception of the right to control the further leasing and lending out of the program or a copy thereof.¹²⁷ The right of the author to further control the transfer of a specific tangible copy which has been lawfully released in the European market is therefore exhausted. Nevertheless this does not affect the right of the author to lay down certain conditions regarding the use of the copy, or a certain destination regarding that copy¹²⁸. After all, the free transfer and further distribution also needs to transfer the conditions of the license. The copyleft principle is therefore not, in principle, in contrary to this principle.

Damages

Damage caused by copyright violations are compensated under Belgian law in accordance with the general applicable principles of the unlawful act¹²⁹. This implies that the injured party of a copyright breach needs to be compensated en manière telle que la personne lésée se retrouve dans la situation qui aurait été la sienne si la faute dont elle se plaint n'avait pas été commise¹³⁰ Dual damages, triple damages or other forms of punitive damages are not awarded under Belgian law. Nor are costs reimbursed which the author spent on tracing and prosecuting infringements¹³¹.

Infringements of software copyrights follow the same regime as infringements of every other copyright 132 . The aforementioned principle is therefore applicable in case of copyright infringements of software.

Infringements of software distributed under a FOSS license, do not need to be sanctioned any differently than infringements of proprietary software. After all, FOSS does not belong to the public domain. In no way whatsoever has the author given up his rights.

Certain legal theory¹³³ and case law¹³⁴ assume that the damage to the copyright

 $^{^{125}{\}rm Feist},~499~{\rm U.S.}$ at 350 (1991). $^{126}{\rm Assessment}$ Techs. of WI, LLC v. WIREdata, Inc., 350 F.3d 640 (7th Cir. 2003). $^{127}{\rm 1-3}$ Nimmer §3.04(B)(3)(a). $^{128}{\rm 17}$ U.S.C. § 107. $^{129}{\rm Id.}$ $^{130}{\rm Id.}$ $^{131}{\rm 17}$ U.S. Code §117(a). $^{132}{\rm 17}$ U.S. Code §117(c). $^{133}{\rm Visual}$ Artists Rights Act of 1990, 17 U.S. Code §106A. $^{134}{\rm 17}$ U.S. Code §302(a).

owner will be limited, as the author has made his work freely available via the internet. This argument does not always apply.

Besides establishing a reputation and recognition with the related value creation, an author can have other reasons to make his work 'freely' available ¹³⁵. The author may also have a direct monetary advantage from the free distribution of his work. The simplest way is circulating the free works with advertising. Another way is granting specific services relating to the work. The free circulation of the work ensures the work has many users. The author generates his income from the provision of support and consulting services, or licensing "proprietary addons ¹³⁶". Another business model is the so-called dual licensing model ¹³⁷. This model uses — as the name allows us to deduce- two different licenses. The first license is often a copyleft license. This first — free — license ensures the work is circulated quickly and has a wide range of users. A second license without the copyleft system can then be obtained against payment by interested parties who want to use the work without their own additions being affected by the copyleft principle.

FOSS cases in Belgium

No cases have been reported yet (October 2013).

China

author:[Xia,Yang]

Introduction to software protection under Chinese law Body of law

The regulations contained in the "The People's Republic of China Copyright Law" are formulated to protect the rights of copyright owners, to safeguard interests in the development, dissemination and use of computer software, to encourage the development and application of computer software, and to promote the software industry and the development of information technology in the context of the national economy.

The key legal regulation in the context of software is the general Copyright Act. While there is a Software Act, it is a special statute in relation to the general Copyright Act, and as such does not contain any specific provisions above and beyond its terms.

¹³⁵17 U.S. Code §302(b).

¹³⁶17 U.S. Code §302(c).

¹³⁷17 U.S. Code §201(d)(1).

Software Act: Object of protection

Computer programs and preparatory material related to their development are protected by copyright and are equivalent to literary works within the meaning of the Berne Convention for the Protection of Literary and Artistic Works. According to the Copyright Law, only original computer programs enjoy copyright protection. This means that a computer program has to be an original intellectual creation of its author. No other criteria may be used to determine whether the program is subject to copyright protection. The ideas and principles behind computer programs or technical interfaces are explicitly denied copyright protection.

The term computer software (hereinafter referred to as software) refers to computer programs and related documentation.

The relevant terms are defined as follows:

- (a) A computer program is the code sequence used by computers or other devices capable of processing information, or a sequence of symbolic instructions or statements which can be automatically converted into a sequence of coded instructions. The source code and object code is of the same program.
- (b) A document contains the text data and charts used to describe the computer program's contents, composition, design, functional specifications, development and test results, such as details of the program design, flow charts, user manuals, and so on.

Software protection under these regulations must be independently developed acquired by the developer, and relates to a specific tangible object.

Legislation on copyright protection for software does not extend to the ideas used in software development, processing, and methods of operation or mathematical concepts and suchlike.

Authors/Beneficiaries

The relevant terms are defined as follows:

- (a) A software developer can be a legal entity or organization responsible for the actual organizational development, direct development and software development; or can be an individual person responsible for the independent software completed by their own effort.
- (b) A software copyright owner is an individual person, a legal entity or an organization that enjoys the copyright in accordance with this regulation.

Chinese citizens, legal entities or organizations enjoy copyright in accordance with this regulation regardless of whether their software is published or not. Foreigners and stateless persons enjoy copyright in accordance with these regulations if their software is first published in China. Foreigners and stateless persons also enjoy copyright protection under these regulations if the developer

is a resident of a state that has signed an agreement with China or an international treaty to which China is a signatory.

Software copyright by default belongs to the software developer unless otherwise stated. If there is no proof to the contrary, the individual person, legal entity or organization holding the copyright is therefore deemed the developer whose name is on the software.

If the software is developed by two or more individual persons, legal entities or organizations, the co-ownership of the copyright is stipulated by a written contract.

If there is no written contract to describe ownership and rights, or the contract is not clearly defined, the jointly developed software can be used separately and the developers of each respective part may be entitled to independent copyright. However, the copyright protection afforded in this context does not extend to the entire software developed. If a situation where co-developed software cannot be divided and no contract or other form of mutual agreement exists between the co-developers, then no single developer may prevent the other developers from exercising their rights apart from the right of transfer, but the benefits have to be fairly distributed amongst all the co-developers.

Exclusive rights

Software copyright holders enjoy the following rights:

- (a) Publication right
- (b) The right of authorship
- (c) Amendment right
- (d) Reproduction right
- (e) Distribution right
- (f) Lending right
- (g) Right to network Dissemination of information
- (h) Translation right

According to the second paragraph of Article 10 of the Copyright Law, if the copyright holders allow others to exercise their rights, they are entitled to payment in accordance with the relevant provisions of the contract. By the same token, the owner of a software copyright may authorize others to exercise his or her software copyright and the right to receive remuneration, or fully transfer that copyright or renumeration right.

Exceptions to exclusive rights

Owners of lawful copies of software enjoy the following rights:

- (a) The right to install the software on a computer and other devices capable of processing information;
- (b) The right to make backup copies to prevent losses. These backup copies may not be made available to others for use by any means, and the owner must destroy the backup copies if he or she loses proprietorship of the lawful copy of the software:
- (c) To use the computer application software and to improve its functionality and performance by making necessary modifications; however, unless otherwise provided, without permission from the software copyright owner the modified software may not be supplied to any third party;

In order to study and research the inner design and principle of a computer program, involving its installation, display, transmission, storage or other use, the granting of software copyright permission is subject to payment of remuneration.

To authorize others to exercise activities covered by software copyright restrictions, the parties have to enter into a written contract. If there is no written contract or agreement expressly stipulating an exclusive license, the right to exercise the copyright has to be treated as non-proprietary.

There are cases where such contracts are not necessary. Article 30 of the Computer Software Act explains the circumstances in which a copyright holder's authorization is not required for reproducing and/or translating a computer program in order to obtain interoperability information.

Article 30 is compulsory law, and contractual provisions to the contrary are deemed not to exist. However, exercising these statutory rights is often difficult in practice because the licensee generally has no access to the source code of the application, and it is not legal to enforce source code access for the purposes of interoperability.

Dispute mediation

The software copyright infringement dispute may be mediated. If the mediation is inadequate or the mediation achieves the agreement latter side to renege on the mediation promise, they can go to the People's court to carry on litigation. If the litigant is not willing to mediate, may also go directly to the People's court.

Term of protection

The software copyright's protection period is 25 years, beginning from the initial publication of the software and ending on December 31 of the 25th year following. Before the expiration date of the protection, the software copyright owner may apply to the software registration management organization to get another 25 years, but the total protection period afforded to any software product cannot surpass 50 years.

Special measures

When the owner of copyright is not able to protect his or her rights related to software provided in an infringing manner, the end recipient of the illegal code still has a duty to destroy or otherwise cease use of the code once they are made aware of the situation. However, they have recourse to seek compensation for this loss and its ancillary consequences from the original supplier of the infringing code.

Unprotected software and non-commercial software

Software that is an intellectual creation of the author is regarded as original and can obtain copyright protection, while non-original software is excluded from such protection. Third party revision or sharing without agreement from the software copyright owner or their legitimate successor is prohibited.

Teaching activities, scientific research, and government agencies operating official functions can use software for non-commercial purposes; these non-commercial rights include the ability to make free copies of the software without the copyright owner or its legitimate successor's agreement. However, the software's name must be correctly mentioned in use and the exploiter should not infringe upon other rights which the owner and its legitimate successor enjoy. Additionally, after the copied software has completed its non-commercial use, it should be reclaimed or be destroyed properly and must not be used for other goals or be given to other people.

Unprotected software and public domain software

Only software that is an intellectual creation of the author can obtain copyright protection. Non-original software does not come into consideration for copyright protection and can, in principle, be used freely.

Under Chinese law, public domain software is considered as software to which the author has given up all rights and on which no other party is able to enforce any rights. This software can be used, reproduced or executed freely without obtaining permission from a rights holder or the payment of a fee to such a party or their representatives. Public domain software may in certain cases even be presented by third parties as their own work, and by modifying the original work, third parties can take certain versions of such code out of the public domain again.

The underlying principle is that software value can only be achieved through protection granted by intellectual property law. Under the general law in this field, value is presented by granting certain exclusive rights to the legal owner of a work, who may realize fiscal or other returns through contracts with third parties, with the proviso that such rights eventually cease and the work enters the public domain. This creates a circle of economic activity that supports industrial and economic development.

Proprietary software and open source software (free software) differ only in terms of their circulation mechanism, and not in terms of the applicability of Copyright.

Analysis of FOSS under Chinese law

Copyrights

From the view of most enterprises, software development differs from traditional creation of copyrighted work. It is no longer subject to a single person or even an organization. With the development of the Internet, very few people operate behind closed doors in the software industry. Building on the ideas and experience of predecessors' has become a crucial factor to the development of software technology.

Qualification of FOSS

Copyright law in China operates under the principle of "self-executing" protection. After a creative good is completed it is automatically subject to copyright protection regardless of whether it is published or registered. The right to publish source code — an intrinsically important part of the FOSS — belongs to the software's "publication right" range. The protections of software copyright may be considered as a mix of applicable law and contracts between the rights holder and any third parties. This model is from the province of international conventions and national copyright laws of the US, and the protection of software copyright law in China is no exception.

One pertinent example is that the Chinese government issued a special regulation on software copyright protection as part of the Copyright Law with the subject "Computer Software Protection Regulations". This provides that without the copyright owner or his legal transferee's consent the use of software is equal to copyright infringement; in the "Computer Software Protection Regulations" Article 18 and 19 the provision of software licenses and transfer of rights must be in the form of a written agreement. In this sense, protection of software copyright in China and international copyright norms are virtually identical.

Article 12 of the Copyright law of the people's republic of China states that where a work is created by adaptation, translation, annotation or arrangement of pre-existing work, the copyright in the work shall be enjoyed by the adaptor, translator or arranger, provided that the exercise of such copyright shall not prejudice the copyright of the original work. Interpretation of the original author should be via their consent and include remuneration, while right of authorship remaining with that party. If the interpretation is created out the period of protection for creative works, it should be with the original author's consent, but no remuneration is necessary. Naturally the original work shall not be violated or distorted in the process of interpretation.

Article 13 of the Copyright law provides for co-ownership of copyrighted works,

covering situations where a work is created jointly by two or more co-authors. Put simply, in these cases copyright in the work shall be enjoyed jointly by those co-authors while any person who has not participated in the creation of the work may not claim co-authorship. If a work of joint authorship can be separated into independent parts and exploited separately, each co-author may be entitled to independent copyright in the parts they have created, provided that the exercise of such copyright shall not prejudice the copyright in the work as a whole. The general consideration is that the creation of a work of joint authorship requires cooperation and arrangement between the authors. If one party does not get consent from the other, then each party only has copyright and its attendant right of modification or distribution in their own section of the work.

Rights of the original co-authors

"Participation" in co-authorship refers to expression in the form of a creative and intellectual work applied either in conceptual planning or writing operations. If a party does not do creative work that falls under this definition of participation, then they cannot become regarded as a joint author. This participation and its attendant copyright in the work of joint authorship can be further regarded in two different ways, either with the whole coauthored work taking a form that can be split into individually authored sections or a form that cannot be split into separate parts. The ability to distinguish individual contributions as opposed to entirely combined contributions naturally has implications for personal rights and property rights and their exercise in market transactions.

Unless the components of software can be clearly distinguished, it is almost certainly going to be defined as an "indivisible work" under Chinese law. These are works whereby it cannot be concluded clearly what the individual contribution of every author is, e.g. when two authors write the source code together.

Where a work is created jointly by two or more co-authors, the copyright in the work shall be enjoyed jointly by those co-authors. Any person who has not participated in the creation of the work may not claim the co- authorship.

If a work of joint authorship can be separated into independent parts and exploited separately, each co-author may be entitled to independent copyright in the parts that he has created, provided that the exercise of such copyright shall not prejudice the copyright in the joint work as a whole.

On the other side, if a work of joint authorship can't be separated into independent parts and exploited separately, the copyright in the work shall be enjoyed jointly by those co-authors, in which case the authors are free to regulate the exercise of the copyrights by agreement. If they can't reach any kinds of agreements relating to the moral rights and have no cogent reasons, No party shall prevent exercise of the rights except for the transfer request, but the proceeds should distribute to all the other parties with attendant rights.

Authors of derivative works

FOSS often falls under the category of a derivative or composed work. Derivative works and composed works are works whose originality may be definable, but whose existence depends on existing work(s), from which at least some original characteristics are copied.

Where a work is created by adaptation, translation, annotation or arrangement of a pre-existing work, the copyright in this work thus created shall be enjoyed by the adaptor, translator or arranger, provided that the exercise of such copyright shall not prejudice the copyright in the original work.

The copyright in a work created by compilation shall be enjoyed by the compiler, provided that the exercise of such copyright shall not prejudice the copyright in the pre-existing works included in the compilation. The authors of such works included in a compilation as can be exploited separately shall be entitled to exercise their copyright in their works independently.

So, the author(s) of the derivative or composed work are the only persons with a copyright on their work. This is not independent and full copyright, which is restricted, however, because the derivative or composed work cannot be operated without the consent of the holder of the copyright on the original work. In the case of FOSS licenses such consent is not a problem, subject to respecting the terms and conditions (e.g. regarding further distribution of the derivative work).

The assignment of copyrights

In order to control the rights related to a specific FOSS project, it may be useful to collect all copyrights concerning this project within one organization. The existence of such an organization can simplify the management and enforcement of joint rights, with the collective management of copyrights is usually, but not necessarily, regulated by the fiduciary transfer of copyrights. This assignment is relatively trivial, with ownership of copyright in a commissioned work being assigned via contract between the commissioning and the commissioned parties. In the absence of a contract or of an explicit agreement in the contract, the copyright in such a work shall belong to the commissioned party.

Moral copyrights

FOSS originated in America, and therefore attaches less importance to the moral rights of the author than it might under a country governed by Civil Law. The Open Source Definition specifies that the author of software distributed under a FOSS license cannot oppose the use of the software by certain people and groups or for certain areas of application.

For example, according to article 22, in some cases, a work may be used without permission from, and without payment of remuneration to, the copyright owner, provided that the name of the author and the title of the work shall be indicated and the other rights enjoyed by the copyright owner by virtue of this Law shall

not be prejudiced. Furthermore, article 23 specifies the statutory license of copyright.

Whether an author is able to give up all his rights on a work is more complex under Chinese law, as such law contains the principal indefeasibility of the moral rights. Although renouncement of moral rights is possible in principle, the global renouncement of the future exercise of moral rights is void, and this naturally also applies to moral rights on software.

The author of a work distributed under the FOSS license shall therefore probably be able to oppose any use of his work by people or groups or for certain purposes which affects his honour or reputation, based on his moral rights.

Moral rights are reflected in derivative works. The author of the original work will therefore, based on his moral rights, not only be able to oppose the use by third parties of his work, but also the use of derivative works which affect his honour or reputation.

Enforcing FOSS licenses

The question whether a FOSS license can be enforced depends on whether a valid license was issued. The essential questions are: (i) between whom is a license granted, and (ii) has the license been validly granted?

Contracting parties

In China, the Contract Law governs all kinds of licenses, but it can be questioned whether FOSS licenses fall into the sphere of the Contract Law of China. There is no clear stipulation about FOSS licenses in its wording, and no case has yet came before the People's court to provide a ruling about the validity of the license. Pending this, a more general interpretation in view of existing rules and norms may be proposed. A creative work that needs two or more people to complete normally involves an agreement to arrange copyright allocation or grants. If one author makes his work available under a FOSS license, the answer is clear: the license is reached between the licensee and the author. But in some cases, the works are finished by different people and they are all contributed to the programs. At this time, the question becomes more complicated. With whom the licensee reaches a contract depends on the different cooperation methods applied by the co-authors.

If a work of joint authorship can be separated into independent parts and exploited separately, each co-author may be entitled to independent copyright in the parts that he has created, provided that the exercise of such copyright shall not prejudice the copyright in the joint work as a whole. This would allow for the author who created the independent parts to grant a license to contracting parties based on his or her individual section of the work. Meanwhile, if the work cannot be separated in such a fashion, and the authors do not collectively

agree on general license terms, a license and implied contract should be reached between the licensee and every author of the program.

Most FOSS licenses solve this through agreements such as BSD, Apache and GPL licenses. For example, the GPL creates a contractual bond between the licensee and all authors in the chain. GPL version 3 contains the following clause: "Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License" and GPL version 2 states that "each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor..." While apparently effective in US and other markets and internally consistent with the rest of the license, it is not clear that this construction will be regarded valid under China Copyright Law.

Validity of the FOSS licenses

An author chooses a FOSS license because he wants to distribute his work and make it available to others—possibly with certain restrictions. For him it is important that he can enforce these restrictions. However, the status of FOSS author rights in China is not entirely clear.

The most common use of FOSS code development and therefore the application of the licenses is through the internet. While conventional IT agreements are reached by the explicit acceptance of the terms and conditions by the licensee following the signing of the terms and conditions, FOSS software is made available with some simple specification on a website or in the source code form that it concerns FOSS. The license usually does not need to be explicitly accepted. In other words, the act of opening the packaging or clicking "I agree" button — methods to reach a licensing agreement are generally considered to be valid and are covered by "The electronic signature law of the People's Republic of China" — tend not to apply with FOSS.

Having to click and confirm every time could in some cases interfere with the use of the software, according to the international common practice. The Open Source Definition opposes demanding explicit agreement with the license conditions with the aim of confirming the agreement between licensor and licensee.

The question is whether in these cases a valid license is possible. The answer to this question is not clear under Chinese law. The reason is that the user of a copyright protected work needs to be able to indicate the grounds on which he is able to use the work. FOSS is still under the protection of present copyright law and using the software without the author's consent implies a copyright infringement, with the implication that everyone who wants to use software which they find via the internet, they should actively look for the license, at least if they know such software will be under the terms of a license. If the user cannot prove that they elected obey the license, they must refrain from using it. But without a mechanism to do so, a potential grey area exists. Of

course it is doubtful whether a user would benefit from disputing the existence of a FOSS license. If the user disputes the conclusion of the FOSS license, this implies no legally valid copyright license was granted and the user therefore is not allowed to use the software. Renouncement of copyrights should not be open to conjecture, but needs to be proven. The availability of a work on the internet does not mean it becomes public domain.

Validity of the contract

Rights holders can place contracts and any party violating the agreement must assume responsibility for their actions. When an author chooses a FOSS license it is relatively clear that he wants to distribute his work and make it available to others—possibly with certain restrictions. For him it is important that he can enforce these restrictions.

The exception in China is that for public welfare or personal use, people can accord to the principle of reasonable use, and do not need to conclude contracts or pay any remuneration in this context. This does not preclude the necessity of the authors and users signing a contract for licensing, but may impact some of its scope. It would be expected that such a contract would include licensing rights, whether licensing right is exclusive or not, the scope and space of using, the remuneration's standards and methods if applicable and the events that may be regarded as breach of contract.

Whatever the situation, the Regulation for Computer Software Protection in China provides that the licensing of software copyright shall be in possession of a contract for licensing. And the licensee may not exercise the right that has not been licensed by the software copyright owner in the contract for licensing.

Normally, rights holders in FOSS write programs collaboratively under a license that permits users to use, change, copy, and distribute the works free of charge, provided that they follow the licensing guidelines of the software. This can cause some confusion because commercial software doesn't usually allow you to change a program and redistribute it unless you specifically negotiate that in an additional license. But in both cases if you make copies or distribute modified versions of the software without permission, you infringe the copyright, and you must take the responsibility. By implication when locating software on the internet it is very important to explore what license is being used. If the user can't prove that he knows the content of the license applicable to the work, he must refrain from using it, and cannot seek to assume that no license or contract is in play. Only in cases where the terms applied to the contract are manifestly unfair can a move be taken to void its applicability.

Waiver and liability

Typically, FOSS licenses contain very strong exoneration clauses, which discharge the author from all liability. The reason for this is that FOSS is often

made available without a fee, as a result of which the author generates insufficient income to pay for liability insurances and legal costs. In China, the validity of this clause is not entirely clear, with the reason being questions that arise about the extent to which such exoneration clauses comply with the general validity requirements under Chinese law due to the existence of no specific legal regulation of FOSS licenses. Liability requirements are scattered in Chinese civil law, with an example being that Article 53 of the contract law of PRC states that the following types of exoneration in contracts are invalid:

- (i) that causes the personal injury,
- (ii) that causes property loss by intentional misconduct or gross negligence.

Meanwhile, Article 52 in the contract law stipulates: if only there is one of following state, the contract shall be invalid:

- (i) obtain the contract by means of fraud or stress, at the same time causes damage to the interests of the state.
- (ii) viciously collude, to damage the interests of the state, the collective, or a third party.
- (iii) use legal form to cover up illegal purpose.
- (iv) do harm to the public interests. And
- (v) And violate the compulsory laws or administrative rules.

Generally speaking when considering FOSS license as a form of civil contract, all the regulations of the contract behaviour are available for the FOSS license. But with such licenses being quite different from typical contracts there remain areas of differing potential interpretation and therefore potential confusion. One remedy in the mid to long-term is to add FOSS licenses as a special form of contracts in the contract law of PRC.

Chinese legislation doesn't normally perceive a large difference between guarantee liability from amateur and professional sellers, but there are some considerations to take into account regarding FOSS. Theoretically, there is difference if the stipulating party be considered as a professional seller. The professional seller is deemed to know the defect in the software, and in pursuance of article 153 of the contract law of PRC, contractual provisions of non- indemnity for surface or hidden quality defects have no effect if the seller knew about the defect at the time of the sale. Additionally, according to Article 150, the seller has the duty to guarantee defects. The professional seller of FOSS will therefore be liable in principle for issues with FOSS code provided unless he can also provide proof of ignorance regarding defects. Such proof may be hard to provide.

The copyleft principle

Principle

A characteristic found in many FOSS licenses is the so-called "copyleft" principle, which is a new and different way of enforcing copyright in software. FOSS licenses which incorporate the copyleft principle lay down by contract that everyone in the chain of consecutive users, in return for the right of use that is assigned, needs to distribute the improvements he makes to the software and the derivative works he makes under the same conditions to other users as those under which he received the original work. In other words, software which incorporates copyleft FOSS needs to be distributed as copyleft FOSS. FOSS means sharing with each other, instead of monopolizing.

This has the consequence that it is not possible to incorporate copyright protected parts of copyleft software in proprietary licensed work directly. The copyleft principle can restrict the commercial possibilities of the software, at least regarding business models or product deployments that assume proprietary behaviour. Sometimes warnings are issued for the dangers that companies could encounter if a negligent or vindictive employee were to incorporate a piece of copyleft code in the code of proprietary software and parties relatively new to FOSS worry that a company would be obliged to make its proprietary software available under a copyleft FOSS license. Although caution is necessary regarding the use of the third party work, one can ask oneself whether such scenarios are realistic under Chinese law. Copyright protection is still strong and absolute in current Chinese legal system. The sanction for incorporating copyleft code in proprietary software will usually be restricted to a prohibition to distribute the software which is in breach or the obligation to remove this piece of code from the program. If the unlawful use has caused damage to the author, this damage will need to be reimbursed, but not more than they actually suffered damage. As such, the implications of copyleft are restricted to normal measures of expected remedy under copyright law.

Validity

Questions regarding the validity and implications of copyleft clauses coincide with questions regarding whether an author is able to validly lay down how derivative works need to be distributed. The answer to this question under Chinese law is not definitive.

The copyright owner or copyright-related right holders are able to lay down the use of the work for a particular use, or link certain conditions to this. Such a right was recognized and based on an interpretation of Article 9 of the copyright law of 27 October 2001. According to the rule, the copyright owner can determine the destination of a work, to copy or distribute, to rent or to exhibit, to performance or screening, etc. They also can license or transfer the rights, with an example being that a copyright collective management organization can claim in its own name for copyright owners, and can carry on lawsuit and arbitration activities as copyrights owner.

The right to determine the destination not only applies inter partes, but "erga

omnes", provided that the third parties, in all reasonableness, should know what the destination is. The author can therefore lay down the copyleft condition based on his right to determine the destination of his work, though aspects of derivative work use/reuse may challenge this. According to the provisions of Article 12 of the copyright law, the author of the original work has no rights on the derivative work; that's to say "A work derived from adaptation, translation, annotation or arrangement of a pre-existing work, the copyrights belongs to the author of the derivative work which be operated doesn't subject to the consent of the copyright owner of the original work, but the exercise of such copyright shall not infringe the copyright in the original work".

In summary, all rights are subject to abuse, including the copyright. An author can therefore not randomly exercise his economic and moral rights. A lawful tangible or moral interest needs to be proven. The implications of Article 9 are in no measure overridden by those of Article 12, but the applicability of both will probably have an impact in any case involving right of use issues and FOSS licenses in a court of law.

The traditional use of copyrighted work in China would see approval from a right holder subject to some form of remuneration, and the simple outcome that other situations probably constitute infringement. But licensing a work under a copyleft restriction will in principle not constitute an abuse of rights, and with "reasonable use", you can make use of the work without the consent of the copyright holder and without the need to pay remuneration. Of course, the licensing or assignment contract of the copyright owner has not explicitly been transferred, and you can't randomly exercise the rights without the consent of the copyright owner, otherwise will constitute infringement.

Viewed formally under Chinese law, a FOSS license is a contract. According to the contract law, it is effective as long as the parties signed the contract voluntarily, it contains no violation of the mandatory regulations applicable to contracts, and if the parties strictly obey the law to exercise rights and perform obligations. A legitimate moral interest applied by a rights holder could be the decision to keep his work within the FOSS community, also in a derivative format, through the measure known as copyleft. Companies which have constructed a business model around distributing software under copyleft restrictions will usually be able to prove the existence of a legitimate interest.

Damages

Damage caused by copyright violations are compensated under copyright law in accordance with the general civil liability of the illegal act. This implies that the injured party of a copyright breach needs to be compensated.

According to the provisions in Article 47 of the copyright law the copyright administration has the rights to stop the infringement, confiscate the illegal income, destroy the infringing reproductions, and may impose fines under the condition of infringing the public interests. If the circumstances are serious,

they also can confiscate materials, tools, and other equipment which was used for making infringing reproductions. The one who infringe the copyright can be considered as constituting a crime, and shall bear criminal responsibility.

According to Article 36 of the regulations of copyright law of 2 August 2002, parties who have violated Article 47 of the copyright law and also offended public interest should be punished with a fine that is 3 times of the income of the illegal operation or 10 thousand Yuan if the income of the illegal operation is difficult to calculate.

Infringements of software copyright are regarded in the same light as infringements of every other copyright. The aforementioned principle is therefore applicable in case of copyright infringements of software.

Additionally, according to the provisions in article 23 and article 24 of the software protection regulations, all actions which have infringed the software copyright should hold the following civil liabilities:

- 1. Stop the infringement
- 2. Eliminate the bad effects
- 3. Apologize
- 4. Compensation for the losses
- 5. Civil sanctions.

FOSS essentially seeks to provide software as the effective public intellectual property of all mankind, and allows for sure software to be distributed freely between the persons of preparation and application. Any restrictions of the intellectual property rights will eventually limit and obstruct its development.

Therefore certain legal experts may assume that the damage to the copyright owner will be limited, as he has made his work freely available via the internet.

However, the essence of FOSS is not free, but "thought sharing, knowledge sharing and resource sharing". The user can freely operate, copy, distribute, research and improvement the software, and avoid the intervening from the proprietary software. One can modify the program to make it better, make it more applicable. One can experience the excitement which comes from the achievement which be improved more efficiency. But one retains certain obligations to all others.

Besides establishing a reputation and recognition with the related value creation, an author can have other reasons to make his work "freely available". The author may also have a direct monetary advantage from the free distribution of his work. The simplest way is circulating the free works f advertising. Another way is granting specific services to support the software. Taking this further into a specific economic example, the free circulation of the work can provide that it has as many users as possible, allowing the author to generate income

from the provision of technological support and consulting services, or "licensing proprietary add-ons". Another business model is the so-called dual licensing model. This model uses — as the name allows us to deduce — two different licenses. The first license is often a copyleft license intended to provide a wide range of users. The second license without the copyleft system can then leveraged to obtain payment from interested parties who want to avoid the copyleft principle.

FOSS cases in China

No cases have been reported yet (June 2011).

Finland

author:[von Willebrand,Martin] author:[Tanskanen,Henri]

Introduction to software protection under Finnish law Body of law

In Finland, copyright protection of software is regulated under the Copyright Act, originally enacted on 8 July 1961 and amended multiple times thereafter. The current version of the Act is available in Finnish and Swedish via the Finlex website of the Ministry of Justice. ¹³⁸ An unofficial translation of the Act by the Ministry of Justice is also available, although it is not as up to date as the Finnish and Swedish versions. The Copyright Act provides for stipulations on copyright and many neighbouring rights, such as the right to a database and the right to directories. Software copyright is covered by the general stipulations on copyright and a number of software-specific stipulations.

The Finnish Copyright Act implements the Council Directive of 14 May 1991 on the legal protection of computer programs (91/250/EEC, as amended) by way of amendments enacted on 11 January 1991 and 7 May 1993. 139

In the current Copyright Act, the relevant articles containing computer program specific stipulations are:

Article 1, second paragraph literary work Article 25 j

copying and examination

138"(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective

Writings and Discoveries." ¹³⁹17 U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

Article 25 k reverse engineering

Article 40 b employment relationship

Article 56 c

sanction on distribution of protection circumvention

In addition to the above, exceptions concerning computer programs can be found in Art 11, second paragraph; Art 12, second paragraph; Art 19, third paragraph; Art 50a, fourth paragraph; Art 50b, third paragraph; Art 50c, fifth paragraph and Art 56a, second paragraph.

Copyright Act: Object of protection

Computer programs are protected by copyright as literary works, as stipulated in Article 1 of the Copyright Act. In order to benefit from the protection, a computer program needs to be original in the sense that it is the author's own intellectual creation. As stipulated in paragraph 3 of Article 1 of the Computer Programs Directive, no other criteria may be used to determine whether the program can be subject to copyright protection. Based on this, it has been argued that computer programs are eligible for copyright protection under less stringent requirements compared to other literary works which need to surpass a certain threshold of originality. 141

According to the preparatory works to amendments of the Copyright Act (Government Proposal HE 161/90; Committee Report KM 1987:8) as well as several subsequent decisions of the Copyright Council, the eligibility for copyright protection in the case of a computer program is to be determined, first and foremost, by assessing the choices made by the programmer in implementing a solution to a computing or data processing problem. A computer program is protected by copyright if it can be considered as an independent and original result of the author's creative work. If the computing or data processing problem at hand has only one solution determined by external factors, the resulting computer program does not represent the author's original creative contribution and is not eligible for copyright protection. The same goes for "simple programs containing only a series of measures that can be deemed as axiomatic by a professional" as well as "commonly applied solutions" to programming tasks.¹⁴²

The case-law on computer programs and eligibility for copyright protection is somewhat scarce, consisting mainly of opinions issued by the Copyright Coun-

 $^{^{140}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{^{141}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

¹⁴²For example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426-11

cil.¹⁴³ In cases where the Copyright Council has stated its opinion on whether a particular program is eligible for copyright protection, the Council has mainly relied on one of the two following tests, i.e., assessing (a) whether there would have been several alternative programming solutions to the problem at hand, or (b) whether anyone independently embarking on the same programming task could have ended up with a similar outcome. In light of the fact that there are usually several possible solutions to any programming task, the level of originality required for copyright protection of a computer program can be safely assumed to be rather low.

Authors/Beneficiaries

Copyright to a work, such as a computer program, belongs to the author. An author is always a natural person, since only individuals are able to author intellectual creations.

There is only one automatic transfer of copyright under the Copyright Act. Under Article 40 b of the Act, if a computer program and a work directly relating to it have been created in the fulfilment of duties arising from an employment relationship, copyright to the program and the work passes to the employer. The same applies to the creations of functionaries of public entities.

The concept of a computer program covers software code both in source code and binary form. Source code commentaries in the code fall under the definition of computer software, or at least under the concept of "works that directly relate to" computer software. Source code documentation as well as other supporting material classify as works directly related to computer software. Supporting material can consist of, e.g., user manuals, instructions and the like. Other works contained in the software (such as text, music, pictures, forms and movies) may fall under the definition of "works that directly relate to it", but it is not always certain to what extent this is the case. According to the preparatory works of the Copyright Act (HE 161/90), a text file contained within the program, for example, would fall under the definition.

The right to a database created by an employee or a public functionary is passed to the employer or public body in a similar manner.

Exclusive rights

The general exclusive rights stipulated in the Copyright Act apply to computer programs. According to Article 2 of the Copyright Act, the economic rights are comprised of the exclusive right to control the work by (a) reproducing copies and (b) making the work available to the public in original or altered form, as a

 $^{^{143}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

¹⁴⁴World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

translation or adaptation or in another literary or artistic form, or by any other technique.

The reproduction of a copy comprises reproduction in whole or in part, directly or indirectly, temporarily or permanently and with any means and in any form. Transferring of a copy to a device in which it can be performed is also considered reproduction.

Making the work available to the public occurs when 1) the work is communicated to the public by wire or by wireless means, including in ways that members of the public may access the material from a place and at a time individually chosen by them; 2) the work is publicly performed to an audience present at a performance; 3) a copy of the work is offered for sale, rental, lending or it is otherwise distributed to the public; or when 4) the work is displayed publicly without technical aid. The concepts of public performance and communication to the public include the performance and communication of a work to a relatively large closed circle provided that there is an intention to make profit.

Exceptions to exclusive rights

Article 19 of the Copyright Act stipulates that the first sale in the European Economic Area of a copy of a program with the consent of the right holder shall exhaust the distribution right of that copy within the Area, with the exception of the right to control further rental or lending of the program or a copy thereof.

Article 25 j provides that

- (1) In the absence of an express contractual provision, no authorization by the right holder is required for the lawful acquirer to make any such copies of or alterations to the computer program which are necessary for using the program for the intended purpose, including error correction.
- (2) The reproduction of the program by way of a back-up copy by a person having a right to use the computer program may not be prevented, insofar as that copy is necessary to use the program.
- (3) The person having the right to use a copy of the computer program is entitled, without the authorization of the right holder, to observe, study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program, provided that he or she does this in connection with loading, displaying, running, transmitting or storing the program.

Essentially, the above article restates the three exceptions under Article 5 of the Computer Programs Directive. The exceptions (2) and (3) above are mandatory, meaning that a contract stipulation to the contrary is void.

Article 25 k of the Copyright Act explains in detail the circumstances in which no authorization of the right holder is required for the reproduction and/or translation of a computer program provided that such actions are necessary for

obtaining the information necessary for the interoperability of an independently created computer program with other programs. This exception is mandatory, as well, and a contract stipulation to the contrary is void.

Moral rights

General stipulations of the Copyright Act on moral rights apply to computer programs, as well. Moral rights under Finnish law are comprised of the paternity right and the right of respect. Paternity right means that in any reproduction or dissemination of the work to the public the author has to be stated in accordance with good practice. The right of respect, in turn, means that modifications of the work must not offend the literary or artistic value or originality of the author, and that they may not be made available to the public in any manner or form that is offensive to the author.

Due to the nature of computer programs, the moral rights are considered to have only minor importance. Computer programs can hardly be modified in a way offending the author, and good practice in the field does not normally require stating the name of the author where the author is an employee and the copyright holder is the employer. 145

Moral rights cannot be transferred, and they may be waived only where the use of the work is limited in scope and character. This applies equally to the right of paternity and to the right of respect.

Term of protection

The term of copyright protection for computer programs is the same as for other works, i.e., 70 years following the year of death of the author (Article 43). In the case of multiple authors, the term is calculated from the year of death of the last living author. In the case of derivative works, the copyright term of the right of the modifier is independent of the copyright term of the original work, i.e., the copyright to the modifications lasts for 70 years following the death of the author of the modifications.¹⁴⁶

Copyright assignment

Copyright can be assigned in full, except for moral rights. Most importantly, moral rights include the obligation to state the author when distributing the work to the public as well as, although hardly applicable to computer programs, the prohibition to alter the work in a way that offends the author. Under Finnish law, copyright assignment is not subject to any requirements of form and oral agreements, for example, are entirely possible. However, for the purposes of evidence, written contracts are recommended.

 $^{^{145}{\}rm The}$ final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

¹⁴⁶The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of_1976.

Unless otherwise agreed, a copyright assignment does not include the right to further assign the copyright or the right to modify the assigned work. If full assignment is the objective, these rights should be expressly included in any assignment contract.

Regarding choice of law, it seems possible that copyright originating under the Finnish Copyright Act can be assigned under laws of another jurisdiction, if such applicable law is agreed upon in the assignment contract. However, this is not completely certain. The uncertainty relates to the question of whether the freedom of contract can cover all aspects of a right based on law.

In the relationship between an employer and an employee, copyright to a computer program and a related work passes automatically to the employer based on Article 40 b of the Copyright Act.¹⁴⁷ Copyright to any other type of work will remain with the employee, unless a specific agreement on copyright assignment has been entered into in the form of an employment agreement or otherwise. In lack of a specific agreement on assignment, the employer will receive a right of use. The exact coverage of such right of use is unclear, but at a minimum, it covers the primary use of the work known at the time of the creation of the work.

In the relationship between a contractor and a procurer, no distinction is made between computer programs and other types of works. The copyright to the created work is held by the creator of the work, i.e., the contractor. If no explicit assignment is agreed upon, the contractor will continue to hold the copyright to the created work and the procurer will receive a right of use in accordance with the agreement between the parties. In the absence of a specific agreement, a right of use is presumed and derived from the joint purpose of the parties.

An unpaid contributor is treated similarly to a contractor. In lack of a specific agreement on assignment or right of use, a right of use is presumed and derived from the joint purpose of the parties.

Special measures

The Copyright Act contains civil law sanctions for a breach of copyright and some provisions on criminal sanctions regarding lesser copyright-related crimes. The Penal Code, in turn, contains criminal sanctions on more severe copyright-related crimes.

There are some criminal consequences that are specific to computer programs. For example, it is a criminal offence to "distribute to the public for the purpose of gain, or for such purpose keep in possession, any device whose sole purpose is the unauthorized removal or circumvention of a technological means protecting a computer program" (Article 56 c of the Copyright Act).

¹⁴⁷Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

However, the provisions under Articles 50~a, 50~b and 50~c of the Act regarding the prohibition of circumvention of technological measures do not apply to computer programs.

Unprotected software and public domain software

Only software that is original in the sense that it is an intellectual creation of the author is eligible for copyright protection. Non-original software, then, is not eligible for such protection and can be used freely from a copyright perspective. ¹⁴⁸

There is no concept of public domain in the Finnish Copyright Act,¹⁴⁹ although based on the general principles of law, it can be concluded that it is possible for an author to grant a computer program into the public domain. However, this grant is possible only vis-à-vis the economic rights but not vis-à-vis the moral rights. Public domain computer programs are generally understood to mean such works to which the author has renounced all copyrights and which can therefore be freely used with the exception of moral rights.¹⁵⁰

Although there is some uncertainty as to what is required of a notice in order to fully place a program into the public domain, the authors of this chapter would deem such notices by the author as "This program is placed into the public domain" or "This program is in the public domain" to be sufficient under Finnish law. In this context, it is useful to observe the requirements in comparison to the assignment of copyright. In order for a copyright assignee to have the right to modify the work, such right must be agreed upon in the assignment contract (Article 28 of the Copyright Act). If placing a work into the public domain is compared with an assignment of copyright "to the public", the question is whether the public domain notice must include a statement on modifications. Our conclusion is that there is no such requirement, since granting the right to modify a public domain work can be clearly seen as the intention of any author intending to place a computer program "into the public domain".

FOSS, however, is not considered as public domain software under Finnish law. This is simply because an author of FOSS reserves the copyright, whereas an author placing a work into the public domain renounces it altogether.

Analysis of FOSS under Finnish law

Under Finnish copyright law, FOSS licenses can be examined on a very general level as follows.

Nothing else apart from the FOSS license can grant the user of the computer program the rights he or she needs in order to comply with copyright legislation. Therefore, the user needs the benefit of the copyright license grant, and that can

¹⁴⁸17 U.S.C. §102(a).

¹⁴⁹17 U.S.C. §411(a).

¹⁵⁰17 U.S. Code §102(a).

only be achieved by fulfilling the license conditions. To the extent the license constitutes an agreement, the user will need to accept the conditions of such agreement.

Copyrights

Although FOSS can be authored by one person or owned by one legal entity, FOSS is often the result of the work of several authors. In such case, the crucial question is whether the later additions together with the original input form a jointly created work (Article 6 of the Copyright Act), or whether the original software is instead considered as the original work while every further contribution constitutes a derivative work (Article 4 of the Copyright Act). The legal consequences for these two cases are different.

Qualification of FOSS

A work that has been originally created by several parties is a jointly created work. In addition, any work in which the end result is such that the individual contributions cannot be separated from each other is a joint work. Contributions to a joint work can occur either simultaneously or successively.¹⁵¹

FOSS can also consist of an original work and the modifications made to it. In such case, the end result is a derivative of the original work.

In some cases, FOSS can constitute a collective work, i.e., a combination of several parties' works. In this case, the author of the collective work is the person assembling and choosing the different works. Again, the permission of the author of the collective work is required for deciding on the license to the whole.

Looking at the different legal scenarios in the light of FOSS development, it seems that many FOSS projects could be construed as partly jointly created works (e.g. the portions created jointly by the project), partly derivative works (e.g. the contributions received later on) and partly collective works (e.g. the third party FOSS components included in the project).

The version control systems used in software development make it often easy to discern between contributions of different persons. Although this might make it possible to regard everything as derivative works, it is possible that jointly planned and executed computer programming would still be considered as creating a joint work, even if a version control system could be used to track every character addition to the code.

Rights of the original co-authors

In the case of a jointly created work, the copyright is held jointly, meaning that each author's permission is required for the exploitation of the work. Regarding

¹⁵¹17 U.S. Code §201(a).

license choice, this means that a joint decision is needed on the downstream license.

In case the joint authors have not agreed or are unable to agree upon the license, the work cannot be licensed at all. Here, the rules and principles regarding joint ownership are applied and, eventually, if no joint solution is found, the parties have the option to apply for a separation of the joint ownership. In such case, the end result could be, for example, that the work is auctioned.

When starting a new project, a written upfront agreement between the most important contributors is recommended. In principle, an oral agreement could do just as well, but typically, the content of such agreement can turn out hard to prove. The written agreement should cover the nature of the project, the roles of the parties, the copyright notices used, the downstream license applied as well as the procedures for decision making and amending the agreement. Each author of a jointly created work has the right to present claims on the basis of copyright infringement, so no joint decision is necessarily required for enforcement.

Authors of derivative works

Most FOSS projects will include derivative works. Even every contribution can perhaps be considered as a derivative work. In this case, the copyright to the original work is held by the original author, whereas the copyright to the modifications is held by the subsequent author. These copyrights are – when separated – independent and full copyrights, but the derivative work cannot be distributed without the consent of both authors.

The combination of the original work and the modifications can be used only by the permission of both the original author and the subsequent author. Thus, the downstream license to the whole will need to be agreed upon together.

Again, a written upfront agreement is recommended between the major contributors starting the project.

In the case of derivative works, as well, enforcement by the authors can occur separately. Each author is, however, able to enforce their rights only in relation to the part in which they hold the copyright.

The assignment of copyrights

In order to control the project in an organised manner, it may be useful to collect all copyrights concerning a FOSS project within one organisation (i.e. a legal entity). The existence of such organisation will simplify the management and enforcement of the joint rights. The assignment of copyright is perfectly possible under Finnish law as long as the legal requirements have been fulfilled. Assignment can also be carried out by way of a fiduciary assignment of copyrights. A fiduciary assignment means that the party to whom the copyrights are

¹⁵²17 U.S. Code §201(b).

 $^{^{153}}Id.$

assigned shall not act for himself but on account of others who have transferred the rights (i.e. the original authors). A fiduciary assignment would resemble an ordinary assignment added, however, with contractual conditions concerning the roles, rights and responsibilities of the fiduciary and the original authors.

Moral rights

As described earlier (see under section_title and section_title), moral rights cannot be assigned under Finnish law, nor can they be fully waived. However, they have less importance with regard to computer programs.

In Finland, it is generally considered that good practice in the software industry does not require the employer to state the names of the employee authors (or contractor personnel) in connection with the dissemination of a computer program. However, this does not necessarily apply to FOSS, since (i) the authors have not assigned their copyrights to the third parties disseminating the program, (ii) the authors have not received salary or any another form of compensation from the third party, and (iii) the authors are often keen to receive acknowledgement of and respect for the use of their works.

Moral rights apply equally to FOSS regardless of whether it has been created as a derivative work, joint work or otherwise. Each relevant author has his or her moral rights.

Enforcing FOSS licenses

In general, FOSS licenses can be deemed fully enforceable under Finnish law. There is no existing case law on FOSS licenses, but it is clear that nothing apart from the license can grant a third party distributor the right to distribute the FOSS. Also, there are no formal requirements for granting licenses. FOSS licenses are therefore enforceable.

However, it may be difficult to clearly associate a computer program with a license. The project may have done their homework poorly, and the license is not adequately communicated to the users, or there are discrepancies in the information given. License attachment clauses may be unclear. This may lead to questions of, and needs for, additional interpretation. Also, individual licenses may have wordings subject to interpretation, and some elements of a license may not be enforceable at all, or the license may be interpreted differently from what was assumed by the project. These uncertainties do not mean that FOSS licenses are unenforceable, per se, but the end result of the enforcement might not always be satisfactory due to unclarity in licensing and license attachment.

There has been very little discussion in Finland on whether a computer program license is (i) an agreement between the copyright holder and the user including copyright permissions grants or (ii) a unilateral permission by the copyright holder. In both cases, the document will need to grant the copyright permissions. With regard to the available measures of execution, copyright-related execution

measures would apply in both cases. Contract-related execution measures would be applicable in the contract-based situation and probably in the unilateral permission situation, as well. In fact, there is little or no difference between these legal concepts.

Violation of a license condition would normally classify as a copyright infringement. A FOSS license cannot be deemed solely as a transfer of a copy of a work, and therefore, any types of conditions contained in a license – depending on the wording of the license – can be considered as prerequisites for the copyright grant. Not observing the conditions could be construed as losing the copyright grant and therefore resulting in a copyright violation and not a mere contract violation.

Waiver and liability

Typically, FOSS licenses contain very strong liability limitation clauses which discharge the author from all liability. Most clauses discharge all liability for quality faults in the software and many clauses discharge liability for issues in the title to the FOSS, as well. The reason for this is that FOSS is mostly made available without a fee, and as a result, the author generates insufficient income to pay for liability insurances and legal costs. ¹⁵⁴

Where business models are built around FOSS, guarantees are often offered against a fee or as a part of chargeable services.

There is no general requirement to offer warranties in (i) business to business, (ii) individual to business, or (iii) individual to individual relations. FOSS liability limitations can thus be considered valid. The reasonableness of such provisions can be contested only on very rare occasions. Since FOSS is mostly licensed without a fee, the circumstances would have to be very exceptional in order for the claim to be able to succeed on grounds of the provision being an unreasonable contract term.

However, in a relationship between a business and an individual using the product as a consumer, there are requirements as to different types of faults in the product. These requirements apply to consumer products but not to consumer services. Although computer software can be considered as a consumer product in some cases (typically in off-the-shelf proprietary software sales), this would not normally apply to FOSS. In any case, since FOSS is normally not sold for a fee, and even proprietary off-the-shelf copies often include full liability limitations, the risk in that a liability limitation of a FOSS license were to be deemed contrary to law or unreasonable can be seen as low.

The variance of licensing regimes does not affect the above analysis. Product liability rules are generic and do not specifically react to particular software licensing regimes.

¹⁵⁴17 U.S. Code §101.

The copyleft principle

Principle

A characteristic found in different (but not all¹⁵⁵) FOSS licenses is the so-called "copyleft" principle. FOSS licenses incorporating the copyleft principle¹⁵⁶ lay down as a license provision that in order for the licensee to be entitled to further distribute the program with his or her modifications, such modifications must be licensed under the same terms as the original program. The extent of "modifications" subject to the copyleft rule varies from license to license. In some licenses only direct modifications of the files are considered modifications, whereas in others any creation of a derivative work is subject to the copyleft rule.

The copyleft principle may – depending on the case – restrict the commercial uses of the software. Sometimes it is feared that copyleft software could unintentionally cause the company's copyrighted works to become subject to a copyleft license. This is a misconception. The sanctions for incorporating copyleft code in an unpermitted manner into proprietary software are the same copyright law sanctions resulting from unpermitted use of any copyrighted work.

Validity

As discussed above, copyleft clauses are as valid as any other clauses in copyright licenses. Some copyleft clauses, however, are unclear or ambiguous (notably in GPL version 2, especially regarding the question of the extent of copyleft) and may therefore become subject to interpretation.

Compensations and damages

Copyright violations entitle the copyright holders to claim for copyright-based compensation as well as damages. Copyright-based compensation is typically set to a level equal to the license fee charged for the infringing act had the license been lawfully acquired. Damage, in turn, includes any damage occurring due to the infringement, e.g., costs due to specialist work for inspecting the infringing acts. In addition, legal and other costs are compensated, fully in principle, but in practice only to a certain extent.

In the context of FOSS, the proper amount of copyright-based compensation can be difficult to establish. If FOSS has been distributed against the copyleft rule, the compensation would, in principle, be equal to the license price the copyright holder would ask for such distribution.

FOSS cases in Finland

No cases have been reported yet (November 2013).

 $^{^{155}17}$ U.S. Code §204.

¹⁵⁶17 U.S. Code §201(a).

Finnish case law on copyright to computer programs

The authors have followed and listed below Finnish case law relating to copyright protection of computer programs up until November 2013. With respect to precedents by the Supreme Court and opinions issued by the Copyright Council, we believe the list is complete and exhaustive. However, with regard to Appeal Court level case law, as well as judgments apart from Supreme Court precedents, we have not been able to perform exhaustive searches for such material. The decisions are in Finnish with Swedish translations available for the Supreme Court precedents.

Supreme Court

- KKO:1996:43
- KKO 2788/1997 (non-precedent)
- KKO:1998:91
- KKO:1999:115
- KKO:2000:68
- KKO:2003:88
- KKO:2008:45

Appeal courts

- Appeal Court of Helsinki (Helsingin HO) 28.12.1999 3571
- Appeal Court of Kouvola (Kouvolan HO) 31.10.2000 1064
- Appeal Court of Helsinki (Helsingin HO) 08.06.2004 2133
- Appeal Court of Vaasa (Vaasan HO) 17.5.2005 712. (The prosecutor obtained, and the Court concurred with, a Copyright Council opinion on copyright threshold in the matter, see TN 2003:10 below.)
- Appeal Court of Helsinki (Helsingin HO) 20.06.2006 1891 (The plaintiff presented as evidence, and the Court concurred with, a Copyright Council opinion on the copyright threshold of a computer program, see TN 1997:2 below. Case decided by Supreme Court, see KKO:2008:45 above.)
- Appeal Court of Turku (Turun HO) 17.02.2009 304
- Appeal Court of Helsinki (Helsingin HO) 20.12.2010 3371
- Appeal Court of Rovaniemi (Rovaniemen HO) 04.03.2011 204

Copyright Council

Opinions of the Copyright Council 157 (in Finnish) can be accessed via the following website: http://www.okm.fi/OPM/Tekijaenoikeus/tekijaenoikeusneuvosto/tekijaenoikeusneuvoston_lausunnot/

* English translation available at http://www.okm.fi/export/sites/default/ $OPM/Tekijaenoikeus/tekijaenoikeusneuvosto/tekijaenoikeusneuvoston_lausunnot/2007/liitteet/TN_2007-9_edi_eng.pdf$

References and recommended literature

There are no wider literature presentations on Finnish copyright legislation in English. The references here are to literature on copyright in Finnish or Swedish, with a special emphasis on literature touching upon issues related to computer programs.

Books

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- Välimäki, Mikko: Oikeudet tietokoneohjelmiin. Talentum. Helsinki 2009.

Articles

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- Pitkänen, Olli: Oikeudet tietokoneohjelmistoihin. In (ed. Eero Hyvönen): Ohjelmistoliiketoiminta. WSOY 2003.
- Vedenkangas, Matti: Tietokoneohjelman luovutuksen luonne: tekijänoikeuden, käyttöoikeuden vaiko teoskappaleen luovutus. Defensor Legis 5/2002.
- Oesch, Rainer Vesala Juha: Ohjelmistolisenssit ja tekijänoikeuden raukeaminen. Defensor Legis 2/2004.

¹⁵⁷17 U.S. Code §101.

France

author:[Perbost,Fabrice] author:[Walter,Alan]

Introduction to software protection under French law Body of law

Under article L. 112-2 of the French Intellectual Property Code, software developments shall be considered as works of the mind and are, as such, protected in France by copyright law.

The copyright protection of software is regulated by Law n° 94-361 of 10 May 1994, which implements Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs in France. It provides some specific rules regarding software, which confirms and outlines the applicability of the general principles of copyright law to such works.

Scope of the protection

Under article L. 112-2 of the French Intellectual Property Code, copyright law protects "software including preparatory design material". The Directive of 14 May 1991 defines such preparatory design material as "preparatory design work leading to the development of a computer program provided that the nature of the preparatory work is such that a computer program can result from it at a later stage".

Copyright law protects software that is original, regardless of its kind, form of expression, merit or purpose. Thus, originality is the sole criterion to consider when assessing whether a given piece of software is subject to copyright protection, which implies that the source and object code of software are protected in the same manner.

Generally, case law considers that a piece of software is original when its author has brought a personal intellectual contribution¹⁵⁸.

However, the ideas and principles, which underlie any element of software, including those which underlie its interfaces, are not protected by copyright.

Authors/Beneficiaries

1. As a rule, authorship shall belong to the natural person, who has created the software, whether the author is an employee or not. However, according to article L. 113-1 of the French Intellectual Property Code, it shall belong, unless otherwise proved, to the person or persons under whose name the work has been disclosed.

 $^{^{158}\}mbox{``(Congress shall have the power...)}$ To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

- 2. Furthermore, article L. 113-9 of the French Intellectual Property Code provides that unless otherwise provided by statutory provisions or stipulations, the economic rights in the software and its documentation created by one or more employees in the execution of their duties or following the instructions given by their employer shall be the property of the employer and he exclusively shall be entitled to exercise them.

 This provision also applies to the servants of the State, of local authorities and of public establishments of an administrative nature.
- Software created by two or more persons may be a "collective work" or a "collaborative work".

A collaborative work is a work in the creation of which more than one natural person has participated. It shall be the joint property of its authors.

It differs from a collective work, which is a work created at the initiative of a natural or legal person, who edits it, publishes it and discloses it under his direction and name and in which the personal contributions of the various participating authors are merged in the overall work for which they were conceived, without it being possible to attribute to each author a separate right in the work as created. It shall be the property, unless otherwise proved, of the natural or legal person under whose name it has been disclosed.

4. When a work integrates a preexisting work, without the collaboration of the author of the latter work, it is defined as a "Composite work". A composite work shall be the property of the author who has produced it, subject to the rights of the author of the preexisting work, which means that the author of the composite work has to (a) obtain the consent of the author of the integrated work for such integration and (b) share the remuneration derived from the composite work with the author of the integrated work.

Exclusive rights

According to article L. 122-6 of the French Intellectual Property Code, the patrimonial rights belonging to the author of the software shall include the right to do or to authorize:

- any permanent or temporary reproduction of software by any means and in any form, in part or in whole;
- any translation, adaptation, arrangement or any other alteration of software and the reproduction of the results thereof; and
- any form of distribution to the public, including the rental, of the original software or of copies thereof.

The right of performance, as defined by article L 122-2 of the French Intellectual Property Code, which is attached to any literary and artistic work, is not

expressly mentioned among the exclusive rights of the author of a piece of software. However, this is not to say that the software author does not enjoy such a right, which could apply to software under certain circumstances, such as a filmed execution or an online execution.

Reproduction shall consist of the physical fixation of a work by any process allowing its communication to the public in an indirect way. This may be through copying or recording onto any media. Insofar as loading, displaying, running, transmitting or storing the software necessitate such reproduction, such acts require the consent of the author.

Exceptions to exclusive rights

Similarly to the general copyright rules, the third paragraph of article L. 122-6 of the French Intellectual Property Code provides that the first sale of a copy of software on the territory of a Member State of the European Community or of a State party to the agreement on the European Economic Area by the author or with his consent shall exhaust the right of placing on the market of that copy in all Member States, with the exception of the right to authorize further rental of a copy.

Considering the specificity of software, article L. 122-6-1 also provides some exceptions to the exclusive rights of the author.

The acts referred in article L. 122-6 shall not require the permission of the author where they are necessary for the use of the software by the person entitled to use it in accordance with its intended purpose, including for error correction, unless otherwise specified in the contract. This means that the person entitled to use the program can copy it into his computer in order to run it.

A person having the right to use the software may make a backup copy where such is necessary to ensure use of the software.

A person having the right to use the software shall be entitled, without the permission of the author, to observe, study or test the functioning of the software in order to determine the ideas and principles, which underlie any element of the software if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the software, which he is entitled to do.

Reproduction of the code of the software or translation of the form of that code shall not require the permission of the author where reproduction or translation within the meaning of article L. 122-6 is indispensable for obtaining the information necessary to achieve the interoperability of independently created software with other software.

However, it is expressly provided that these exceptions to the exclusive rights shall neither prejudice the normal exploitation of the software nor cause unreasonable prejudice to the author's legitimate interests.

Any stipulation contrary to the provisions of article L. 122-6-1 shall be null and void.

Moral rights

The moral rights of the author generally include (i) the right to disclose his work, (ii) the right of respect for his name and his work and (iii) the right of withdrawal.

However, the Intellectual Property Code contains some specific rules limiting the extent of the moral rights over software. It provides that, except for any stipulation more favorable to him, the author may not (i) oppose to modifications of the software, as far as such modifications do not affect his honor or reputation, and/or (ii) exercise his right of withdrawal.

In the absence of any specific provision regarding the right of disclosure, opinion suggests that such right shall apply to software.

Moral rights are perpetual, inalienable and imprescriptible, which means that an author cannot waive his moral rights on a literary or artistic work or transfer them to a third person.

However, the moral rights may be subject to contractual waivers, provided that such waivers are special and limited. For example, an author can decide not to disclose his identity. The clauses imposing the preservation of the author's anonymity are valid, as long as the author does not permanently waive his right of paternity. An anonymous author may reveal his paternity at any time.

Term of protection

According to article L. 123-1 of the French Intellectual Property Code, the author shall enjoy, during his lifetime and for 70 years after his death, the exclusive right to exploit his work in any form whatsoever and to derive monetary profit therefrom.

In the case of collaborative works, the calendar year taken into account for the calculation of the 70 years following death shall be that of the death of the last surviving joint author.

In the case of collective works, the term of the exclusive right shall be 70 years from January 1 of the calendar year following that in which the work was published. This rule also applies to works produced anonymously or under a pseudonym.

Finally, a composite work is protected regardless of the preexisting work, even if the preexisting work has entered the public domain ¹⁵⁹.

 $^{^{159}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

Copyright assignment

Article L. 131-1 of the French Intellectual Property Code provides that the complete assignment of intellectual property rights in future works shall be null and void.

According to the general regime for literary and artistic works, assignment of the exclusive rights on software may be total or partial. The assigned rights shall be "separately mentioned in the instrument of assignment and the field of exploitation of the assigned rights being defined as to its scope and purpose, as to place and as to duration" ¹⁶⁰.

Contrary to the general regime, which imposes that the remuneration of an author be proportional to the revenues derived from the sale or exploitation of his work, article L. 131-4 of the French Intellectual Property Code provides that the remuneration due to the author of software in compensation for the assignment of his rights can be calculated as a lump sum.

The assignment may always be done for free, considering the interest of the author to release its work and have it brought to the knowledge of the public.

Special measures

Law n° 2006-961 of 1st August 2006, which implements Council Directive 2001/29/EC of 22nd May 2001 on the harmonization of certain aspects of copyright and related rights in the information society, provides some specific rules regarding software.

Besides, general measures provided by the Intellectual Property Code to enforce copyright, article L. 335-2-1 provides for penalties against any person offering to the public a computer program aimed at providing public access to protected works without authorization.

In addition, pursuant to article L. 331-5, right holders may implement technological measures designed to prevent or restrict actions that they have not authorized. This article also provides legal protection against the circumvention of effective technological measures and against the provision of devices, products or services to this effect. Nevertheless, the article specifies that it is not applicable to the technological measures used in connection with software.

Unprotected software and public domain software

As previously discussed, only original software is protected by copyright.

The original nature of software has been the subject of numerous debates on principles and in courtrooms. The notion of originality, which is traditionally de-

 $^{^{160}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

fined as a reflection of an author's personality, is difficult to apply to a technical work like software.

Some authors agree that such reflection of an author's personality through software would mainly reside in "the choice to use one or several possible methods, fulfilled in the final program" ¹⁶¹.

In this respect, the full assembly of the Court of Cassation held that software was original if it contained the "intellectual contribution of the author and that originality extended to a personal effort over and above the simple implementation of a restrictive and automatic software and that the realization of said effort resulted in an individualized structure"¹⁶².

Software that fails to meet this criterion is not liable to protection under copyright law. This is the case for "applets", for example, which are used for web animation. Such software can be freely executed, reproduced and modified without the author's permission.

Software that comes into the public domain may also be freely used and reproduced. Given the length of protection afforded under French copyright law it can safely be considered that, at present, no software has yet come into the public domain.

It can be questioned whether software can, at the author's desire, be created directly in the public domain. Contrary to free licenses, public domain licenses are supposed to make the work in question as freely accessible as if that work had come into the public domain. They suppose that the author has renounced all rights over the software. This type of license would appear to be possible as far as the author may freely waive his patrimonial rights. The use of the software would, however, be subject to the respect of the moral rights of the author.

Analysis of FOSS under French law

Free software licenses have once been defined as "licenses through which the author allows the copy, modification and distribution of the work modified or not, concurrently, without transferring the author's copyright and without the user being able to limit the rights attached to the original work and any derivatives thereof" ¹⁶³.

Hence, free software is not free of all rights. It is in fact protected by copyright, but its source code may be freely executed and modified by its user community.

 $^{^{161}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

 $^{^{162} \}rm For$ example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{163}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, <code>http://www.law.cornell.edu/uscode/18/1831.html</code>.

Depending on the type of license under which the software was released (which may — or may not — include a copyleft), the members of such user communities are — or are not — obligated to disclose any modifications or improvements they made and communicate the corresponding source codes to other users. For these reasons, many authors favor the "Open Source Software" designation over that of "Free Software", as they find it more expressive and understandable.

The determination and the expression of rights between different contributors will depend on the qualification given to the work.

FOSS definitions

In accordance with the principle of free modification of software distributed under a free license, a certain number of persons will contribute to the evolution of the original software. The modified software may then be defined as a collaborative work, a collective work or a composite work.

The term "collective work" is applicable if the creation and the disclosure of the software are carried out under the direction of the initial author of the software. This definition allows the latter to benefit from all rights attached to the software to the detriment of the successive contributors.

The term "collaborative work" could also be used. However, in such case, a concerted action on the part of all contributors is required—an idea, which seems incompatible with the very nature of a free license. Certain authors consider that this definition is the one that comes the closest to the spirit of free work. Indeed, it has the advantage of taking "the global evolving work and the equality of the authors" into account. The use of this definition does, however, raise difficulties, as it offers an indivisible right over the work to each of the authors.

The final possibility is the definition as a derivative or composite work. According to this definition, each original modification of the software gives rise to a distinct version of the preceding work. It allows the rights of each contributor to be clearly defined, provided that each modification made to the original software can indeed be individualized. This definition is the most commonly admitted in principle¹⁶⁵. It is also the one that appears to have been accepted by the Court of Paris, in a decision dated 28 March 2007¹⁶⁶.

None of the definitions given by the Intellectual Property Code fully accounts for the specific nature of free software, due in particular to its evolutionary character resulting from the unusual granting of a right to modify to all users.

 $^{^{164}} World$ Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

¹⁶⁵The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

 $^{^{166} \}rm The~U.S.$ Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of_1976.

The remainder of the current paper is based upon the most commonly admitted definition for open source software, namely that of a derivative work.

Copyright

The evolutionary character of free software makes the definition of each author and contributor's rights extremely complicated. Literary and artistic ownership, which grants the author a monopoly over the exploitation of the work, is effectively difficult to reconcile with the freedoms of use and modification that govern free software in practice.

The definition of free software as a succession of derived works allows the author of each modification to be clearly defined, together with the scope of his rights. Each contributor adding original modifications to the software thus creates an independent work from the modified work. Consequently he enjoys all moral and patrimonial rights pertaining thereto.

Under these circumstances it is important to distinguish the rights of the initial author from those of the contributors.

The initial author is free to determine the fate of his patrimonial rights. Contrary to moral rights, patrimonial rights may be assigned in whole or in part, gifted, or licensed. Nothing prevents the author from assigning or awarding operating permissions free of charge¹⁶⁷. This gratuitous nature is in accordance with article L. 122-7 of the Intellectual Property Code, which provides that "the right of performance and the right of reproduction may be transferred, for or without payment". It is therefore up to the author to decide whether to license free uses of his work.

Law n°2006-961 of August 2006 on the droits d'auteur and related rights in the information society, introduced, among others, a new article L. 122-7-1 into the Intellectual Property Code in response to the legislator's wish that the development of the "free" movement be taken into consideration. This article states that "the author is free to provide his work to the public free of charge subject to the rights of any future co-authors and third parties as well as in respect of any conventions, which he may conclude". The "free of charge" provision is thus admitted in French law and has been acknowledged by courts¹⁶⁸.

However, it would appear arguable, under copyright law, whether so-called copyleft licenses compel contributors to give up their own patrimonial rights over the work in order that others may freely copy, modify or distribute the program. This assignment of a future right disregards the fundamental right of the author to exploit his work.

Moreover, article L. 131-3 of the Intellectual Property Code imposes a duty to mention each assignment separately in the instrument of assignment and to define the field of exploitation of the assigned rights as to its scope and

¹⁶⁷ Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

¹⁶⁸17 U.S.C. §102(a).

purpose. Case law has thus consistently held that general assignment clauses are invalid¹⁶⁹. The application of this provision to software and licenses entails that a free license granting the rights to copy, distribute and modify with no further precision, such as the BSD license¹⁷⁰, should be considered null and void. In practice, the principle of strict interpretation of contracts shall reduce the scope of such permissions to the methods of exploitation defined in the contract.

However, case law has shown proof of flexibility in this field. Certain decisions have been based on the real will of the parties¹⁷¹ or actual use¹⁷² in order to validate an assignment and to appreciate its scope.

Moral copyrights

The mechanisms of free licenses are based on the freedom for licensees to use and to freely modify software. This freedom is liable to clash with the moral rights of the author and those of the different contributors.

Right to disclose

The author of the initial software exercises his right to disclose through his decision to distribute the software under a free license. He thus authorizes all modes of disclosure of the work, namely copying, distribution and modification.

Licensees also enjoy a personal right to disclose over their own contributions, where such contributions are of an original character. The scope of such right depends on the conditions of the license under which the software is disclosed.

Certain licenses require that the modified software be disclosed under the same license. Such licenses are known as "Copyleft".

With copyleft licenses the licensee may elect whether or not to disclose his modifications, but cannot decide the conditions of such disclosure. The author of the modified software's disclosure rights are thus considerably limited. However, this limitation of rights does not seem to call the principles of copyright law into question considering that, while the composite work is the property of its author, its exploitation remains subject to the rights of the author of the preexisting work. The author of the original software may therefore define the conditions under which his work is disclosed without affecting the moral rights of future contributors.

The disclosure rights granted to contributors by licenses without copyleft are much more flexible. The contributors are free to use and modify the software without being bound to subject their modified work to the conditions of a given license.

¹⁶⁹17 U.S.C. §411(a).

 $^{^{170}17}$ U.S. Code 102(a).

¹⁷¹17 U.S. Code §201(a).

¹⁷²17 U.S. Code §201(b).

Paternity rights

Paternity rights over the initial or modified software are not treated uniformly by all free licenses.

Copyleft licenses are extremely detailed on paternity issues for successive authors.

For example, the GPL license¹⁷³, which is the best known and most widely used free license, requires contributors to indicate their names and to specify the modifications they made to the work to avoid any mistaken attribution to a third party. As a result, anonymity rights, which result from paternity rights, cannot be exercised when the software is distributed under a license of this kind.

Right of integrity

Free licenses allow any person, who accepts the terms thereof to modify the work.

According to software law, the author of the software cannot object to modifications unless such modifications harm his honor or reputation. Modifications made to correct or develop a program without the author's permission are thus valid.

However, prior authorization of any and all kinds of modifications to the software by third parties is contrary to the right of integrity of the work. Indeed, case law underlines the "inalienable right of respect for work, a public order principle, which is opposed to the author abandoning or assigning in a premature or general manner the exclusive enjoyment of use, distribution, withdrawal, addition and changes, which this latter may like to carry out"¹⁷⁴. Any software modification may therefore expose its author to a future action based on the right to respect for the original work.

Enforcing FOSS licenses

Contractual organization

The originality of the distribution of free licenses lies in the fact that the author does not simply disclose his work; he also organizes the use which can be made thereof. He thus allows, through contract and under certain conditions, the copying, transmission and modification of the software he created. Any and all persons accepting such conditions enter into a contractual relationship with the author.

The license agreement thus establishes a contractual relationship between the licensees and the initial author. Each licensee who modifies the work by virtue of the permission granted by the initial author enjoys copyright protection for

 $^{^{173}}Id$

 $^{^{174}17}$ U.S. Code §101.

his original contributions. He may then grant the same freedoms over his contributions. Users of the modified work would then find themselves contractually bound, not only to the initial author but also to the authors of subsequent modifications.

In theory users of the modified work must have permission to use and modify the work, not only from the initial author but also from all authors of subsequent modifications.

This being said, certain licenses, such as the GPL, specify that rights over the modified work be granted only by the initial author to the detriment of the rights of other contributors.

Validity of the agreement

The validity of such licenses can be called into question under basic contract law, or under consumer laws.

From a contract law perspective, it should be noted that free software is generally subject to standard licenses, which are real subscription contracts ("take it or leave it"). Acceptance of the license is often by tacit agreement, demonstrated by the carrying out of certain actions allowed by the author. Indeed, it is consistently accepted by the courts that the performance of an agreement may constitute acceptance of an offer.¹⁷⁵

Turning to consumer laws, numerous standards are contrary to this type of license. Consequently, should the licensee be a consumer or a non-professional (as defined by French case law), a certain number of clauses—such as those excluding all guarantees or those limiting or excluding the developer's liability 176—could automatically be considered abusive.

Certain licenses could also find themselves in breach of the French law imposing the use of the French language (generally referred to as the "Toubon law")¹⁷⁷, which may lead to the payment of fines and/or the unenforceability of such licenses.

Likewise, certain licenses do not comply with the rules regulating online agreements (e.g. prior information of the licensee; "double click" requirement to express acceptance...empty)¹⁷⁸, which may lead to the unenforceability of such licenses.

In spite of these notions of French law, the Court of Appeal of Paris indirectly acknowledged the validity of such free licenses in a decision dated 16th September

¹⁷⁵17 U.S. Code §204.

¹⁷⁶17 U.S. Code §201(a).

¹⁷⁷17 U.S. Code §101.

¹⁷⁸1-6 Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.

 2009^{179} .

Breach of license conditions

Failure to comply with the provisions of a license constitutes a breach by the licensee of his contractual obligations as well as a breach of the copyright rules.

With copyleft licenses, the free use of software is subject to the condition that the user releasing a modified version of the software allows free access to the modified source code and its further modification to third parties. According to Professor Gautier, this is a sort of condition subsequent to the legal act, which is generally stated in the license terms¹⁸⁰. If the contributor fails to comply with the terms of the license, the license is automatically revoked by his fault, without prejudice to any future claims on grounds of piracy by the original author.

On that basis, the Court of Appeal of Paris in a decision dated 16th September 2009, pronounced the revocation of a contract for a violation of the license conditions: a free software was used by a licensee as a basis for the development of an application, but the licensee removed the original copyright notice referring to the authors of the two files and replaced them with his own, removed the contents of the license under which the original software was released and failed to provide the source code of his modified version of the free software. The Court of Appeal therefore held that several conditions of the GNU GPL had not been complied with.

Waiver and liability

The majority of free licenses includes a limitation or exemption of liability. This is the case with GNU and Mozilla licenses, for example. The question arises as to the validity of such licenses under French law.

Article 1150 of the French Civil Code allows for the limitation of contractual liability. Such limitations are valid in the absence of gross negligence or fraud, in as far as they are agreed between professionals.

Looking at consumer law, clauses "excluding or limiting the non-professional or consumer's legal rights in the event of a failure by the professional to comply with any of his obligations" are unquestionably deemed abusive and consequently held to be null and void, potentially leading the distributor and/or the editor to be considered fully liable for all direct damages¹⁸¹. In order to determine the validity of such clauses, it is therefore necessary to determine the status of who modifies the software source code: professional or consumer.

Finally, there is the question of liability for defective products in the realm

 $^{^{179}}Id.$

¹⁸⁰See. Id.

 $^{^{181}1\}text{-}6$ Nimmer §§6.02, 6.03.

of free software¹⁸², whereby the producer is automatically responsible for any material damage or personal injury caused by a defect in his product. Opinion is divided on this point, as to whether such liability can be applied to software. Some authors consider that the law only applies to material products and that article 1386-3 of the French Civil Code was not intended to include products of intellectual origin¹⁸³. It is not impossible that case law will extend the scope of the law to include intangibles.

Where it is admitted that software falls within the scope of liability for defective products, this will only concern professional suppliers. The independent developer, whose profession is not to supply software, is therefore not concerned. The professional developer could take refuge behind the principle of "development risk", which would allow for an exclusion of liability, as far as the professional may prove that the state of scientific and technical knowledge did not allow the existence of the defect to be known at the time that the product came into circulation. It is within this meaning that the warranty clause in the CeCILL license has been produced¹⁸⁴.

FOSS Cases in France

Although it can be said that the free domain relatively generates few cases of litigation, users of free software are nevertheless subject to rules governing use and distribution. Developers and other organizations involved with free software no longer hesitate before pursuing users, who fail to comply with the conditions of applicable licenses, particularly in matters of distribution.

Three cases have come before the French courts.

- 1. The first case before the High Court of Paris in November 2008 concerned a claim brought against the access provider Free, by three free software developers. The latter accused Free of distributing the Freebox (the modem provided by the ISP to its customers), containing free software components, in breach of the terms of the associated GPL license. The courts have not yet published a decision on this case.
- 2. The second concerns the CNRS, in a case brought by Educaffix¹⁸⁵. The latter company had concluded software transfer agreements with several higher education establishments and the CNRS. The transferred software could, however, only work with a free piece of software, JATLite, developed by the University of Stanford under GNU GPL license. Educaffix requested that the contract be declared null and void for fraud on the basis that CNRS had concealed the fact that the existence of the free software included in the transfer agreement required permission from a third party holder of the rights over said free software, in this case the University of

 $[\]overline{^{182}Id}$.

¹⁸³1-6 Nimmer §6.03.

¹⁸⁴17 U.S.C. §201(a).

 $^{^{185}1-6}$ Nimmer $\S 6.06(A)$.

Stanford. Further, Educaffix requested that the contract be revoked for the sole fault of CNRS because the exploitation of the transferred software implied by necessity the commission of an act of piracy over the free software.

The Court held that "this program has the particular feature of depending on a GNU license, which allows free use of the software, but requires a license if the work based on the program can not reasonably be identified as independent and must therefore be considered as a derivative of the JATLite program."

This decision constitutes an application of the provisions of the GNU license and refers to, without directly citing, article 2 of the GNU license according to which "these requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program and can reasonably be considered independent and separate works in themselves, then this License, and its terms, shall not apply to those sections when one distributes them as separate works. Although, should one distribute the same sections as part of a whole based on the Program, the distribution of the whole must be placed under the terms of this License, whose permissions to other licensees extend to the whole, and thus to each and any of its parts, regardless of who wrote them". Through this decision, the judges recognized the contaminant nature of GNU GPL on a derived program.

It should be noted, however, that the decision does not recognize the validity of the GNU-GPL license, as far as it would have been up to the holder of the rights (University of Stanford, or transferee) to act on the legal principle of piracy and to request the recognition of its rights, which was not the case here.

3. The validity of the GNU GPL license was finally recognized in a decision issued by the Court of Appeal of Paris dated 16 September 2009.

In this case the National Association for Adult Education (AFPA) issued a call for tenders for the implementation of learning spaces, which was finally granted to EDU 4. Doubting the sincerity of the offer submitted by EDU 4, AFPA declared the contract terminated. EDU 4 felt that the product they delivered matched the expectations and sued AFPA for abusive breach of contract, which claim was upheld by the High Court of Bobigny in 2004.

Before the Court of Appeal, AFPA claimed that EDU4 had not clearly informed them that a free piece of software had been incorporated into the provided solution, that the copyright mentions relating to this piece of software had been modified and that the text of the GNU-GPL license had been removed. The Court of Appeal of Paris upheld the claims made by AFPA and held that EDU4 had failed to comply with the terms of the GNU license.

This decision is important because it was feared that France, one of the countries with the highest levels of copyright protection, would deem the free license to be null and void. It also reminds developers, who have decided to integrate free software that this decision is not without consequences and that a free software is not a software free of rights.

Legal procedures

Free software developers enjoy several methods of ensuring the compliance with their rights. They can act on the basis of contract law or copyright law.

On the basis of contract law, where one of the parties to a license agreement fails to perform his obligations, the other party may sue to demand the execution of the promised obligations¹⁸⁶ or the termination of the agreement¹⁸⁷. That party may also claim damages where the execution becomes impossible or where the failure by the licensee to carry out his obligations has resulted in repairable damages.

On the basis of copyright law, failure by the licensee to comply with the terms of the license is tantamount to piracy. Effectively, article L. 335-3 of the Intellectual Property Code states that "the crime of piracy is the violation of one of the rights of the author of a piece of software, as defined at article L. 122-6". Any and all reproduction, representation, distribution, modification, or marketing of software without the consent of its author is a civil tort and a criminal offense. As a result, the licensee can take action in civil and criminal courts to ensure the compliance with his rights. Before criminal courts, the pirate risks up to 3 years in prison and fines of up to 300,000 Euros¹⁸⁸.

Recommended literature

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- Y. Dietrich, Logiciels Opensource : une réalité juridique au sein des entreprises, RLDI, April 2005, n° 4, p. 28

 $^{^{186}}Id.$

 $^{^{187}}Id$

¹⁸⁸17 U.S.C. §103(a).

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Germany

author:[Engelhardt,Tim] author:[Jaeger,Till]

Introduction to software protection under German law Body of law

In Germany, the Copyright Act¹⁸⁹ is the primary legislative regime providing legal protection to software. Its key provisions relevant for software are sections 69a through 69g. They were included in order to implement the so-called EU Software Directive¹⁹⁰ into German national law, and their language is almost identical with that of the EU directive. However, insofar as there are no contradictions or unless the act provides otherwise, the general rules of the Copyright

¹⁸⁹"(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^{190}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

Act (i.e., on the transfer of rights, the legal consequences of infringements, etc.) apply to software as well. 191

Object of protection

Following the understanding of the Berne Convention for the Protection of Literary and Artistic Works and the framework of the Software Directive, computer programs (including the preparatory material) are literary works. According to UrhG, sec. 69a para 3, only original computer programs are protected under copyright law. 192 This means that the computer program needs to be the author's "own intellectual creation". Sec. 69a para 2 sentence 2 of the Copyright Act explicitly states that the ideas and principles underlying any element of a computer program, including those which underlie its interfaces, do not enjoy copyright protection.

But what does "the author's own intellectual creation" mean? First, the term "intellectual" refers to the condition that the computer program must have been created by a human being and not a machine. Thus, programs that are entirely computer-generated are not protected under copyright law. The only other prerequisite is that the creation must be the author's "own". According to German case law and literature, this confirms that the threshold for awarding copyright protection to computer programs is low. Hence, the creation does not need to be exceptionally original, it is sufficient if the program has certain specific characteristics that are not trivial or entirely banal. The Federal Court of Justice held in a decision from 2005 that there is even a presumption for sufficient individuality if a computer program is complex. This ruling has consequences in cases where the copyrightability of a program is disputed. The creator of the program has only to show that this program is complex, whereupon the opponent has the full burden to show and prove that the program is in fact not individual enough.

Authors/Beneficiaries

Generally, all rights in a work belong to the actual author. Sec. 69b of the Copyright Act, a special provision on the ownership of the rights on computer

 $^{^{191}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{^{192}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

 $^{^{193} \}rm For}$ example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{194}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

 $^{^{195}}$ World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

¹⁹⁶The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

programs, does not defer from this principle, but stipulates that where a computer program is created by an employee in the execution of her duties or following her employer's instructions, the employer shall be exclusively entitled to exercise all economic rights in the program created, unless otherwise provided for by contract. Other than under the work made for hire doctrine, which is well-established in the USA, for instance sec. 69b does not provide for a fiction of authorship to the benefit of a developer's employer, but maintains the principle that only the actual creator of a work can be considered its author. However, sec. 69b achieves the goal of easing the exploitation of computer programs made by larger developer groups hired by software companies by a statutory grant of all necessary economic rights in the software. The original authors are thus confined to assert their moral rights in very special situations. ¹⁹⁷

For an analysis of joint authorship, derivative works, compound works, and collective works see below. 198

Exclusive rights

The right holder's exclusive rights are set out in UrhG, sec. 69c, which implements the specifications of sec. 4 of the Software Directive: the author of a computer program has the exclusive right to reproduce the computer program by any means and in any form; to translate, adapt, arrange or otherwise alter the program; to distribute the program including to rent and lend the program; and to communicate it to the public. Distribution means any act by which a physical copy of the work is put into circulation or any offer to the public to distribute such a copy. It includes the right to rent physical copies of the work. In contrast to the distribution right, the right to communicate a work to the public covers only acts by which the owner does not transfer physical copies of the work. From a practical point of view, among the several rights that are sub-categories of the right to communicate a program to the public (such as the right of recitation, performance and presentation, broadcasting, communication by means of video or audio recordings, etc.), only the making available to the public right is relevant. It covers acts where a work is made available to the public in such a way that members of the public may access it from a place and at a time individually chosen by them, e.g., offering a work for download and software-as-a-service.

Exceptions to exclusive rights

Sec. 69c no. 3 sentence 2 of the Copyright Act sets forth the principle of exhaustion. According to this provision, the distribution right is exhausted whenever a copy of a computer program is put into circulation by way of sale¹⁹⁹ within the territory of the European Communities or in another Contracting State of

¹⁹⁷The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of 1976.

 $^{^{198} \}mathrm{Public}$ Law 96-517 found at http://law.copyrightdata.com/amendments.php.

¹⁹⁹17 U.S.C. §102(a).

the Convention Concerning the European Economic Area²⁰⁰ with the consent of the right holder, with the exception of the rental right. Whether this applies only to the physical distribution of software (that is, on data storage media) or whether the principle of exhaustion also applies to online transmissions was highly disputed in German legal circles until recently. The problem was that the language of sec. 69c no. 3 sentence 2 seems to require that the rights holders themselves put a copy of the program into (physical) distribution, whereas in cases where the program is made available for download, it is the downloading recipient of the software, rather than the right holder who creates the physical copy. Hence, interpreting the above provision narrowly would mean that it could not be applied to making-available situations, as the right holder would not "put a copy of the program into circulation". However, as it appears odd to disadvantage the more efficient, faster, and commonly used distribution channel of downloading, a number of scholars and courts have opined that exhaustion is also possible where a copy of a program was made by its downloading recipient.²⁰² According to this approach, the recipient would be entitled to give away this copy to anyone else, provided that she deletes from her systems all copies of the program she has made. On 3 July 2012, the Court of Justice of the European Union has, in its UsedSoft decision, recognized the so-called "online exhaustion". ²⁰³ Applying the principles established in that decision, the German Federal Court of Justice held in 2013 that the owner of a copy of a computer program downloaded by her may give that program to a third party if the following conditions are met: (1) the original owner paid a fee to the copyright holder for receiving her program copy; (2) the original owner's license was not limited in time; and (3) the original owner's program copy must be made unusable. Moreover, any improvements and updates the copy the new owner receives may contain must be covered by a maintenance agreement between the copyright holder and the original owner of the copy of the computer program.²⁰⁴

Equally contentious, and in its details certainly not easy to understand, are the exceptions provided for in UrhG, sec. 69d and 69e. Their origin is, not surprisingly, the Software Directive. The exceptions are intended to balance the interests of protection for software developing companies on the one hand, and the interests of users in maintaining the usability of their copies of the program and in developing new compatible programs on the other.

According to UrhG, sec. 69d para 1, users of a computer program do not need to obtain a license for the reproduction and alteration of the software if these acts are necessary for the use of the program in accordance with its intended purpose and the user is entitled to use a copy of the program.²⁰⁵ The provision specifically points out that error corrections can be allowed without the need to

²⁰⁰17 U.S.C. §411(a).

²⁰¹17 U.S. Code §102(a).

²⁰²17 U.S. Code §201(a).

²⁰³17 U.S. Code §201(b).

 $^{^{204}}Id.$

²⁰⁵17 U.S. Code §101.

receive a license. Confusingly, the paragraph also contains language stating that the exercise of these rights is subject to the condition of no specific contractual provisions stipulating otherwise. Does this mean that sec. 69d para 1 can be fully waived? The prevailing opinion in Germany answers this question in the negative, saying that sec. 69d para 1 contains a core of exceptions that may not be forgone. ²⁰⁶ The German Federal Court of Justice confirmed this opinion in *UsedSoft II*.

In addition, the requirement of an "intended purpose" poses manifold problems that are beyond the scope of this chapter. UrhG, sec. 69d para 2 allows lawful users of a copy of a computer program to make a back-up copy insofar as it is necessary to ensure future use, even if contractual obligations of the owner of the copy with the right holder provide otherwise.

Sec.69d para 3 of the Copyright Act contains an interesting rule, giving lawful users of a copy of a computer program the right to observe, study, or test the functioning of the program "in order to determine the ideas and principles which underlie any element of the program if she does so while performing any of the acts of loading, displaying, running, transmitting or storing the program which she is entitled to do." UrhG, sec. 69d para 2 and 3 may not be overridden by contract, as UrhG, sec. 69g para 2 unequivocally states.

The same is true for the rule set out by UrhG, sec. 69e. According to this provision, authorization of the right holder is not necessary when the reproduction of a program and its translation into another form, including the decompilation, is indispensable to obtain the information necessary to achieve the interoperability of an independently created computer program with other programs, if certain conditions are met.²⁰⁷

Moral rights

German copyright traditionally recognizes strong moral rights of the authors of protected works. In principle, this is also true for copyrighted software. Moral rights are not within the scope of the EU Software Directive: thus, the general rules of German copyright law on moral rights apply that is, in particular, UrhG, sec. 12 through 14.²⁰⁸ However, there is much discussion about the extent to which authors of computer programs enjoy moral rights. It appears that the tendency is to award them less protection than to authors of "classical" works protected by copyright law.²⁰⁹

Sec. 12 gives authors the right to decide whether and how their works are to be published. Its practical importance for software is negligible.

²⁰⁶17 U.S. Code §204.

 $^{^{207}17}$ U.S. Code §201(a).

 $^{^{208}17}$ U.S. Code §101.

²⁰⁹1-6 Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.

Sec. 13 grants authors the right of recognition of their authorship (sentence 1), and the right to decide whether the work is to bear an author's designation and what kind of designation that should be (sentence 2). The prevailing view is that an author may not completely waive his right of recognition²¹⁰, even in an employer-employee relationship.²¹¹ On the other hand, authors may renounce their right to be expressly named on each copy of the software.²¹² This can be done impliedly for instance, if the author was aware of a business practice that does not list the actual developers.²¹³

Sec. 14 provides for the right to prohibit any distortion of an author's work which would jeopardize her legitimate intellectual or personal interest in the work. Examples could include the use of a work in a certain way that could negatively reflect on the author's reputation, such as the use of the work in a racist or pornographic context, or the distribution of versions of the work in particularly bad quality.

In addition, the recognition of moral rights has a strong impact on the possibilities to assign or grant rights in copyrighted works. For details, see the "Copyright assignment" section below.

Term of protection

For computer programs, the same provisions on the protection term apply as for works of literature and art: the copyright expires 70 years as of January 1 following the death of the author (UrhG, sec. 64, 69). If a work was created by joint authors, the 70-year period is calculated from the date of the death of the last surviving author (UrhG, sec. 65 para 1). As to derivative works, there is no special rule as both the author of the original work and the author of the derivative work hold independent copyrights. Thus, each protection term is calculated separately under the general rule. For anonymous and pseudonymous works, the deciding date is the publication of the work (UrhG, sec. 66 para 1). If, however, the author or his legal successor reveals her identity before the expiration—that is within the 70-year period after publication—or if the author's identity is clear, the duration of the copyright is calculated under the general rule set forth in sec. 64 and 65 (UrhG, sec. 66 para 2).

Copyright assignment

In principle, German copyright law does not distinguish between software and other protected works when it comes to the fundamental mechanisms of the transfer and assignment of rights. German copyright tradition is built on the idea that both economic and moral interests in a work come from the same root (so called "monism theory"). As moral interests are seen as being linked directly

 $^{^{210}} Id.$

 $^{^{211}}See,\ Id.$

 $^{^{212}1-6}$ Nimmer §§6.02, 6.03.

 $^{^{213}}Id.$

with an author's personality, it is not possible for an author to completely assign all rights in a work or, to put it in other words, to entirely transfer the ownership of the work. This being said, it cannot come as a surprise that the concept of works made for hire is foreign to German copyright law as well.

The legal mechanism used for giving other parties the rights to use and exploit a work is the grant of a bundle of rights. To achieve results similar to a complete copyright transfer, one would grant all exclusive usage rights to the licensee. The original author would still be entitled to her moral rights and could object to certain uses on their basis.²¹⁴

However, art. 2 para 3 of the Software Directive caused the German legislator to introduce a clause into the Copyright Act that significantly eases the acquisition of developers' rights by their employers. Sec. 69b, which is applicable only to software but not to other work categories, implements this EU provision and provides that "[w]here a computer program is created by an employee in the execution of his duties or following the instructions given by his employer, the employer exclusively shall be entitled to exercise all the economic rights in the program, unless otherwise agreed." Thus, it is presumed that an employer obtains all economic rights in a software program created by an employee as long as the creation of the program occurred within the framework of her obligations as an employee. Two observations: First, the employer does not become the author of the software (as would be the case if it were a work made for hire system) but only obtains the economic rights that is, the rights needed for the commercial exploitation of the work. The moral rights, however, remain unaffected. Second, the presumption can be overcome by individual agreement.

Special measures

In case of infringement, a mix of provisions governing the enforcement of the copyright applies. Most general provisions of the Copyright Act are applicable to software in the same way as to any other copyright-protected work. Most importantly, sec. 97 para 1 accords to the authors and holders of exclusive rights the right to demand from the infringer to cease and desist from her infringing actions (provided that there is the danger that she will repeat the infringement, Unterlassungsanspruch) and to correct the infringement already caused (Beseitigungsanspruch). Moreover, where the infringement was intentional or the result of negligence, the holders of exclusive rights may also ask for damages (sec. 97 para 2). According to sec. 97 para 2 sentence 4, authors may also demand a monetary indemnity for the injury caused to them even if no pecuniary loss has occurred. Sec. 101 accords to the infringed right holders the right to require from the infringer to be informed as to the origin and distribution channels of the infringing copies, which includes in particular the name and address of the manufacturer; the supplier and other prior owners of the copies and of the

²¹⁴1-6 Nimmer §6.03.

²¹⁵17 U.S.C. §201(a).

commercial customers; the quantity of copies that have been manufactured, dispatched, received or ordered; and the prices obtained.

In addition, UrhG, sec. 69f contains special provisions exclusively governing software, in particular with regard to DRM protection, and pursuant to UrhG, sec. 69a para 5, the general provisions about DRM protection (UrhG, sec. 95a through 95d) do not apply to software.

According to UrhG, sec. 69f para 1, the holder of the rights in a computer program is entitled to demand from anyone who owns or possesses unlawfully manufactured or distributed copies, or copies intended for unlawful distribution, to destroy these copies. This right does not require intent or negligence on the part of the owner or proprietor, nor is it required that the owner or proprietor herself infringed on the copyright. It is sufficient that the copies are made or distributed in an objectively unlawful way. In this sense, sec. 69f para 1 is considerably further-reaching than the general rule set forth in sec. 98 para 1 of the Copyright Act, according to which the right to require the destruction of unlawful copies can only be enforced against the actual infringers. Apart from that, the right owner may also require — for appropriate compensation — that the owner or proprietor hand over the infringing copies to her (sec. 69f para 1 sentence 2).

Sec. 69f para 1 applies mutatis mutandis to any means whose sole intended purpose is to facilitate the unauthorized removal or circumvention of any technical mechanism that protects the software from copyright-infringing acts (sec. 69f para 2). In comparison with the general provisions on technological measures that are designed to restrict or prevent certain acts which are not authorized by the right holder and on destruction claims, there are a number of important differences. First, sec. 69f para 2 does not provide for a direct prohibition of any act of circumventing technical measures. Second, sec. 69f para 2 applies only when the circumvention means are solely designed for circumvention purposes, whereas sec. 98 para 1 sentence 2 of the Copyright Act provides for a destruction claim also in cases where a means is predominantly used for the creation of infringing copies. Third, sec. 69f para 2 (as para 1) does not require intent or negligence. Finally, para 2, just as para 1, provides for a claim against any owner or proprietor irrespective of whether she is the infringer.

The right to equitable remuneration and the so-called "Linux clause"

With a right to equitable remuneration of each author, in 2002 the German legislator introduced a feature into copyright law that is rather uncommon on the international level. According to UrhG, sec. 32 para 1 sentence 3, if the initially agreed compensation is not equitable, any author has the right to require assent from the other contracting party to amend the license agreement concluded between the two parties so that the author is assured equitable remuneration. As this obviously has the potential to conflict with the concept

²¹⁶1-6 Nimmer §6.06(A).

of FOSS, the German legislator, pressed by the FOSS community, researchers, and practitioners, 217 inserted into UrhG, sec. 32 para 3 sentence 3 an exception to this rule called the *Linux clause*. According to this provision, the author may "grant a non-exclusive exploitation right without consideration to the world at large," which excludes the right to claim equitable remuneration at any later point.

The situation is similar with regard to UrhG, sec. 32a, another provision protecting authors' interests in getting a fair share of the returns gained by using their works. This provision provides for an author's right to demand further compensation for the exploitation of her work, in situations where the conditions of the grant of rights cause the agreed consideration to be conspicuously disproportionate to the returns and advantages from the use of the work. According to sec. 32a para 2, even third parties can be liable to pay to the author additional compensation, if the author's licensee has transferred the exploitation rights granted to her, or granted further exploitation rights, and the conspicuous disproportion results from advantages to this third party. In this case, the original licensee ceases to be liable under sec. 32a. In order to protect the functioning of the FOSS concept that is built on not paying for the exploitation rights, the German legislator decided to include in sec. 32a para 3 sentence 3 the same exception as sec. 32 para 3 sentence 3 delineated above. 219

According to their wording, both sec. 32 para 3 sentence 3 and 32a para 3 sentence 3 only apply if the author herself puts her work under a general non-exclusive license for everyone. Yet one might wonder whether she can claim equitable remuneration or additional compensation if she grants exclusive rights to a third party who later puts the work under a FOSS license. There is no case law on this matter; but if the license agreement between the author and the third party expressly provides for the third party's right to distribute the program as FOSS, the situation is so similar to the one directly contemplated by said provisions of the Copyright Act that in this case they should be applied by way of analogy. However, the outcome should be different if the author's licensee uses both a FOSS and a commercial license. In such a case, the author must get a fair share of the returns made by the commercial distribution of her creation; the Linux clauses do not apply.

Another issue should also be briefly considered. It deals with whether or not UrhG, sec. 32 and 32a have a bearing on cases where software was created in an employer-employee relationship (which is, as discussed above, governed by the presumption of UrhG, sec. 69b).²²⁰ There is no authoritative answer to this question so far; however, based on older case law regarding sec. 32a's predecessor²²¹ it seems likely that sec. 32a also applies if an employer obtained

 $^{^{217}}Id.$

 $^{^{218}}Id.$

²¹⁹17 U.S.C. §103(a).

²²⁰17 U.S.C. §101.

²²¹1-3 Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S.

exploitation rights under sec. 69b.²²² The consequence is that an employee who did not give her consent to the distribution of his creation under a FOSS license would not be hindered in raising a claim under sec. 32a UrhG. If, on the other hand, the employee assented to a FOSS distribution, sec. 32a para 3 sentence 3 should apply by way of analogy. In contrast, sec. 32 is probably not applicable to employed software authors.²²³

Unprotected software and public domain software

As explained, German copyright doctrine does not allow the complete waiver of one's copyright, and consequently, public domain software cannot be seen as software to which the author has forgone all her copyrights. Hence, real public domain software — software without a rights holder — is a phenomenon that can occur only after the expiration of the protection term. However, the term "public domain software" is widely used in Germany as it is in other countries. As this may not be understood as the non-existence of any rights in the software, another mechanism applies for giving effect to a right holder's desire to enable everyone to freely use the program: putting a program in the public domain can be interpreted as granting to everyone a non-exclusive right to use the software. ²²⁴

However, FOSS is not considered public domain software, as FOSS authors do not give up their rights but rather use copyright to enforce their interests. 225

Analysis of FOSS under German law

Copyrights

Qualification of FOSS

Even though the general public often assumes that a FOSS author forgoes her rights, the generally accepted opinion among lawyers, including the courts, is correctly that FOSS authors rather use the traditional mechanisms of copyright to enforce their particular interests. Thus, the analysis of FOSS under German copyright law can build on its generally accepted structures.

The first issue that has to be dealt with is the question of authorship: Who is the original rights-owner of FOSS software? And who is entitled to enforce the

 $^{340,\,348,\,111}$ S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

²²²Lothar Determan, Dangerous Liaisons — Software Combinations as Derivative Works? Distribution, Installation, and Execution of Linked Programs Under Copyright Law, Commercial Licenses, and the GPL, 21 Berkeley Tech. L. J. 1421, 1430 (2006).
²²³Id.

 $^{^{224}1-6}$ Nimmer, §6.05.

²²⁵17 U.S.C. §103(a).

 $^{^{226}} Id.$

rights emanating from authorship? The general principles of authorship have been presented above, but how do they apply to software that from the outset is often created by a group of developers and then set free so that hundreds or thousands of people contribute to the further development of the software?

Four terms representing different concepts come to mind: co- or joint authorship, derivative works, compound works, and collective works.

Rights of the original co-authors

Sec. 8 para 1 of the Copyright Act sets out two factors of joint authorship: (1) the work must have been jointly created by several authors; and (2) their contributions cannot be separately exploited.

(1) Joint creation:

Joint authorship requires that two or more authors willfully collaborate in order to create a work. They must follow a common idea and have a shared plan to create a unitary work. Joint authors agree on a common task and reciprocally align the creative process with the collective idea to create an integrated work. ²²⁷ In contrast, the creator of a derivative work does not collaborate with the author of the original work.

It is not necessary, however, for the authors to work at the same time or at the same place.²²⁸ Hence, collaborative software development over networks can lead to the creation of a joint work, as would developing a program while being in the same office. Nevertheless, in most FOSS projects joint authorship is less common than the creation of derivative works.

(2) Unitary exploitation:

Joint authorship further requires that the contributions of the distinct authors cannot be exploited separately. If a separate exploitation is possible—as is the case, for instance, for software modules or libraries—it is rather a case of compound works (UrhG, sec. 9).

According to para 2 of sec. 8 of the Copyright Act, "the right of publication and of exploitation of the work shall belong jointly to the joint authors." Alterations to the work are permissible only if every joint author consents. The consequence of this is that every contributor to a jointly developed computer program has to agree with the exploitation of the program, in particular with putting it under a FOSS license.²²⁹

The third sentence of para 2 of the provision is of great importance for the enforcement of FOSS licenses. Pursuant to its terms, each joint author alone is entitled to assert claims arising from infringements of the joint copyright. Hence, it enables every contributor to enforce compliance with the applicable FOSS

²²⁷1-3 Nimmer §3.02.

 $^{^{228}}Id.$

 $^{^{229}17}$ U.S.C. § 101.

license through cease and desist claims under UrhG, sec. 97 para 1. However, it should be noted that a single joint author may demand payment of damages only to all joint authors. This means that while one single joint author is in principle allowed to enforce payment claims, she must, when doing so, name every other co-author of the work and demand payment to all co-authors together. The purpose of this requirement is the protection of the other co-authors not raising the payment claim. The treatment of information claims is disputed, but it seems reasonable to allow each single author to enforce this kind of claim alone without being obligated to refer to each and every co-author.²³⁰

Authors of derivative works

Another way of creating new software is the alteration of pre-existing programs, as contemplated by UrhG, sec. 3, 23, and 69c No. 2. If this is the case, both the old and the new work are separately protected under copyright law. However, the author of the derived work needs consent from the author of the original work in order to be able to lawfully exploit the new creation. It is not always easy to decide whether a work was created as a joint work or just derived from another one. The main aspect is the afore-mentioned factor of having a common, shared plan: if one existed and the contributions were not separately exploitable, it is a case of joint authorship; otherwise, it is a derivative work or a case of compound works.

In derivative work situations, both the author of the original work and the author of the derived work may enforce their own rights without having to involve the other.

Compound works

Independent works — that is, works that were created and can be exploited independently from each other — that are combined by several authors for exploitation in common are called compound works and are governed by UrhG, sec. 9. Sec. 9 not only requires the act of combining the works, but the combination must be made for *joint exploitation*. In other words, the respective authors must enter — expressly or impliedly — into an agreement that the works are supposed to be exploited in common.²³¹ Hence, compound works may be created only if each author consents in advance to the combination of the works. The legal consequence is that each author of the several works combined may require from the others their consent to the publication, exploitation, or alteration of the compound works, provided that such consent may be reasonably demanded of them. Contrary to cases of joint authorship, the authorship on every separate

 $^{^{230}}$ l-3 Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)). 231 17 U.S.C. §201(c).

work remains unaffected by the combination. Thus, the rights in each separate work can be enforced separately.

Collective works

In addition, German copyright law also protects collective works. These are collections of works, data, or other independent elements, provided that the collection itself is a personal intellectual creation (UrhG, sec. 4 para 1)—in other words, work as defined by UrhG, sec. 2 para 2.

The difference between collective works and works of joint authorship is that in the latter case, one single work is created whose parts cannot be exploited separately, whereas an exploitation of the parts of a collective work is perfectly possible. If a work is co-authored, only one work exists; if a collection is created, one can distinguish between the collection as one work, and its parts as different works.

The decisive aspect for the distinction between collections and compound works is the following: For bringing compounds of works into existence, it is necessary that the authors of the individual works themselves determine what works should be combined and decide that exactly these works should be exploited in common. In the case of a collection, by contrast, the authors of the several parts grant exploitation rights to a third party and do not designate which works will eventually be used for the collection. 232

Due to the fact that the copyright in the collective work is independent from that in the parts of the collection (provided they are works), the exploitation of the collective work requires the consent of both the creator of the collective work and the authors of its parts.²³³ Each author, including the author of the collection, may enforce her rights separately.

The assignment of copyrights

Copyright assignments or contribution agreements that are designed to transfer the complete copyright to the assignee are problematic under German law. Under German copyright law, the complete transfer of copyright is not possible, so such assignments risk being void. Therefore, when drafting such agreements, it is recommended to take into consideration the legal situation in Germany and other "droit d'auteur"-countries. The solution that comes closest to a complete transfer is the grant of all exclusive usage rights to the licensee, leaving the author her moral rights that enable her to object to certain uses.

FOSS developers relatively often enter into so-called fiduciary license agreements or contribution agreements, according to which the grantee receives unlimited exclusive rights in the developer's work. These kinds of agreements are used for avoiding copyright fragmentation; they serve to concentrate the rights, with

 $^{^{232}}$ 1-6 Nimmer $\S 6.05$.

 $^{^{233}}Id.$

one person or entity having the means to take care of licensing and copyright enforcement. In order to protect the FOSS principle, fiduciary license agreements often contain a clause linking the allegiance of the fiduciary to FOSS principles with the validity of the grant itself.²³⁴ If, in contrast, the grantee has the right to license the work against license fees, the grantor is entitled to equitable remuneration (see UrhG, sec. 32), and the agreement should provide for a compensation clause.²³⁵

Moral rights

Even though moral rights play a rather minor role in the software context, they may have some ramifications on the use of FOSS. Most importantly, from a practical perspective, authors are entitled to decide whether the work is to bear an author's designation and what designation is to be used (UrhG, sec. 13).

In addition, FOSS developers have a particular interest in maintaining a flaw-less reputation. Thus, they have a strong interest in fighting distortions of their works that may be detrimental to their standing, which argues for the application of UrhG, sec. 14, at least in some cases. However, it should be considered that software is by its nature normally subject to further developments, and that in addition many FOSS licenses require licensees to clearly indicate each modification made to the software. Nevertheless, this does not totally exclude the possibility that authors rely in certain cases on UrhG, sec. 14.

But what if a license—such as the GNU General Public License²³⁷—stipulates that the licensor allows any kind of alteration to the software? The answer to this question lies in the general tendency of German copyright law to always protect a core of authors' moral interests. Thus a complete renouncement for the future, especially in so-called standard business terms, ²³⁸ is not possible. Consequently, in some more severe cases, developers will be able to enforce their moral rights against modifications of their software even if the applicable FOSS license seems to allow any kind of alterations, the infringing one included.

Enforcing FOSS licenses

Contractual relationships

Under German law, FOSS licenses are commonly seen as license agreements between the licensor and the licensee, and therefore as contracts.²³⁹ When receiving FOSS, however, in most cases the FOSS license agreement is not the only contractual relationship the receiving party enters into: normally, the distributor of the software will not be identical with the holder of the exclusive

²³⁴ Id. 235 Id. 236 Id. 237 Id. 238 17 U.S.C. §106. 239 Id.

rights; hence, there will also be an agreement between the recipient of the software and the distributor handing her the software. In the following, we will focus on this case where right holders and distributors are not identical. It is crucial then to distinguish between these two basic relationships, as otherwise it is impossible to come to correct assessments of issues like liability and warranty. All issues relating to copyrights in the FOSS have to be determined under the FOSS license agreement. This covers first of all the question of what exploitation rights the user of the FOSS has, what conditions she must meet, and what the consequences of a breach of the license requirements are. Problems like the legal responsibility for the software itself have to be solved under the agreement between the supplier and the recipient of the software. The most important issue in this context is the legal responsibility for defects in the software. However, a lack of title can be a problem of the relationship between the distributor and the user, as well.

Finally, it should be noted that although we are dealing here with a triangle of relationships, so far only two sides of this triangle have been mentioned. The missing part is the relationship between the holder of the exclusive rights and the distributor. All problems concerning rights, warranties, and liability are governed by their specific agreements.

Validity of the contract

The mechanisms of the conclusion and validity of the contract between the supplier and the recipient of the software do not pose any specific problems. Therefore, the focus of the following analysis will be on the relationship between the holder of the exclusive FOSS rights and its licensee.

(1) Contract as offer and acceptance

Any contract is entered into by an offer from one party and the corresponding acceptance by the other. The German understanding is that the delivery of the license text of a FOSS license constitutes a valid offer.²⁴⁰ Any use of the software by the licensee requiring the grant of a right to her that exceeds the limits of the statutory permissions under UrhG, sec. 69d, can be construed as an implied acceptance.²⁴¹ Normally, however, the offeror needs to be notified of the acceptance in order for a contract to come into existence; but according to sec. 151 sentence 1 of the German Civil Code, ²⁴² a notification of the offeror is not required if such notification is not to be expected according to customary practice, or if the offeror has waived it. In case of the use of a FOSS license by the holder of the exclusive rights in a computer program, it is fair to say that both alternatives may apply: the right holder waives the notification requirement by relying on the FOSS license, and it is customary practice in these kinds of cases not to notify the right holder of the acceptance.²⁴³

²⁴⁰17 U.S.C. §109(a).

 $^{^{241}}$ 2-8 Nimmer §8.12.

²⁴²Computer Assoc., 982 F.2d at 714.

 $^{^{243}}See, 4-13$ Nimmer $\S13.02(B)$.

(2) The law on standard business terms

The particularities of German private law pose another problem as to the question of whether licensor and licensee validly agreed on the terms of a FOSS license that was included in the software delivery: FOSS licenses are not written for individual contracts but formulated for an indefinite number of contracts and presented by the licensor to the potential licensee with no chance for the latter to negotiate their terms. Thus, they are generally regarded as standard business terms, ²⁴⁴ which are governed by the restrictions of BGB, sec. 305 through 310. These provisions were introduced into the Civil Code with the purpose of protecting parties to whom standard business terms are presented. The first problem that arises from this fact is how a FOSS license in its quality as standard business terms becomes a part of a contract between both parties. How does the licensee take cognizance of the license (or at least of the fact that the software at hand is under a FOSS license)? And is it a problem that the license text is in English, a foreign language for most people living in Germany?

Pursuant to BGB, sec. 305 para 2, standard business terms "only become a part of a contract if the user, when entering into the contract, (1) refers the other party to the contract to them explicitly or, where explicit reference, due to the way in which the contract is entered into, is possible only with disproportionate difficulty, by posting a clearly visible notice at the place where the contract is entered into, and (2) gives the other party to the contract, in an acceptable manner, which also takes into reasonable account any physical handicap of the other party to the contract that is discernible to the user, the opportunity to take notice of their contents, and if the other party to the contract agrees to their applying."²⁴⁵

In most cases of FOSS distribution, these requirements will not be fulfilled.²⁴⁶ However, from a practical perspective, this is not a real problem. First, irrespective of the license being incorporated into a contractual relationship between the FOSS licensor and a licensee, the limitation of warranties and liability normally contained in FOSS licenses are in any case void.²⁴⁷ Moreover, the mere use of a computer program is allowed pursuant to UrhG, sec. 69d, without the necessity for the parties to enter into a license agreement.²⁴⁸ Hence, in most cases of using a FOSS program, there is no need for a license agreement at all. Only if someone desires to make further-reaching use of the software than allowed by UrhG, sec. 69d would one need to obtain a license. In such a case, it would be self-contradictory to assert on the one hand rights that can only be granted through a license agreement, and to claim on the other hand that this license is void (venire contra factum proprium).

Therefore, one can presume that someone who distributes, modifies, or repro-

²⁴⁴See, Computer Assoc., 982 F.2d at 715.

 $^{^{245}}Id.$

²⁴⁶Apple Computer, Inc v. Microsoft Corp., 35 F.3d 1435, 1445 (9th Cir. 1994).

²⁴⁷See, Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 819 (1st Cir. 1995).

²⁴⁸See, Id. at 815.

duces FOSS has taken cognizance of the applicable license and has accepted its terms. 249

The same reasoning applies $mutatis\ mutandis$ to the issue of the license language: sserting on the one hand that the license is void because of its language but relying at the same time on the rights granted thereunder would be self-contradictory. In addition, the FOSS license forms the entire contractual relationship between licensor and licensee, including the language of the initial offer to enter into an agreement. In such a case — the language of the negotiations between the parties being not German — the incorporation of non-German standard business terms is possible and valid. 250

(3) Waiver of warranty and liability

As briefly mentioned before, the common warranty and liability waivers contained in FOSS licenses go far beyond what is permitted in standard business terms, whether in agreements with consumers or in pure business matters.²⁵¹ Consequently they are considered void.

(4) Antitrust law

The compliance of FOSS copyleft licenses with competition law is another issue worth mentioning. One could argue that such licenses are in conflict with the prohibition of price fixing as they force licensees to give away modified works for free - that is at a fixed price. However, the prevailing view in Germany is — with differing reasons — that the obligation to distribute derivative works for free cannot be regarded as price-fixing.²⁵²

Moreover, users of FOSS could not gain very much from claiming that the relevant license is void. They need a license in order to be able to make use of the software, at least if the use exceeds the boundaries of UrhG, sec. 69d. If a court declares the FOSS license void or not applicable, they would still not obtain a license and would thus not be entitled to the use of the desired software. They can either receive the required rights through the FOSS license, or they will have no rights at all.

Violation of license conditions

Whether the violation of a license agreement is merely a breach of contract or also constitutes a copyright infringement, is a standard problem known from many intellectual property cases. Many FOSS licenses address this issue by including an express provision on the effects of violating the license terms. Sec. 4

²⁴⁹4-13 Nimmer §13.03(F).

²⁵⁰ See, Order Re Copyrightability Of Certain Replicated Elements Of The Java Application Programming Interface (hereinafter *Order*) found at http://www.groklaw.net/pdf3/OraGoogle-1202.pdf.

²⁵¹17 U.S.C. §102(b).

²⁵²1-2 Nimmer §2.02.

²⁵³4-13 Nimmer §13.03(B)(2)(a).

of the GPLv2, for instance, states clearly that any failure to comply with the conditions of the GPLv2 will automatically terminate the license. German courts had no problem with aligning this with the basic principles of German private and copyright law. From the very first case, the courts followed the prevailing academic opinion and interpreted this as a condition subsequent, pursuant to BGB, sec. 158 para 2.²⁵⁴ Consequently, it is generally accepted that violations of FOSS licenses which include express conditions on the grant of rights constitute copyright infringements and not merely a breach of contract. It should be noted that an infringer beginning to comply with the FOSS license conditions cannot "heal" the past infringement; the "old" license is not reinstated in such a case, but she enters into a new license agreement with the FOSS licensor.

Waiver and liability

As mentioned above, the complete waiver of any warranty and liability commonly used in FOSS licenses conflicts with general principles of German private law and is void. But what is the impact of the ineffectiveness of these provisions? The starting point for finding an answer to this question is evident: the statutory law on warranties and liability applies. But what exactly does this mean?

In order to carry out a correct analysis of this problem, one has to clearly distinguish between the contractual relationships among the parties involved.

Relationship distributor — user

As far as the relationship between distributor and user is concerned, the ineffectiveness of the waivers has no importance, as they would apply only to the relationship between the holder of the exclusive rights in the software and her licensee. What is the distributor's liability then? The answer to this question depends on several factors. In cases where the distributor and the user do not enter into a specific agreement on warranties and liability, the most important question is whether the distributor gives away the software completely for free or whether payments for handing out the software are involved (for instance, "for the physical act of transferring a copy," 255 or if the software is offered in a package with support $services^{256}$). In the first case, the provisions of the law on donations apply, thereby considerably limiting the distributor's liability. According to BGB, sec. 524 para 1, the sole liability a donor bears is that she has to pay damages to her contractual partner if she fraudulently concealed a defect of quality.²⁵⁷ Thus, the distributor must advise her customers of bugs she knows about. Defects of title are dealt with in BGB, sec. 523 para 1, in exactly the same way. A distributor would be liable, for example, for damages

²⁵⁴Computer Assoc., 982 F.2d at 708.

²⁵⁵See, BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

 $^{^{256}}$ See, 4-13 Nimmer §13.03(B)(3).

 $^{^{257}}$ See, 4-13 Nimmer §13.03(F)(2).

caused by her passing the software off as open source software against her better knowledge.

The liability for damaging events that do not affect the equivalence of the contractual primary obligations but impair the value of the donnee's property in general (that is, not the donated software itself) is governed by BGB, sec. 521, according to which the donor's liability is restricted to acts of intent and gross negligence.

If, on the other hand, the distributor gives away the software while she receives payments from her customers, the privileges for donors that German private law provides for do not necessarily apply. It is impossible to find a general rule precisely stipulating when, in cases of contracts containing a mix of paid and unpaid duties, the whole contract must be considered non-gratuitous. The general tendency appears to rather assume that this kind of agreement is for remuneration. In this case, much stricter rules on liabilities and warranties—the law of the sale of goods—apply. Thus, according to BGB, sec. 439, the recipient of the software may demand supplementary performance from the distributor if the software received is defective as to its quality. If she fails to remedy the defect within a reasonable time, the recipient may terminate the contract, reduce the compensation, claim damages, or demand reimbursement for her wasted expenditures.²⁵⁸ This does not differ at all from the rights a recipient has against a distributor of proprietary software.

If, on the other hand, the distributor and the user have come to a valid agreement concerning the former's warranties and liability, the terms of this agreement replace the above provisions. 259

Relationship right holder—user

As to the relationship between the holder of the exclusive rights and the licensee, the following mechanism applies: There is no contractual responsibility for any defects of quality of the software itself. The right holder does not deliver (in the situation discussed herein) the software itself but only grants the rights on this software. Thus, her responsibility only covers the lack of title. As the grant of rights is gratuitous, it is governed by the principles of the law of donations. Hence, the responsibility of the rights owner is, according to BGB, sec. 523, limited to cases where she fraudulently conceals the existence of third-party rights. ²⁶¹

However, it should be noted that in a case where the licensor is situated in a country other than Germany, the laws of that country will most probably apply (see art. 4 para 2 of the so-called Rome I regulation²⁶²).

 $^{^{258}4-13}$ Nimmer $\S13.03(F)(2)$.

 $^{^{259}}See,$ Computer Assoc., 982 F.2d at 715.

²⁶⁰See, Computer Assoc., 982 F.2d at 715.

²⁶¹Order supra Note XXX

²⁶²See. Id. at 710.

Product liability

Apart from the contractual liability explained above, software developers and distributors can also be subject to the principles of product liability as set forth in the German Product Liability Act²⁶³. This act provides for direct damages claims against the producer of a product if the product is defective, and the defect causes the death or bodily injury of someone, or damages a thing other than the defective product itself that is used for private purposes (sec. 1 para 1). Claims for financial loss are not covered by the German Product Liability Act. Defects are defined in terms of the lack of safety the product provides (sec. 3), which deviates significantly from general private law.

Whether or not product liability applies depends on whether the developer or distributor are "producers", as defined by sec. 4 of the Product Liability Act. According to this provision, a producer is the person or entity who has made the product, who uses a distinctive sign giving the impression that she is the maker of the product, or who imports the product into the European Economic Area in order to distribute it for commercial purposes. Hence, both developers and distributors of FOSS can in principle be regarded as producers in terms of the Product Liability Act. However, pursuant to sec. 1 para 2 no. 3, the liability under this act is excluded if the respective product was neither made for sale or any other form of commercial distribution, nor made or distributed as part of the professional activities of the producer.

Claims under the Product Liability Act may not be waived or limited in advance; any agreements to the contrary effect are void.

Torts

Finally, producers and distributors of FOSS may also be liable under the general law of torts (BGB, sec. 823 ff.). Liability under sec. 823 para 1 of the Civil Code—the fundamental torts provision—requires that the tortfeasor at least acted negligently. In this context, it is important that according to the Federal Court of Justice, the liability limitations of the law on donations under BGB, sec. 521 (liability only for intent and gross negligence) also apply to the law of torts, as long as a parallel donor-donee relationship existed between both sides. 264

Moreover, BGB, sec. 823 para 1 also requires that a so-called absolute right was infringed. Such rights include life, body, health, freedom, and property. Most likely, tort claims from the delivery of defective FOSS will arise because of damages to property and bodily injuries.²⁶⁵

²⁶³4-13 Nimmer §13.03(B)(4).

 $^{^{264}}Id$.

 $^{^{265}}See,$ John William See v. Christopher Durang and LA. Stage Co., 711 F.2d 141, 143 (9th Cir. 1983).

The copyleft principle

Principle

A common feature of many FOSS licenses is the "copyleft" principle. This term means that any licensee is obligated to put derivate works that she creates based on the licensor's work under the same license obligations as the original work if she distributes the derivative work.

Validity

As clear and simple as this principle appears, it is very difficult in its practical application. The main issue is how to define what constitutes a derivative work or — in copyright terms — what UrhG, sec. 69c no. 2 means by "adaptation, arrangement and any other alteration of a computer program." The answer to this question is particularly important for cases where the code of the original work is not itself modified, but where the original program is combined with other programs or program components. There is no case law on this problem, ²⁶⁶ and literature dealing with this issue is scarce. One proposal brought forward in the literature with regard to the implementation of the Software Directive is to apply the rather formal criteria of whether or not the new software uses an interface to communicate with the original one.²⁶⁷

Even though the question of what constitutes an adaptation or alteration of a computer program thus remains largely open, it is fair to say that the copyleft principle as such is valid under German law; right holders are allowed to make their grants subject to the compliance with certain requirements.

In the same context, a further issue should be mentioned. Existing copyleft licenses provide for various wordings and can consequently be different in their scope. This can, at least in theory, be a legal issue if a copyleft obligation is put on the recipient of the software even for cases where copyright law does not require her to obtain a license for moving forward with her own programming. For most copyleft licenses, this is not a real issue, however.²⁶⁸ On the other hand, sec. 2 of the GPLv2 could be interpreted in such a way that its definition of the term "derivative work" goes beyond what is covered by UrhG, sec. 69c no. 2 (the exclusive right to alter the software), when it states that even independent sections that are distributed as part of a whole have to be licensed under the GPLv2 if one of them is GPLv2 software. Nevertheless, this does not necessarily mean that this GPL provision goes any further than what German copyright law requires. The reason is that not only the alteration of a work but also the distribution of several works as compound works under UrhG, sec. 9 requires each right holder's consent.²⁶⁹ However, the impact of sec. 2 of the GPLv2 on cases where one could neither argue that the program at hand was altered nor

²⁶⁶ Id.

²⁶⁸Mist-On Sys. v. Gilley's European Tan Spa, 303 F. Supp. 2d 974, 978 (W.D. Wis. 2002).

²⁶⁹4-13 Nimmer §13.03(B)(4).

that a compound work was created (if this is possible at all) depends on the circumstances of the concrete situation.

Claims against infringing acts. Damages

Practical experience has shown that the GPLv2 can be enforced in Germany without major difficulties. 270

Under German law, copyright infringements can trigger a number of statutory claims, the most important one being the right to compel the infringer to refrain from further infringing acts. Such a claim requires that there is the danger that the infringer commits further infringing acts, which normally is presumed on the basis of the pre-infringement.²⁷¹ In contrast, it is not required that the infringer acts intentionally or at least negligently.

Moreover, the right holder may also require the infringer to abolish anything interfering with the right holder's rights.

An infringed party may also bring forward a claim for destruction or surrender of unlawfully manufactured or distributed copies or of all copies intended for unlawful distribution (UrhG, sec. 69f para 1).²⁷²

Furthermore, UrhG, sec. 101 stipulates that any injured party may require from any person who infringes on her copyright in the course of business to give information as to the origin and distribution channels of such copies.

Finally, UrhG, sec. 97 para 1 sentence 1, 3rd case provides for claims for damages. In contrast to cease and desist claims, damages claims require fault on the part of the infringer. Hence, the infringer must have caused the infringement intentionally or at least negligently. It is sufficient if the infringer could have known and should have known that she is infringing on someone else's copyright. German courts tend to be rather strict (for instance, requiring that a software distributor control the license chain) and will in most cases assume that an infringer acted at least negligently.

Three ways of determining the amount of damages are established: the actual damages including lost profits; payment of the equivalent of an appropriate license fee; or an account of profits. The infringed right holder has a choice among these three methods.

In cases of dual licensing, it is a reasonable option to choose the second method of damage calculation because in such cases the infringed party is able to prove how much she would normally charge licensees for exploitation rights in the software. In other cases, it is more advisable for FOSS owners to claim an

 $^{^{270}}$ Mist-On Sys., 303 F. Supp. 2d at 976 (W.D. Wis. 2002)

²⁷¹Computer Assocs., 982 F.2d at 709-10.

 $^{^{272} \}mathrm{BUC}$ Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

²⁷³See v. Durang, 711 F.2d at 143.

account of profits. However, this option is also potentially problematic if the infringed party holds only rights to a derived work. 274

An interesting feature of the law on damages can be found in UrhG, sec. 97 para 2. Under this provision, right owners can ask for indemnification for immaterial damages that is, the infringement of moral rights. One example might be the distribution of a computer program without naming the author. Another possibility would be that someone who is not the true author poses as such. However, indemnifications for the violation of moral rights are in practice rather rare and come into consideration mostly in very serious cases.

Legal procedures

Standing to sue

The first issue that must be dealt with regarding procedural law is the question of who is entitled to sue. In most FOSS cases there is not only one right owner in the infringed program, because most software in general, and FOSS in particular, is the product of collaboration between many developers and later further development by others. As described above, rights in FOSS can be owned by joint authors, by original authors, by authors of derivative works, and by authors of compound works. Who in these cases is in a position to enforce the copyrights in the computer program?

Joint authors

According to UrhG, sec. 8 para 2 sentence 3, each joint author of a work may enforce the exclusive rights in this work. However, she may demand payment only on behalf of all joint authors. In other words, she may go to court and ask for a decision that compels the infringer to refrain from the infringing acts, but she must ask for the payment of damages for the benefit of every joint author. Thus, when filing her action, she has to name every co-author of the work whose rights were infringed upon.²⁷⁵ The size and diversity of developer communities involved in the development of computer programs can make this an extremely difficult task. However, the prerequisite of following a common idea when creating a program in order to justify the classification as joint authors limits quite significantly the number of developers who have to be considered; as a consequence, it is in most cases not impossible to prepare an exhaustive list of all joint authors.

Compound works

For compound works, the Copyright Act does not contain a provision similar to sec. 8 para 2 sentence 3. The most reasonable rule one could apply should be to let each author enforce the rights in her own creation.

²⁷⁴Computer Assoc., 982 F.2d at 715.

 $^{^{275}}See,$ 1-2 Nimmer $\S 2.03(G).$

Derivative works

As described above, the situation is different for derivative works. Both the creator of the original work and the author of the derived work hold by law a full right in their respective work. Both are therefore entitled to institute proceedings against any infringer on their rights. However, the derivative work's author may not create or exploit any derivative works without the original author's consent.

This being said, German doctrine applies UrhG, sec. 8 para 2 sentence 3 by analogy to certain situations involving derivative works. The creator of the derivative work is hence permitted to ask for injunctive relief against any acts infringing on the work, even if the part concerned was not created by her but the original author. On the other hand, she may ask for damages only insofar as the part of the work she created herself is concerned.²⁷⁶ This can lead to severe, almost insurmountable problems regarding the calculation of the damages.

Courses of action

If right holders wish to receive injunctive relief from a court, German law requires them to first institute out-of-court-proceedings: Right holders must first contact the infringers directly, demand that they cease and desist from the infringing acts, and enter into a cease and desist agreement with a sufficient contractual penalty for every case of violating the agreement. Sec. 97a of the Copyright Act only uses the verb "should", thereby leaving it up to the infringed person to decide whether she wants to deal with the matter out of court first. However, if the right holder starts direct court action, she risks having to bear all the costs of the court proceedings, including those of the infringer, if the infringer immediately acknowledges in court the claims brought forward against her.²⁷⁷ This explains why, in practice, injured parties will almost always first send out a cease and desist letter. Moreover, it is important to know that the infringer is obligated to reimburse the infringed party for all necessary costs she incurred for the enforcement of her rights, including the statutory legal fees incurred for an attorney sending a formal cease and desist letter (UrhG, sec. 97a para 3 sentence 1).

As mentioned above, injunctive relief can only be sought if there is a danger that the infringer will repeat the infringing acts in the future. German courts interpret the previous commission of certain infringing acts as the basis for a presumption in favor of the existence of such danger. This presumption can only be overcome out of court by entering into the afore-mentioned cease and desist agreement that includes the enforceable promise to pay a contractual penalty for any future infringing acts of the same nature. Thus, if the infringer issues such a declaration, any filing for injunctive relief in the same matter will have

²⁷⁶17 U.S.C \$105.

²⁷⁷http://copyright.gov/help/faq/faq-definitions.html.

no success. If, however, the infringer refuses to sign a sufficient declaration to cease and desist, the infringed party may seek injunctive relief.

The right holder has two options for such court actions: filing for a preliminary injunction or instituting the main proceedings. In IP matters, it is common to ask for a preliminary injunction, as this is a fast and relatively cheap way to get help from a court.²⁷⁸ However, preliminary injunctions require that the matter be urgent. Even though there is no strict rule as to when a matter is considered urgent, most courts usually refuse to issue a preliminary injunction if the infringed party has waited for more than one, at most two months after learning about the infringement before going to court. A preliminary injunction, if granted without prior hearing, ²⁷⁹ is normally issued within a few days after the request was submitted to the court.²⁸⁰ The main proceedings, in contrast, can take from a few months up to considerably more than a year, and that does not even take into account the first right of appeal. After the issuance of a preliminary injunction, the defendant often signs a formal declaration that the matter shall be fully resolved with this injunction with the effect that no further court action against her in this matter would be admissible.²⁸¹

As to the costs involved in litigation, it is important to know that under German law, the losing party is obligated to reimburse the prevailing one for its reasonable expenses according to the statutory scales of attorney's and court fees. 282 Moreover, when filing a complaint with a court, the plaintiff has to pay the court fees in advance; for preliminary injunctions this is not required, however. The expenses that are subject of reimbursement claims are determined according to a statutory scale of attorney's and court fees and depend on the value in dispute. In FOSS cases the courts have so far assumed values in dispute between EUR 100,000 and EUR 250,000. On this basis, the financial risk a party bears for the case of loss in one instance ranges from roughly EUR 9,000 to EUR 12,000 if no oral hearing is involved (as often in preliminary injunction cases), and from EUR 12,000 to EUR 21,000 if an oral hearing takes place.

FOSS cases in Germany

As FOSS is a relatively recent phenomenon, case law is still limited internationally. In some landmark decisions, however, German courts left no room for any doubts that FOSS licenses are enforceable. As a consequence, most cases where FOSS right holders start proceedings against infringers are resolved before even entering the court stage. 283

 $[\]overline{\ ^{278}See}$, Id.

 $^{^{279}}See,$ Computer Assocs., 982 F.2d at 710.

 $^{^{280} \}rm http://www.copyright.gov/help/faq/faq-general.html.$

²⁸¹4-13 Nimmer §13.03(F)(4).

 $^{^{282} \}rm http://creative commons.org/licenses/public domain/.$

²⁸³17 U.S.C. §102(b).

Welte v. Sitecom

In 2004 the first case dealing with the violation of a FOSS license was brought before a German court;²⁸⁴ the District Court of Munich I (Landgericht München I) was asked by the right owner of an infringed software program to grant a preliminary injunction to safeguard his interests. The factual core of the matter was that the producer and distributor of a W-LAN router distributed this router and made available its firmware containing certain Linux kernel programs, which are licensed under the GPLv2, without accompanying it with the GPLv2 text and the complete corresponding source code or a written offer to provide the source code on request as required by sec. 1 and 3 of the GPLv2.

The court had to address a couple of important issues: What is the general quality of the GPLv2? Was the GPLv2 validly entered into between the parties? Was it conflicting with the law on standard business terms and, if yes, with what consequences? What are the consequences of a GPLv2 violation: Is it a mere breach of contract, or does it constitute a copyright infringement?

The first important statement the court made was that the use of the GPLv2 did not mean that the right holders had waived any of their copyrights: instead, they had used the means of copyright in order to ensure that their work was used, distributed, and further developed according to their ideas and plans.²⁸⁵

The court also held that the GPLv2 constituted standard business terms as governed by BGB, sec. 305 ff. The court found that they had become part of the agreement between the plaintiff as the right holder and the defendant. The court dedicated the most extensive analysis to the discussion of sec. 4 of the GPLv2, which stipulates that any violation of the license's conditions terminates the grant of rights set out in the agreement. The court held that this provision did not place the licensee at an unreasonable disadvantage and was therefore not in conflict with BGB, sec. 307.²⁸⁶ Sec. 4 of the GPLv2 constituted a valid condition subsequent, pursuant to BGB, sec. 158 para 2. Consequently, any breach of the license conditions led to the loss of the rights a licensee had received, thereby causing any license violation to be at the same time also an infringement of the licensor's copyrights.²⁸⁷ Finally, even if one assumed that sec. 4 GPLv2 went beyond the boundaries of what BGB, sec. 307 allowed, the defendant would have infringed on the plaintiff's exclusive rights: In this case, no license at all would have been granted to the former with the consequence that also in this case they would have infringed on the latter's copyrights.²⁸⁸

The preliminary injunction was granted and accepted by the defendant.

²⁸⁴Feist, 499 U.S. at 350 (1991).

²⁸⁵Assessment Techs. of WI, LLC v. WIREdata, Inc., 350 F.3d 640 (7th Cir. 2003).

 $^{^{286}}$ 1-3 Nimmer §3.04(B)(3)(a).

²⁸⁷17 U.S.C. § 107.

 $^{^{288}}Id.$

Welte v. D-Link

The fundamental holdings of the Sitecom case were reaffirmed in 2006 by the District Court of Frankfurt/Main (Landgericht Frankfurt/Main), which was asked by the plaintiff, this time in main proceedings, to order the defendant to reimburse the plaintiff for the enforcement costs incurred and to provide him with information about the distribution of the infringing products. ²⁸⁹ The facts the court had to decide about were the following: A subsidiary of a Taiwanese consumer electronics producer distributed a network media storage device whose firmware contained the Linux kernel. However, the device was distributed without GPLv2 license text or warranty waiver and without releasing the complete corresponding source code. The plaintiff held the exclusive rights in three of the Linux kernel programs and had sent the defendant a warning letter demanding a sufficient cease and desist declaration. The defendant had done accordingly, but refused to reimburse the plaintiff for the expenses he had incurred for the enforcement of his rights (test purchase, software engineering costs, attorney's fees) and to disclose information concerning the distribution channels of the infringing products. In order to assess the plaintiff's claims, the court had to enter into an in-depth analysis of GPL-related issues similar to those discussed in the Sitecom case.

In this case, the court emphasized once again that the use of the GPLv2 could not be interpreted as a waiver of any rights the holder of the exclusive rights was awarded by law. It confirmed the classification of the GPLv2 as standard business terms and held that sec. 4 of the license provided for a condition subsequent, making every license violation a copyright infringement.²⁹⁰ Besides the issue of exhaustion²⁹¹—the court justly found that the plaintiff's rights were not exhausted, as the copies had not been lawfully put on the market ²⁹²—it also raised the question whether the GPLv2 conflicted with antitrust law, in particular with the prohibition of price fixing and of fixing the conditions of the contracts the co-contractor enters into with her customers. The court argued that the question did not need to be answered, as either answer would have no effect on the assessment of the legal situation regarding the defendant's acts. The defendant would in any event have needed to be granted a license; a finding of a violation of antitrust law, however, would not have this effect, as it would only void the GPLv2 itself, without providing any exploitation rights in the programs used.²⁹³

Welte v. Skype

Another GPLv2 case clarified the question of whether it was sufficient to simply present a link to a website in order to provide the license text and the source

²⁸⁹ *Id.*²⁹⁰ 17 U.S. Code §117(a).
²⁹¹ 17 U.S. Code §117(c).
²⁹² Visual Artists Rights Act of 1990, 17 U.S. Code §106A.
²⁹³ 17 U.S. Code §302(a).

code if the software was distributed offline and not online. 294 The facts were the following: The defendant's (Skype Technologies SA) website had served as a platform for offering not only voice over IP (VOIP) software but also VOIP hardware of different kinds. Several producers and distributors used it as a marketing means. One of the devices, a VOIP phone by SMC Networks, contained firmware with the Linux kernel, but was delivered without the license text of the GPLv2 and without the source code or an offer to provide the source code on request. The plaintiff first sent a cease and desist letter to SMC Networks, whereupon the latter began to put a leaflet in the phone packages that informed customers about the possibility to access both the terms of the GPL or GNU Lesser General Public License (LGPL) and the source code on their website. They did not sign a cease and desist declaration. The plaintiff sent another warning letter to the owner of the website where the phones were offered (Skype Technologies SA). Skype itself also did not sign a sufficient declaration to refrain from assisting in the distribution of the phone as long as the distribution was not in compliance with the GPLv2. The plaintiff filed for a preliminary injunction with the District Court of Munich I (Landgericht München I).

The court confirmed that both SMC Networks and Skype had originally infringed on the plaintiff's copyright, Skype's liability being based on the concept of contributory liability. However, the analysis did not stop there. The question the court faced now was whether SMC Networks had entered into a valid license agreement under the GPLv2 with the plaintiff by continuing the distribution of the VOIP phone with the aforementioned leaflet added to the packages they sent to their customers.²⁹⁵ In other words: Was it compliant with sec. 1 and 3 of the GPLv2 to simply indicate a website where people could find both the license text and the source code? The court's answer was in the negative. It based its conclusion on the wording of both license provisions, which require giving any recipient of the program a copy of the license text "along with the Program" and "accompany" the program with its corresponding source code or a written offer for its delivery. The court held that this clearly showed that in cases of a program's offline distribution, GPL compliance could only be achieved if copies of the license text and the source code (or a written offer) were delivered to the recipients in the distributed packages themselves.

It should be noted that the defendant appealed the decision mainly for alleged violation of antitrust law.²⁹⁶ However, the defendant withdrew the appeal after the Munich Court of Appeals (Oberlandesgericht München) expressed in the hearing its clear intention to uphold the District Court's decision, arguing that even in the unlikely case that the GPLv2 would violate antitrust provisions, such a violation would not result in releasing a licensee of GPLv2 software from observing the conditions of the GPLv2.

²⁹⁴17 U.S. Code §302(b).

²⁹⁵17 U.S. Code §302(c).

²⁹⁶17 U.S. Code §201(d)(1).

FreeAdhocUDF (WISO Mein Büro 2009)

A recent judgment rendered by the District Court of Bochum (Landgericht Bochum) dealt among other issues with whether the violation of the conditions of a FOSS license — in this case, the GNU Lesser General Public License, version 3 — could trigger claims for damages. 297 The question arose in the context of an action for disclosure of information on sales figures regarding the software at issue that had been filed in order to prepare an action for damages.

The court didn't show any doubts that LGPLv3 violations could give rise to claims for damages. Otherwise, the court argued, authors of free software would practically not be protected against infringements of their rights. The court found that the damages could be assessed by way of a license analogy. However, as the damages issue arose only as part of its analysis of the merits of the information claim, the court did not discuss how a license analogy could be calculated for software under a FOSS license. Also, the court did not consider other ways of determining the damages to be paid (actual damages and skimming of profits), as the plaintiff had exclusively relied on the license analogy.

The parties settled the matter in 2012, agreeing on a payment of EUR 15,000 as compensation for the damages suffered.

AVM v. Cybits

In 2011 the District Court of Berlin (Landgericht Berlin) published a decision that touched upon more complex questions regarding software copyright and open source licensing.²⁹⁸ The decision was the end point of a case that had gone through two instances in preliminary proceedings before reaching the district court in the main proceedings. For the sake of clarity, the focus here shall be on the final decision of the District Court.

The plaintiff in the matter was AVM Computersysteme Vertriebs GmbH (AVM), the biggest German producer and distributor of DSL routers. AVM's routers, called "Fritz!Box" used a firmware built around the Linux kernel. The defendant was Cybits AG (Cybits), a company that distributed software called "SurfSitter" which consumers could use for modifying the kernel parts of the Fritz!Box firmware in order to achieve a certain degree of control over their children's surfing behavior. AVM's goal when instituting the court proceedings was to enjoin Cybits from the distribution of SurfSitter. Apparently, no firmware programs developed by AVM itself were changed by SurfSitter.

The court denied AVM's copyright claims and ruled that the defendant was allowed to distribute software consumers may use for changing the firmware of the plaintiff's products. However, the court upheld an auxiliary claim raised by AVM (which was based on unfair competition law) and banned Cybits from

²⁹⁷17 U.S. Code §201(d)(2).

²⁹⁸17 U.S. Code §204(a).

²⁹⁹17 U.S. Code §205(d).

distributing SurfSitter where the use of the software caused the Fritz!Box web interface to display a wrong status of the Internet connection and web-filtering software.

The court based its ruling on considerations that were not always entirely clear but seem to come down to the following:

The court considered the firmware a collective work/compilation of several programs, including the kernel programs. Therefore, the entire collective work/compilation fell within the scope of the GPLv2. Consequently, the plaintiff was barred from relying on the firmware as a whole as a basis for its copyright claims ("Danach stehen der Klägerin an der Firmware als Ganzes ... keine urheberrechtlichen Unterlassungsansprüche zu", which could be translated as "The plaintiff has no copyrights in the firmware as a whole enabling AVM to ask for injunctive relief."). The ruling has come under heavy fire, in particular because of its nebulous language possibly suggesting that collective works/compilations with pre-existing GPLv2-licensed components must always be licensed in their entirety under the GPLv2: Rather than providing for such far-reaching consequences, section 2 of the GPLv2 merely prohibits the holder of rights in the collective work/compilation from compromising any of the users' freedoms to use, copy, distribute, or modify the pre-existing GPLv2-components. ³⁰⁰

However, according to the court, distributing SurfSitter constituted an act of unfair competition, insofar as causing the routers to display wrong status messages may confuse the user, which could be detrimental to AVM's reputation as the producer of the Fritz!Box.

Welte v. Fantec

Most recently, the District Court of Hamburg added a few new aspects to the picture. Fantec, a German company selling various consumer electronic devices under its Fantec brand, had entered into a cease and desist agreement with the holder of the exclusive rights in the software Netfilter/iptables, which is licensed under the GPLv2. According to that agreement, Fantec promised that it would not make available to the public the software Netfilter/iptables without being compliant with the conditions of the GPLv2. One of these conditions was that Netfilter/iptables could only be made available to the public in binary form if the "complete corresponding source code" could be accessed from the same place, or a written offer was made to hand out that source code on request. For each case of breaching that obligation, Fantec agreed to pay a contractual penalty.

Two years later, Fantec was caught distributing a media player with a Linux-based operating system that included Netfilter/iptables. It also made the binaries of the firmware available for download. However, the source code that could

³⁰⁰17 U.S. Code §205(e).

³⁰¹17 U.S. Code §203(a)(1-2).

also be downloaded from Fantec's website did not contain Netfilter/iptables. Moreover, the source code offered was clearly older than the source used for compilation. When Fantec received a new cease and desist letter from the right holder, Fantec signed a new cease and desist declaration but refused to pay (1) the contractual penalty due under the old cease and desist agreement and (2) the lawyer's fees incurred for sending the cease and desist letter. Moreover, Fantec was not willing to give full information on sales figures, customers, etc.

The right holder brought an action at the court in Hamburg demanding payment of the contractual penalty and the legal fees and for full information. The court decided in the plaintiff's favor. It held that Fantec had breached its duty of offering the complete corresponding source code along with the binary of the software. It emphasized that Fantec had not met its duty to verify that its products did not infringe on any third party's rights and had therefore acted negligently. Consequently, Fantec was ordered to pay the contractual penalty. Moreover, the court also confirmed that violating GPLv2 conditions amounted to copyright infringement and confirmed on this basis that Fantec had to indemnify the right holder for its legal costs and had to give the requested information. The court pointed out that by not including Netfilter/iptables in its source code, Fantec had failed to comply with its obligation to offer the complete corresponding source code.

Fantec appealed the decision but withdrew its appeal when the right holder agreed to waive its right to receive the requested information.

Xt:commerce

The Higher Regional Court of Düsseldorf (Oberlandesgericht Düsseldorf) is responsible for two important decisions dealing with the tricky issue of using trade marks for FOSS. In the first of the cases, the plaintiff owned a word/figurative trade mark containing the phrase "xt:Commerce" for software, development of software, and software support. It distributed a computer program that was licensed under the GNU General Public License, using the name "xt:Commerce". The defendant offered on the market, inter alia, its own reproductions of the xt:Commerce software, also using that name. The plaintiff, relaying on its trade mark, asked the court to enjoin the defendant from doing so. The court granted the relief sought, arguing that the GPL only conveyed licenses under copyright, but not under trade mark law. If someone desired to distribute her own copies of GPL software, she may do so under the GPL, but only under a name that did not infringe on third parties' trade mark rights.

Enigma

Two years later, in 2012, the same court addressed some more complex questions. 303

³⁰²17 U.S. Code §203(a)(3).

 $^{^{303}17}$ U.S. Code $\S 203(a)(4)$.

The plaintiff, DP GmbH (DP), was the owner of the community trade mark "Enigma" which is protected for operating systems, drivers, set-top-boxes, satellite receivers, and digital TV receivers. Its sister company, DM GmbH (DM), distributed set top boxes whose firmware was based on GNU/Linux. DM developed its own user interface, published it under the name "Enigma" and licensed it under the GNU General Public License, version 2 (GPLv2). Since 2006, DM had distributed a new version of this user interface, called "Enigma 2." "Enigma" and "Enigma 2" were used by numerous manufacturers for their own set top boxes.

The defendant S GmbH distributed a set top box that used Enigma 2, but with several adaptations to S's hardware. S advertised its device with the words "fully equipped HDTV Tuner PVR with Linux Enigma 2 operating system." The product description contained the following language: "400 MHz CPU + Linux OS Enigma 2 + Internal HDD (2.5/3.5) + Twin DVB-S2 Tuner + E-SATA/3 x USB...". Moreover, when a user clicked on "About," a window popped up with information about the precise software status, including a reference to "Enigma."

The plaintiff argued that the situation described above infringed its community trade mark. The Higher Regional Court of Düsseldorf disagreed and provided the following arguments:

According to the court, S had not used the term "Enigma" as a trade mark—as required by art. 9 para 1 b) of the Community Trade Mark Regulation (CTMR)—but only as the title of the work (Werktitel³⁰⁴). Using "Enigma 2" as described above thus did not indicate the origin of the software. Rather, consumers understood this as a necessary identifier of the software itself.

The court continued that in any event, the way S had used the term "Enigma 2" would be permitted by art. 12 b) of the CTMR: The title "Enigma 2" was used by S in order to inform (potential) customers about the characteristics of their products. Moreover, as the software "Enigma" / "Enigma 2" was utilized by numerous companies under the license conditions of the GPLv2, the relevant public had gotten used to "Enigma" being the name of a certain software product associated with a wider range of sources.

Even if customers did not have this understanding of the term "Enigma" the prerequisites of art. 12 b) of the CMTR would have been met, the court held. Under the GPLv2, S was allowed to reproduce the work called "Enigma" / "Enigma 2". In such a case, S must also be permitted to identify this work, which can only be done by using its name. Here, the court used an interesting analogy to an older decision of the BGH: In 2000, the BGH had held that once a work had entered the public domain, anyone was permitted to use this work's title, even if this title was registered as a trade mark. According to the Düsseldorf court, the situation is similar when a work may be used by anyone under a free license.

³⁰⁴17 U.S. Code §203(b)(1).

³⁰⁵17 U.S. Code §501(a).

The court went even further and held that use of the trade marked software title could also be justified if the software was — to a certain degree — modified. The court recognized that software may not be used on different types of hardware without being subject to some adaptations. Therefore, the use of its (trademarked) title should even be lawful when the program had been adjusted to the technical environment it was used in. Even making use of the software title for a program with certain new functions would be covered by art. 12 b) CTMR, as long as the essential functions of the original software were sustained, and pre-existing third-party plug-ins still worked with the software.

Importantly, the court emphasized that the principles stated above apply only so long as the user meets all the license conditions of the GPLv2. Otherwise, using the trademarked title would not be in accordance with honest practices in industrial or commercial matters.

Moreover, it should be noted that the ruling covers only the simple use of a work title as an indispensable identifier of the software used; therefore, the principles above cannot justify any form of use going beyond the narrow scope described in the decision.

Other cases

In a number of other cases, German courts have granted preliminary injunctions against producers and distributors of products that violated the GPLv2 terms. Apart from one case³⁰⁶ the decisions generally do not provide an explanation of the court reasoning, as is often the case in preliminary injunction proceedings. The exception mentioned did not add anything new from a doctrinal perspective, but confirmed a few of the arguments set forth above: most importantly, that sec. 4 GPLv2 leads to an automatic loss of any rights of use in case of license violations; that even if the GPLv2 was not part of an agreement between the parties, no rights would be granted to the infringer; and that the right holder's rights were not exhausted since the first distribution of the copies at hand had occurred without his consent.

Recommended literature

Recommended literature in English

- J. Höppner: The GPL prevails: An analysis of the first-ever Court decision on the validity and effectivity of the GPL, http://www.law.ed.ac.uk/ahrc/script-ed/issue4/GPL-case.asp
- T. Jaeger: Enforcement of the GNU GPL in Germany and Europe,1 (2010) JIPITEC 34, http://www.jipitec.eu/issues/jipitec-1-1-2010/2419/ dippadm1268746871.43.pdf

 $^{^{306}17}$ U.S. Code §411.

- A. Metzger, T. Jaeger: Open Source Software and German Copyright Law, IIC Vol. 32, 2001, p.52, http://www.ifross.org/publikation/open-source-software-and-german-copyright-law
- H. Picot, A. Duisberg: A review of German case law on the GNU General Public License, http://www.twobirds.com/en/news/articles/2007/review-german-gnu-general-public-license

Recommended literature in German

Over the course of the years, an increasing number of articles on legal aspects of free software under German law have been published. Please see for an overview:

- http://www.ifross.org/en/publikationen/publikationen-des-instituts/i-buecher-und-gutachten-ifross-mitarbeitern-open-source-so
- $\bullet \ http://www.ifross.org/en/publikationen/publikationen-des-instituts/ii-veroeffentlichungen-juristischen-fachzeitschriften-und-$
- http://www.ifross.org/en/publikationen/fremdpublikationen/ii-juristischeonline-artikel-freier-software-und-recht/b-laendersp
- http://www.ifross.org/en/publikationen/fremdpublikationen/iv-offlinematerialien-freie-software-und-recht/b-laenderspezifisch

Comprehensive books

- ifrOSS (ed.), Die GPL kommentiert und erklärt, available at http://www.ifross.org/en/Druckfassung/Die_GPL_kommentiert_und_erklaert.pdf
- T. Jaeger, A. Metzger: Open Source Software Rechtliche Rahmenbedingungen der Freien Software, 3rd edition, Munich 2011
- G. Spindler (ed.): Rechtsfragen bei Open Source, Cologne 2004

Israel

author:[Greenbaum,Eli]

Introduction to software protection under Israeli law Body of law

The Israeli Copyright Law of 2007 (the "Copyright Law") modernized the protection of intellectual property in Israel. The Copyright Law replaced the prior outdated statutory framework, which consisted of both the Copyright Ordinance of 1924 and the British Copyright Act of 1911, the latter having been made applicable to the British Mandate in 1924 and adopted by the nascent State of Israel

in $1948.^{307}$ The Copyright Law expressly provides for the copyright protection of computer programs.

A full analysis of the patent license provisions incorporated in many free and open source software ("FOSS") licenses is beyond the scope of this chapter. However, it should be noted that it is possible, in certain circumstances, to protect software under Israeli patent law. On March 15, 2012, the Israeli Patent Authority issued new guidelines regarding the patentability of software inventions in Israel. The new guidelines adopt a relatively liberal approach regarding the patent eligibility of software inventions.

Copyright Act: Object of protection

The Copyright Law expressly provides that computer programs, which are categorized as literary works, constitute copyrightable subject matter. The Copyright Law also provides that a computer program includes the program "in any form that it may be expressed". This provision is intended to be consistent with the definition of computer programs in Article 4 of the WIPO Copyright Treaty.³⁰⁸

Authors/Copyright owners

Section 34 of the Copyright Law provides that, absent an agreement to the contrary, an employer shall be the owner of the copyright of a work that was created by an employee "for the purpose and in the course" of such employee's work. As there may be circumstances where it is not clear whether an employment relationship exists, or whether the work was created "for the purpose and in the course of" employment within the meaning of the statute, employment agreements in Israel frequently contain express provisions to clarify the ownership of created works, as well as affirmative assignments of rights. The Copyright Law takes a different tack with respect to works for hire. Section 35(a) of the Copyright Law provides that in the absence of an "express or implied agreement" to the contrary, the default rule is that the creator of a work, and not the party that commissioned the work, will be the original owner of the copyright in a commissioned work. However, as that provision allows an "implied" agreement to determine copyright ownership, the default rule is less than clear. As such, it is recommended that consulting agreements or other "work for hire" arrangements in Israel include an express grant of the copyright to the commissioning entity, if that is the intention of the parties.

^{307&}quot; (Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

³⁰⁸17 U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

Compilations

The Copyright Law also protects compilations as literary works. Section 4(b) of the Copyright Law provides that the original expression protected in a compilation is the originality of selection or arrangement of individual works or material in the compilation.

Joint works

The Copyright Law recognizes the possibility of joint works but does not expressly provide for the manner in which joint owners in a copyright may exploit the work. Case law has not provided a clear determination of whether Israeli law should generally follow the rule in the United Kingdom—such that the consent of all joint owners would be required to license a work—or whether it should generally follow the rule in the United States—such that each joint owner should be able to license the work without consent of the other joint owners, subject to a duty of accounting. As such, the right of joint owners to exploit a jointly-owned work, including the right to grant licenses to third parties or to individually enforce the copyright, is at present unclear under Israeli law.

Section 54(b) of the Copyright Law requires that a plaintiff in a copyright infringement suit join all other right holders in the suit. This would seem to require that all joint owners of a copyright be joined in any action to enforce a copyright.

Derivative works

Section 16 of the Copyright Law defines a "derivative work" as an original work that is "materially based" on another work. While not expressly set forth in the statute, the copyright of the author of the derivative work should extend only to the original elements of the derivative work, while the rights of the copyright holder of the original work should remain intact. ³¹⁰ As noted below, subject to certain statutory exceptions, the right to create a derivative work is one of the exclusive economic rights included in a copyright.

The question of what constitutes a "derivative work" is, of course, of primary importance in the interpretation of the GPL, which (in very brief summary) may potentially require the disclosure of the source code of works that are derivative of the licensed work. To the extent the statutory definition of a "derivative work" impacts the answer to that question, ³¹¹ it should be noted that the statutory test

 $^{^{309}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{3\}tilde{10}\tilde{15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

 $^{^{3\}bar{1}1}$ For example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

of the Copyright Law looks to the "materiality" of the "use" that the subsequent work makes of the protected work. This test may subtly differ from the definition of a "derivative work" in other jurisdictions that look to the substance of the protected work that is incorporated in the potentially derivative work, rather than how the potentially derivative work uses that material.

Exclusive rights

Section 11 of the Copyright Law sets forth the exclusive economic rights afforded under a copyright. All of the rights apply in the case of a computer program. The rights include:

- (a) The right to copy the work;
- (b) The right to publish the work, if the work has not yet been published;
- (c) The right to publicly perform the work;
- (d) The right to broadcast the work;
- (e) The right to make the work available to the public;
- (f) The right to create and a exploit derivative works; and
- (g) The right to lease the work.

Several other provisions of the Copyright Law are relevant to the interpretation of these enumerated exclusive rights in the context of computer programs. Section 12 of the Copyright Law provides that technological and electronic storage of a work, as well as "temporary" copying of a work, will also be deemed copying for purposes of the law. These provisions bear on the possibility of infringing a copyright by running a computer program or by accessing data over the internet. However, Section 26 of the Copyright Law limits the exclusive right of "temporary" copying to certain purposes and to the extent the copy itself has significant economic value.

In addition, section 11(7) of the Copyright Law expressly provides that the "right to lease the work" applies to computer programs. Section 17 of the Copyright Law limits this right to the lease of physical copies of the work for commercial purposes, and provides that the right does not include the exclusive right to lease computer programs or recordings that are inseparable from the item that is the primary object of the lease. As such, the exclusive right to lease a copy of a computer program is not infringed by the lease of consumer goods that include software. ³¹²

Exceptions to exclusive rights

The Copyright Law provides for certain "permitted uses" which constitute exclusions to the exclusive rights of copyright holder enumerated above. These

 $^{^{312}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

include, as described in more detail below, the right to create copies or derivative works of computer programs for the purpose of backups, maintenance and support, fixing bugs, and ensuring interoperability. These "permitted uses" may be exercised only by the holder of a "lawful copy" of the program or on her behalf.

Section 24(a) of the Copyright Law provides for a right to create backup copies. It states that that the holder of a lawful copy of a computer program may create additional copies of such program for backup purposes. Such copies, however, must be destroyed once the need for them passes.

Section 24(b) of the Copyright Law provides that that the holder of a lawful copy of a computer program may copy such program, either for the purpose of maintenance of such program or for the purpose of maintenance of a computer system, if such maintenance is required to use such program. Such use is also permitted for the purpose of providing such maintenance to the holder of a lawful copy.

Section 24(c) of the Copyright Law allows for creating both copies and derivative works of computer programs for the purpose of fixing bugs, interoperability and information security. Without repeating verbatim the detailed conditions set forth in this section, it should be noted that this section is broadly intended to allow reverse engineering and decompilation of computer programs for the enumerated purposes.³¹⁴ It is not clear whether a licensee may contractually agree to forgo the rights of "permitted uses" set forth in this section. As such, the enforceability of common contractual terms against reverse engineering is at present unclear under Israeli law.

Moral rights

Section 45(a) of the Copyright Law expressly provides that moral rights do not exist in computer programs.

Terms of protection

The term of protection for computer programs is the same as for other works. Section 38 of the Copyright Law provides that copyright protection in a work is for the life of the author plus 70 years, regardless of whether the author owns the copyright. Section 39 of the Copyright Law provides that in a joint work, the term of copyright protection is for 70 years following the death of the last joint author. However, the term of protection for works that were originally published in a country outside of Israel is generally limited to the term of protection afforded by that country.

³¹³World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

³¹⁴The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contul.html.

Copyright assignment

Except in the context of the employer-employee relationship, the transfer of a copyright (or the exclusive license in respect thereof) requires a written assignment. In contrast to the prior law, the Copyright Law does not require that such writing be signed by the parties, which raises the possibility that unsigned messages (such as emails) may be sufficient to effect an assignment of a copyright.

Enforcement

The Copyright Law sets forth both civil and criminal penalties for the infringement of copyrights. Civil penalties, as described in more detail below under the heading "Legal Remedies", can include claims for an accounting of profits, actual damages or statutory damages. Criminal sanctions can include imprisonment and the imposition of a statutory fine, and generally can be imposed for infringement for the purpose of commerce, or the sale, lease or distribution of infringing work in commerce.

The Copyright Law also imposes a special duty on the office holders in a corporation. Section 63 of the Copyright Law provides that office holders must supervise employees in order to ensure that such employees do not commit acts of infringement. Section 63(b) of the Copyright Law sets forth a presumption that an office holder has not fulfilled his statutory duty of supervision if any such acts of infringement are committed. Statutory fines can be imposed on such office holders that do not satisfy their duty of supervision.

Technical devices and effective technological measures

The Copyright Law does not contain provisions regarding the circumvention of technological measures implementing digital rights management. This reflects the deliberate decision of the Israeli parliament (the Knesset) not to include such provisions in the law. In 5097/11 Telran Communications (1986) Ltd. v Charlton Ltd., the Supreme Court confirmed that the Copyright Law should not be interpreted as prohibiting the circumvention of technological measures implementing digital rights management.

It is possible, however, that the circumvention of effective technological measures may present a criminal violation of the Computer Law of 1995 (the "Computer Law"). Sections 2 and 7 of the Computer Law prohibit the unauthorized disruption of the proper operation of a computer system, or the unauthorized erasure, change or disruption of material on the computer system. It is unclear whether the circumvention of effective technological measures falls within the ambit of these provisions, especially considering the Knesset's deliberate decision not to include express provisions regarding this issue in the Copyright Law.

Analysis of FOSS under Israeli law

Under Israeli law, rights in FOSS do not differ from other forms of copyright and patent licensing. FOSS is protected under the Copyright Law as with any other form of software, and there is no reason to believe that FOSS licenses would not constitute enforceable legal contracts. As such, a breach of a FOSS license would be viewed as a breach of a contract, and the use of FOSS in breach of a license is likely to constitute copyright infringement.

For example, recently the Jerusalem District Court in TA 3560/09 and TA 3561/09, Reuveni v. Mapa Publishing, Ltd. enforced the terms of the Creative Common BY-NC-ND license against a commercial defendant. The plaintiffs, amateur photographers, had uploaded photographs to the Internet pursuant to that license. The defendant, a commercial publisher, published the pictures both in a book for commercial sale as well as on its website, violating the terms of the Creative Commons license. The Court found that, in violating the license, the defendant had infringed the plaintiffs' copyright and ordered the defendant to pay monetary damages. The case presents an important precedent which shows that Israeli courts are willing to enforce the terms of open source licenses against commercial defendants. Several questions raised by the decision, including the issues of the contractual validity of a FOSS licenses and how damages should be calculated in an action for infringement of FOSS, are discussed in more detail below.

Rights of the original co-authors

FOSS is often developed within a collaborative development model. As noted above, while the Copyright Law recognizes the possibility of joint authors, it does not specifically set out the rights afforded to each of the joint owners. This increases the importance under Israeli law of ensuring that contributors to open source projects have executed contribution agreements, in which they either assign or license their contributed code to such project.

Authors of modifications

Successive versions of FOSS may build upon the works of previous FOSS authors. As in many other legal systems, Israeli law recognizes the copyright of successive authors in the derivative work. This copyright in the derivative work should be subject to the copyright of the original author to the original work.

Validity of FOSS licenses

The Contract Law of 1973 (the "Contract Law") provides that under Israeli law contracts are formed through a process of offer and acceptance. The statute details how this requirement of offer and acceptance can be satisfied. In addition, case law has generally emphasized the substance of contract law rather than the form and, as such, Israeli law puts a strong emphasis on questions of good faith

and fair dealing between the parties.³¹⁵

Commercial license agreements generally satisfy the statutory requirements of contract formation, in that they are often reached through express acceptance of the terms of the license following a process of negotiation. FOSS licenses that are reached through this standard process of offer and acceptance should also be seen as validly formed and should be enforced as regular contracts. In practice, however, the acceptance of a FOSS license will frequently not involve such a process of offer and acceptance.³¹⁶ Often a FOSS license does not provide for an express agreement between the parties, but merely sets forth conditions that a licensee is required to satisfy in order to benefit from the protection of the license. 317 For example, FOSS code is often made available through the Internet with the minimal statement that it is being made available pursuant to a specific FOSS license. Even so, Israeli contract law is likely to recognize FOSS licenses as validly formed legal contracts. First, Section 6 of the Contract Law expressly recognizes that contracts may be accepted through a manner of conduct. In addition, the Standardized Contract Law of 1982 (the "Standardized Contract Law") generally recognizes the contractual validity of "standardized contracts" that may be either accepted or rejected by a counterparty.³¹⁸ This conclusion is likely to be bolstered by the general emphasis of Israeli law with regard to good faith and fair dealing, since the FOSS license will be the only grant of permission to use the FOSS work.³¹⁹

The plaintiffs in Reuveni (the case referenced above) did seem to advance contractual claims when they asserted that the defendants did not satisfy the conditions set forth in the Creative Commons license.³²⁰ The court, however, did not consider the question of whether the Creative Commons constituted an enforceable legal contract and proceeded directly to the issues of copyright infringement and damages. As such, the Reuveni decision leaves open the question of whether FOSS licenses constitute enforceable legal contracts.

The Contract Law does not incorporate a requirement of consideration. As such, questions that may arise in other jurisdictions regarding the consideration received by the licensor in a FOSS context do not arise under Israeli law.

Termination

As noted above, Israeli law generally interprets licenses according to the standard rules of contract law. As such, a license that does not contain an express term may be terminated by the licensor by providing reasonable prior notice. What constitutes "reasonable" prior notice varies on a case-by-case basis ac-

³¹⁵The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of 1976.

³¹⁶Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

 $^{^{317}17}$ U.S.C. $\S 102(a).$

³¹⁸17 U.S.C. §411(a).

³¹⁹17 U.S. Code §102(a).

³²⁰17 U.S. Code §201(a).

cording to the circumstances, and is ultimately a question determined by the court. FOSS licenses do not generally contain an express term and are generally granted for an indefinite period of time. As such, Israeli law presents the risk that a FOSS licensor can terminate a FOSS license upon reasonable notice.³²¹

Waiver and liability

FOSS licenses typically contain strong disclaimers of warranties and liability. The enforceability of such broad disclaimers under Israeli statutory law is not entirely clear, and the case law has not yet considered the application of broad disclaimers in the software licensing context. However, it is important to note under Israeli law that such disclaimers may be entirely reasonable for FOSS that is made freely available without charge, especially considering that the author of such works may not have any control over the actual distribution or use of her work.

Israeli law provides for certain implied warranties in the context of a sale of goods, services or rights, including with regard to rights in intellectual property. For example, Section 11(3) of the Sale Law of 1968 (the "Sale Law") generally provides for implied warranties of "regular or commercial use or any other special purpose that may be implied by agreement". These implied contract terms are similar but not equivalent to the implied warranties of merchantability and fitness for a particular purpose provided by the Uniform Commercial Code. Additionally, Section 18(a) of the Sale Law provides for an implied warranty of non-infringement. These provisions of the Sale Law predate the significant development of the Israeli high-tech industry and do not seem to have been directed towards the problems raised by intellectual property licenses generally and software licenses in particular. In addition, Israeli case law regarding the application of these statutory provisions to intellectual property is sparse.

The ability of contracting parties to entirely disclaim such implied warranties is not entirely clear. Section 4(b) of the Sale Law provides that warranties will be implied only in the absence of any agreement to the contrary between the parties. At the same time, however, the Standardized Contract Law provides that a court may ignore or change unconscionable terms in a "standardized contract", and Section 4(1) of that statute provides for a presumption that contractual terms limiting liability in a "standardized contract" will be deemed unconscionable. FOSS licenses, in that they are typically drafted in advance by the licensor for an indefinite number of licensees who are not able to negotiate the terms of the license, facially fit the statutory definition of a "standardized contract." As noted above, however, broad disclaimers of liability and warranty may be entirely appropriate in the FOSS context. The enforceability of such disclaimers in the software licensing context in general and for FOSS licenses in particular has not yet been examined by Israeli case law.

³²¹17 U.S. Code §201(b).

 $^{^{322}}Id.$

Licensors should note that Section 16 of the Sale Law provides that the implied warranties of merchantability and fitness for a particular purpose may not be disclaimed if the non-conformity results from facts that the seller "knows or has reason to know of". While not explicit in the statute, this provision may also apply to the implied warranty of non-infringement.³²³ Again, the application of these provisions to the licensing of intellectual property has not been satisfactorily explored in Israeli case law.

Remedies

Copyright infringement — damages

Under Israeli law, a copyright holder may be entitled to either an accounting of profits or damages (whether actual or statutory) for the infringement of a copyright.³²⁴ Criminal penalties may also be generally imposed with regard to infringements of copyright in commerce, but a full discussion of such criminal penalties is beyond the scope of this article.

In an accounting of profits, the plaintiff is entitled to receive the profits obtained as a result of the infringement of the copyrighted work. Often only a part of the defendant's work is based on the infringed work, and in such event a court must determine what proportion of profits should be allocated to the infringed work. Though the question has not yet been addressed by case law, it seems that an infringer of software (including FOSS) should similarly be entitled to an accounting of profits of the infringing party.³²⁵

Actual damages may be difficult to assess in a suit for FOSS infringement, especially where the work is generally made available free of charge. In addition to actual damages, however, the Copyright Law also provides for the possibility of statutory damages in the amount of up to 100,000 New Israeli Shekels for each instance of infringement, without any requirement to prove actual damages. A court generally has wide latitude in setting the amount of statutory damages. Section 56(b) of the Copyright Law sets out factors that for the court to consider in this regard. Factors applicable to the infringement of FOSS may include the damage caused to the copyright holder, the profits of the infringing party and whether the infringing party acted in good faith.

FOSS copyright owners may find claims for statutory damages easier to assert than attempting to prove actual damages. The plaintiffs in Reuveni, for example, asserted a successful claim for statutory damages. At the same time, the court in Reuveni, in setting the amount of statutory damages, also took into account the fact that the plaintiffs were amateur hobbyists who did not expect to profit from the copyrighted works and who, in fact, did not suffer material economic damage from the infringement. In light of these factors, the court awarded the plaintiffs substantially less than the 100,000 NIS ceiling per infringement. The

³²³17 U.S. Code §101.

 $^{^{324}17}$ U.S. Code $\S 204.$

³²⁵17 U.S. Code §201(a).

court distinguished the facts in Reuveni from another case where the infringed work was the well-known photo of a professional photographer and where the court had awarded substantially higher statutory damages per infringement. While FOSS copyright holders are often professional programmers or engineers, FOSS is often provided free of charge by the copyright holder with little or no expectation of economic gain. As such, the factors enumerated in Reuveni may prove relevant to the calculation of statutory damages in future FOSS infringement actions.

Section 60(c) of the Copyright Law may restrict the remedies available against a licensee in good faith of intellectual property. While Section 60 of the Copyright law sets forth certain actions that a court may order in respect of an infringing work, Section 60(c) subjects these provisions to the "market overt rule" set forth in Section 34 of the Sale Law. Subject to the conditions of the statute, the "market overt rule" provides that the purchaser of an item in good faith obtains good title regardless of whether the vendor itself can pass on good title. As such, an owner of intellectual property may be restricted in his ability to file suit against the end users of pirated or infringing intellectual property, and may only be able to file suit against the providers such infringing works.

Contract remedies—injunction

Section 53 of the Copyright Law provides that the holder of a copyright is entitled to obtain an injunction against an infringer, "unless the court determines that justifications exist for denying such an injunction." Israeli courts may also grant temporary injunctions against infringers. ³²⁶ The grant of an injunction may prove of central importance to the licensor of open source software, especially given the difficulty of proving actual damages. The plaintiffs in Reuveni had dropped their demand for an injunction, and the court in that case opined that the course of events would have in any event mooted such a demand. Nonetheless, the court seemed to state that it would have been prepared to consider such a demand had it been raised by the plaintiffs.

${\bf Contract\ remedies -- specific\ performance}$

In addition to an infringement claim, copyright holders may also bring an action for breach of contract. Specific performance is a remedy theoretically available under Israeli law for the breach of contract. Section 3 of the Contract Law (Remedies for Breach) of 1970 expressly provides for the availability of this remedy to the non-breaching party, and a long tradition of Israeli case law has emphasized the importance of specific performance as a remedy for breach of contract.³²⁷ This approach contrasts strongly with the common law tradition

³²⁶17 U.S. Code §101.

 $^{^{327}}$ 1-6 Melville B. Nimmer, Nimmer on Copyright $\S 6.03$. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.

of favoring an award of monetary damages rather than specific performance of the contract.

As such, to the extent contractual remedies are available for breach of an opensource license, licensees may find themselves exposed to the possibility of orders for specific performance. Such orders could include, for example under the terms of the GPL, an injunction to release the source code of the licensee's work. Licensees that have discounted the possibility of such injunctions under the rules of other legal systems should be aware of this possibility under Israeli law.

Italy

author:[Piana, Carlo] author:[Aliprandi, Simone]

Body of law

Copyright protection of software is regulated in Italy under a few articles added to the general Italian Copyright Law (precisely "Legge n. 633 del 22 aprile 1941") under the Legislative Degree no. 518 dated 29 December 1992. This reform transposes the Council Directive of 14 May 1991 on the Legal Protection of Computer Programs (91/250/EEC) into Italian national law (hereinafter referred to as the "Software Directive").

Now the Italian Copyright Law has a section in chapter IV specifically on software: namely, Section VI, comprising articles 64 bis, 64 ter, and 64 quarter.

Software Act: Object of protection

Computer programs (including the preparatory material) are protected by copyright and are equivalent to literary works within the meaning of the Berne Convention for the Protection of Literary and Artistic Works. According to article 2, no. 8, of the Italian Copyright Law software programs are protected in whatsoever form, insofar as they are original and result from the intellectual creative activity of the author. The ideas and principles on which software programs are based, including those on which their interfaces are based, are excluded from protection. The concept of "program" includes also the preparatory material of the same.

Authors/Beneficiaries

The general principle of Italian copyright law provides that the copyrights in a work belong to the author. Article 64 ter however provides that—unless stipulated otherwise—the employer holdes the exclusive right to exploit the program (or of the data base) created by the employee while performing his/her job or working under instructions from the employer. According to a very reliable doctrine, however, also in case of "work for hire", i.e. when software

development occurs under the performance of a development agreement and is paid by the client, the exploitation rights are assigned to the contracting party. 328

Exclusive rights

According to article 64 bis of the Italian Copyright Law the exploitation rights comprise the exclusive right to perform or authorize:

(a) the temporary or permanent reproduction of the computer program by any means or in any form. Insofar as acts like the uploading, displaying, execution, transmission or storage of a software program require its reproduction, those acts are also subject to the authorization of the copyright holder; (b) the translation, adaptation, transformation and any other modification of the computer program, including the reproduction of the resulting program [in other words, creating a derivative work], without prejudice to the author of the modification; (c) any form of public distribution, including lending the original computer program or copies thereof. The first sale within the [the European Union] exhausts the right to further control the distribution of such copy within the [European Union], with the exception of the right to control the further lending of the program or of a copy thereof.

Exceptions to exclusive rights

Article 64 ter of the law expressly provides that:

in the absence of any contrary stipulation, authorization from the copyright holder shall not be required for the activities as per subheadings a) and b) of article 64 bis, whenever such activities are necessary for the program to be used, for its designated purpose, by the person who legally purchased it, including for the correction of errors. Whoever is entitled to use a copy of the computer program may not be prevented by contractual means from making a backup copy of that program, where this is necessary for its use. Whoever is entitled to use a copy of the computer program may, without being authorised by the copyright holder, evaluate, study or test the operation of such program in order to identify the ideas and principles underlying each component of that program, provided he carries out such acts during the course of loading, visualization, execution, transmission or storage of the program which he/she is entitled to perform. Any contractual stipulation conflicting with the provisions of this paragraph is null and void.

³²⁸"(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

Moral rights

The Italian copyright system is a *droit d'auteur* one, where moral rights are particularly strong. Worth noting are:

- The right to be acknowledged as the author of the work (Art. 20, 21)
- The right to object to modifications or alterations which are prejudicial to the honour or reputation of the author (Art. 20)
- The right to withdraw the work from distribution, when high moral reasons exist, subject to indemnification of those who have acquired the right to exploit the work (Art. 164).

Article 20 provides for two separate rights:

independently of the exclusive rights of economic utilization of the work referred to in the provisions of the preceding Section, and even after the transfer of such rights, the author shall retain the right to claim authorship of the work and to object to any distortion, mutilation or any other modification of, and other derogatory action in relation to, the said work, which would be prejudicial to his honour or reputation.

While the right to claim authorship does not raise any practical concern, the right to object to any distortion has been cited sometimes as a possible restriction to the working of a FOSS license, because the author at any point in time could de facto revoke his or her permission to modify the program, in stark contradiction to the provisions of any FOSS license. However, on the one hand this right is limited to very serious alterations of the work, as they must be detrimental to the honor or reputation of the author. In addition, according to Art. 22, if the author is aware of and acceps the modifications he has no right to object to them. Finally, we argue that this provision is not applicable to software because of its rationale, which is to protect the "sprit" of the artist which lives in rtistic works, spirit which are far less arguable in a software work. There is no known case in Italy dealing with the application of such rights to software. Many authors are inclined to think that since there is no specific exception for software, and since the rules are of general application, they also apply to software. But this rather formal argument does not seem convincing, as the same is quite patently inapplicable in certain instances of copyright law, such as the sui qeneris database rights. Besides, because the copyright provisions in the Italian copyright law are formally an implementation of a Directive for the harmonization of the internal market, it is arguable that such an impediment to harmonization — that could prejudice the exploitation of software works — may only be based on grounds that supersede the European legislative powers and should receive restrictive interpretation.

Article 22 provides that these moral rights are non-transferable and Art. 23 provides that they have no time limitation, as after the author's death they

may at any point in time be exerted by the heirs of the author.

A further moral right is the right to withdraw the work from distribution when high moral reasons exist (Art. 142). This provision has the same rationale as the one in Art. 20, and again it reflects the fact that an author can have very serious moral involvement with his or her own works, so that the distribution of said works can be highly prejudicial to his or her reputation or other aspects of the droit moral of the author. It is therefore arguable that the right to withdraw the work does not apply to software for the same reasons we put forward for Art. 20. At any rate, the need to indemnify the rightsholders (including licensees) who would be damaged by the withdrawal, and the cumbersome procedure provided for it by the law, relegates this hypothesis to the realm of intellectual exercise without practical bearings.

Term of protection

The same term as for works of literature and art applies: 70 years as of January 1 following the death of the author.³²⁹ In case of co-authorship the death of the latest surviving author is taken into account.

Copyright assignment

Copyright assignment is not expressly regulated by Italian Law for any copyrightable subject, except for works created under an employer/employee relationship, as mentioned above. By the way, this is not considered a case of assignment, but a case where the rights to exploit the work are vested in the employer by virtue of the law. We have also already mentioned that in the case of work for hire the copyright of the resulting work has to be attributed — depending on circumstances and unless different stipulations exist — to the contracting entity, as this is the normal working of the rules of contracts ("contratto d'appalto"). In the case of unpaid contributors, without an express agreement the copyrights will be vested in the authors, as the general rules apply.

Moral rights cannot be assigned and any agreement to the contrary is null and void. All other rights can be assigned and transferred without limitation (Art. 107 of Italian Copyright Law), save for certain express provisions under a the publishing agreement. The only requirement is that the agreement must be proved in writing (Art. 110).

Special measures

The Italian Copyright Law refers to the general copyright principles regarding measures for enforcing software copyrights. Besides these general measures, a specific criminal sanction has been created for those who bring into trade or

 $[\]overline{^{329}}17$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

possess for commercial purposes a copy of a computer program. Article 171 bis, subsection 1, of the Italian Copyright Law provides that:

whoever unlawfully duplicates computer programs for purposes of gain, or imports, distributes, sells, detains for commercial purposes or leases the said programs, for the selfsame purposes and being aware or having reason to be aware of the fact that such copies were not authorized, shall be punished by imprisonment for between three months and three years and by a fine of between 500,000 and 6,000,000 Liras [1 euro = 1936.27 Liras]. The same punishment shall be not less than imprisonment for six months and a fine of 1,000,000 Liras if the offence is serious or if the program which was unlawfully duplicated, imported, distributed, sold, detained for commercial purposes or leased had been previously distributed, sold or leased on media bearing the mark of the Italian Authors' and Publishers' Association [SIAE] pursuant to this law and to the relevant Regulations as per Royal Decree no. 1369 of May 18, 1942.

Unprotected software and public domain software

Italian Copyright Law lays down that, in order to be protected, a work must have a minimal creative character, which must have at least two components: novelty and originality. This applies also to software, although as a matter of fact — excluding utterly simple computer programs or very basic scripts, as well as interface definition files — it would be hard for a judge to rule that a software application fails to have sufficient creative character.

A public domain status exists ex lege when the copyright expires, i.e., 70 years after the death of the longest surviving author. In practical terms this is so far ahead of it becoming relevant that discussing it would be futile at the time of writing. In theory, nothing prevents a rightholder from relinquishing her rights, but as we have seen, some of the moral rights are actually non-disposable; therefore it is impossible for a copyrighted item in Italy to have a truly public domain status. If for the purpose of our analysis we redefine "public domain" for this purpose into "devoid of any exploitation rights", then a public domain status is achievable by an act of dedication to the public domain of the rightsholder.

Analysis of FOSS under Italian law

Copyrights

Although FOSS can be written by a single person or be owned by a single legal entity,³³⁰ after some time software is the result of the work of several authors who can lay claim to it. The question is whether later additions create a collaborative work (a work created by collaborating authors), or whether the

 $^{^{330}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

original software is the final work and every contribution created during the further development of the software i a derivative work. The legal consequences are different in each case.

Qualification of FOSS

There is no way to determine whether a FOSS work is a collective work, a complex work or else, and each version of the software can be classified differently depending on how the work was made. Many combinations can ensue. The simplest scenario is the one in which the software was made by author A, taken by author B and then by author C. A, B and C have each modified and extended the software. This is a collective effort, but technically it consists of a series of derivatives, each one being technically copyright of the resepective author, who relies on the upstream permission in the chain of development. Usually the scenario is more complex, as the contributions of the individual authors are committed into the release by means of a code management system through which concurrent development is made.

Whereas the first version of the software, if written by several people, can in many cases be qualified as a collaborative work where the different contributions are indistiguishable, this seems much less the case for the later versions, which are based on the original work, without, however, there being any "consultation" between the authors. These later versions will be qualified as derivative works. Therefore, in terms of the legal consequences, a distinction needs to be made between the rights of the original co-authors and the rights of people who carry on developing the original work.

According to a sound theory in Italy, this way of working constitutes a "complex work", in other words a work in which "[...] the individual contributions have their own autonomy, which enables their separate exploitation, and nevertheless they are shaped in a way that, as a final result of the cooperation, they result as essential elements of an organic ensemble where the individual contributions express themselves as a whole, creating an unitary artistic effect". This definition is geared towards artistic works (such as movies) where the contributions are different in nature (like the photography, the direction, the story, the writing of the screenplay, etc.), while in software programming the elements are more of the same nature.

Rights of the original co-authors

Unless the components of the software can be clearly distinguished *and* separate, software made collaborative is usually considered an "indivisible work"³³¹. This involves works whereby it cannot be concluded clearly what the individual contribution of every author is, e.g. when two authors write a text together. In the case of indivisible works the authors are free to regulate the exercise of the

 $^{^{331}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

copyrights by agreement. This freedom is very far reaching. The co-authors can agree how the program is made public (e.g. as "FOSS") and how decisions regarding the copyrights are made, e.g. by normal or special majorities, or by giving one of them the right to take all the decisions regarding this work (limited to acts of ordinary administration).³³²

If the co-authors have not reached an agreement as to how decisions are made (insofar as the law allows them to regulate the co-authors' decision-making process) the rules laid down by Art. 1105-1110 of the Italian Civil Code apply. The main rule is that any act that does not involve disposing of the copyright and that does not prevent the co-owners to exert their rights is allowed, but acts of "extraordinary administration" must be voted according to the majorities laid down by the law or agreed upon by the parties. Parties disagreeing can oppose the decisions of the majority in Court.³³³

FOSS and derivative works under Italian law

Italian law does not expressly mention "derivative works", but it deals with "creative elaborations". It may be only a nuance, a reflection of the nature of the Italian law in the *droit d'auteur* system, but it is worth noting.

Art. 4 of the Italian Copyright Law provides that

Without prejudice to the rights in the original work, elaborations of a creative character of any such work, such as translations into another language, transformations into any other literary or artistic form, modifications and additions constituting a substantial recasting of the original work, adaptions, reductions, abridgements and variations which do not constitute an original work, shall also be protected.

The assignment of copyrights

Assignment of copyrights in FOSS licensing does not pose any particular challenge or differ greatly from the general working concept of assignment. The virtual absence of distributed all-Italian collaborative FOSS projects makes it difficult to predicate any characteristic of the assignment of copyrights in practice, for lack of examples. A field where all-Italian FOSS projects exist is the public administration sector, which is however governed by certain specific rules (such as the reuse principle and compulsory clauses in ad-hoc software development) meaning that it would require a much wider and separate discussion.

 $^{^{332} \}rm For}$ example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{333}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

Moral rights

Moral rights could play a dangerous role in FOSS, which for instance prohibits of field-of-use restrictions. In discussion groups arguments can be found in favour of applying moral rights in order to object to military or nuclear power-related use of software) and the Freedom to improve and adapt the software, which empowers anybody to make changes to the software. If these change are made to port an application to a field of use that can affect the reputation or the morals of the original author, arguably this could trigger the use of moral rights to object to such modifications of the work. Reference is made to the section on moral rights above above for an argument against the applicability of the moral rights to software.

Enforcing FOSS licenses

There is little doubt that a FOSS license is enforceable in Italy, except in marginal cases. The same reasoning as in Welte v. Skype³³⁴ would apply. Regardless of whether the license is a contract or a bare copyright license,³³⁵ copyright can be considered a general prohibition barring unrestricted use of the software. Therefore other than the license, nothing permits the use of copyright, and the absence of a license would defeat any arguments by an infringer directed at voiding the license.

In other words, in a FOSS license enforcement case the alleged infringer cannot invoke the nullity of the license and at the same time argue that the use was legitimate under the same license, unless there is another legal theory that permits said infringer to use the software. For instance, if the infringer claims that the obligation to release the modified source code is unenforceable because, e.g., the GNU GPL is null, and this is a condition to use the software according the same GNU GPL, this argument will fall flat on its face, because it would result in claiming that the use by the alleged infringer was not permitted at all.

But what about actually enforcing an obligation? Such as, in the above example, actually enforcing the disclosure of the modified source code if the alleged infringer refused to perform such obligation (or to meet such condition). In theory, a licensee could be forced to do something which is provided for by a contractual obligation. Under Italian law, this is in general possible under Art. 2931 of the Italian Civil Code. To trigger such provision, a contractual obligation must exist, a "positive" one (of doing or giving something), whereas a "condition" is not sufficient. Most FOSS licenses just set out the conditions that must be met in order to permit the four liberties, and also the copyleft clauses are laid down more as true conditions than as obligations. Therefore it is hard, and not necessary, to construe a contractual obligation. There are exceptions, though, to

³³⁴World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

³³⁵The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

this finding. Two examples come to mind: explicit downstream patent licenses (as in the Mozilla Public License) and liability disclaimers.

Downstream patent licenses state that the contributor (sometimes the distributor, as with the GNU General Public License v.3³³⁶) of software will explicitly provide all downstream recipient of the software it distributes with a worldwide royalty-free patent license for the patents it owns or controls. This is a positive effect of the license. However, this is strictly speaking not a result of the inbound license from the upstream, but a result of distribution (or "conveyance") of software under the same public license, which is a separate act of licensing. In fact, without distribution, the grant is not applicable, and the act of granting itself is conceived not as an obligation to grant, but as a direct grant embedded in the license. Again, there is no need to construe a valid contractual obligation to make the patent grant work.

Similarly, all licenses provide for a liability disclaimer, which again is not an obligation, but an effect of the license, or a waiver. This is a focal point and needs to be dealt with more in depth.

Waiver and liability

Typically, FOSS licenses contain very strong disclaimer clauses, which discharge the author from all liability.³³⁷ The reason for this is that FOSS is often made available without monetary compensation of any sort, as a result of which the author generates insufficient income to pay for liability insurances and legal costs.³³⁸

Under Italian law there is a first issue. According to Art. 1229 of the Italian Civil Code, no disclaimer of liability can be made to the effect of excluding liability for gross negligence or willful acts. Any provisions to the contrary are null and void (although the overall agreement may remain valid). The nullity can be declared ex officio without a specific demand from the parties (Art. 1421 ICC), but it must be instrumental to a demand made by the parties. Therefore, the provisions of the licenses are null and void insofar as they unconditionally exclude all liability without making such distinction. However, the invalidity does not extend to the contractual clauses that are not affected by the nullity (art. 1429 ICC) and in any case the clauses that are null and void can be converted into different clauses with similar effect, such as the parties would have wanted if they had been aware of the nullity (Art. 1424 ICC). All those rules should be read in the light of the license quite likely being a unilateral act (Art. 1424 ICC).

Should the disclaimer be ineffective, could a software developer be liable for damages caused by his or her software, under Italian law, in the light of the fact

 $^{^{336}\}mathrm{The~U.S.}$ Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of 1976.

³³⁷Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

³³⁸17 U.S.C. §102(a).

that his or her software is released for free (under the FOSS license)? Apart from the cases of gross liability and wilful acts, or a liability in tort, the answer seems negative. On contractual grounds it is impossible to determine a liability. A license is just that, a permission, therefore it does not impose any obligation to deliver anything upon the developer. Suppose that somebody wants to integrate the software in a larger product for a particular scope, and the software is unfit to it. The integrator is then permitted and invited to do all the modifications, including the adaptations and quality assurance activities, to make sure that the combination works. There is a considerable difference between this case and a proprietary software license. In proprietary software licensing consideration is exchanged against delivery of the software or even permission to use software, is a sale (Art. 1471 ICC). Being a sale, it bears certain statutory warranties, including the product being free from defects that reduce its intended use (Art. 1490 ICC). But the same cannot apply to FOSS, which is not "sold" — unless there is a separate agreement on that particular piece of code — but just offered for perusal. If there is a separate agreement, such as a software development agreement, the relationship between the client and the developer — in particular the liability for defective software — is governed by this specific contract and not by the license.

A liability cannot be construed on the basis of product liability rules as well, because product liability would invariably arise from a defect in a physical item, and without a contractual link other than the license, the developer cannot reasonably be considered the "provider". At any rate, any such limitation would be void outright if the product liability law were applicable (Art. 124 of the Italian Consumers Code).

A tort liability would also be hard to find and the onus would be entirely on the plaintiff. Art. 1227 of the Italian Civil Code provides that damages are not due insofar as they could have been avoided on duly exercising diligence. But, more than that, it must be established that the damage has been caused by an unlawful act (i.e. an act against the law and conflicting with the conduct expected by an average subject). Now, the "exchange" between the developer and the user is "I give you the Freedoms, but the code is all you get, not a product, mind that I don't guarantee anything". It is generally understood that because the exchange is gratuitous, the avoidance of liability flows naturally from said act (again, except the case of gross negligence) unless a warranty is expressly given. All this makes it particularly difficult to construe a solid case for tort liability of large proportions, and in any case there is no pre-made contractual language that can prevent it, especially because Art. 1225 of the Italian Civil Code limits maximum liability to what could have been reasonably expected when the obligation arose.

Liability for lack of title is also a possibility. Releasing software as FOSS by an upstream provider is an act upon which third parties might rely for downstream re-licensing. If there is a gap in the chain of title, that could mean that the lower

³³⁹17 U.S.C. §411(a).

end of the chain suffers losses, e.g. because of litigation it suffers from upstream, even if no knowledge of any infringement existed. Can this distributor of software demand to be indemnified by its software provider who has "obfuscated" the real status of the copyright title of that particular piece of code? Such indemnification is hard to construe, because there is no contractual link between the party requesting indemnification and its upstream provider. What remains, in the absence of express warranties and representation, is a non contractual liability. Certainly the licenses have no warranties and representation—indeed the contrary is the case.

Any downstream developer or integrator must do its own due diligence or require other kinds of warranties and representations from its upstream — or better, do both. Indeed, that of providing certain levels of indemnification for FOSS is a business case for some companies.

The copyleft principle

Principle

A characteristic found in many (but not all³⁴⁰) FOSS licenses is the so-called "copyleft" principle. FOSS licenses which incorporate the copyleft principle,³⁴¹ lay down by contract that everyone in the chain of consecutive users, in return for the right of use that is assigned, has to distribute to other users the improvements the software and its derivative works, if he chooses to distribute such improvements or derivative works. In other words, software which incorporates copyleft FOSS, must be distributed as copyleft FOSS. As a general statement, it is not possible to incorporate copyright protected parts of copyleft software in a proprietary licensed work.

Often Copyleft is referred to as "virality" of the license. However, this wording has a pejorative implication and is misleading as to how the copyleft principle operates. The copyleft clauses imposes a condition as in: "if you want to do X, then you must do Y, else you can't do X", but this concept has been mistaken for "if you do X, then you are obligated to do Y, else I can force you to do Y". In other words, the result of distributing derivatives of copyleft software under a different license is an infringement of the upstream license, it is not that non properly licensed software is by magic transformed into copyleft software. It does not cause per se any re-licensing of the infringing work in copyleft software, unless the infringer wants to cure the violation by relicensing. In other words, copyleft licenses are no more "infective" than proprietary ones (in which, if the price is not paid, the right to use the software is not obtained).

We have discussed above about the difference between the effects of an obligation and of a condition in the section on enforcement and we make reference to said discussion for further details.

³⁴⁰17 U.S. Code §102(a).

³⁴¹17 U.S. Code §201(a).

Validity

The question of the validity of the copyleft clause coincides with the question whether an author can effectively lay down how derivative works have to be distributed. The answer to this question is affirmative. The author of the original work has no rights in the derivative work as a whole, but based on his rights in the original work he is able to permit or prohibit the distribution of the derivative work. A derivative work can therefore only be operated subject to the consent of the copyright owner of the original work.

An issue could in theory be raised against creating exclusive rights which are not provided by law, as copyleft is sometimes accused of doing. But copyleft does not create any exclusive right that is not already granted by the law: instead it carves its permissions out of the already existing exclusive right to authorize derivative works. Since the downstream recipient of the software must clear its derivatives vis à vis all upstream copyrights, this either is done generally and conditionally by using the copyleft license, or is done otherwise. If and insofar as the conditions are approved—and met—the software is clear. Otherwise the software is not clear and clearance must be sought on an individual basis, as in any other kind of software distribution. That, by the way, is how dual (proprietary + copyleft) licensing works, such that Richard Stallman has dubbed the scheme as "sale of exceptions [to a copyright license]". 342

Damages

According to Art. 158 of the Italian Copyright Law, damages caused by copyright violations are compensated under Italian law in accordance with the general legal principles applicable to unlawful acts (Art. 2056 and 2059 of the Italian Civil Code) and with the principles of breach of contractual obligations (Art. 1223, 1224 and 1225 of the Italian Civil Code). Those provisions establish that damages shall be awarded in a measure sufficient to restore the economic (Art. 2056 ICC) and moral (Art. 2059 ICC) losses of the aggrieved party. The economic loss is calculated in terms of actual damage and lost profit, limited to the damage that was foreseeable at the time of the breach unless the act was done intentionally or due to gross negligence.

Dual damages, triple damages or other forms of punitive damages are not awarded under Italian law. Traditionally, these damages were considered radically incompatible with fundamental principles of Italian Law (so called "divieto di locupletazione"). However, with the introduction of TRIPS, a limited version of punitive damages (i.e. damages unrelated to the actual loss suffered) has been introduced for patent and trademark violations, under the name of "civil punishment"—such as awarding to the rightholder the infringing products that have been confiscated. Similarly, in copyright violations an award of damages not directly related to the lost profits and the actual losses can easily be achieved by applying moral damages (Art. 2059 of the Italian Civil Code,

³⁴²17 U.S. Code §201(b).

expressly mentioned in Art. 158.3 of the Italian Copyright Law) and through an award equal the profits unlawfully obtained as a result of the violation by the violator (and profit here could include the advantage coming from the avoidance of production costs). Infringements of software copyrights follow the same regime as infringements of every other copyright. The aforementioned principle is therefore applicable in cases involving the infringement of software copyright. The same applies to FOSS.

Infringements of software copyrights follow the same regime as infringements of every other copyright. The aforementioned principle is therefore applicable in case of copyright infringements of software. Same applies to FOSS.

It may be assumed that the damage to the copyright owner will be in any case very limited if existing, as the author has made his work freely available. This argument is not necessarily bound to succeed, because the factual premise falls flat in its face in many cases where FOSS indeed is utilized for business purposes, as in the following cases.

Besides establishing a reputation and recognition — which can indeed be a valuable asset — an author can have other reasons to make his or her work "freely" available.³⁴³ The author may also gain a direct monetary advantage from the free distribution of his work. The simplest and traditiona way is to add advertisments to the software ("ad-ware"). Another way is to offer specific services relating to the work, such as assitance, maintenance, customization, indemnification, etc., or other related products. In this later example, the free circulation of the work ensures the work attracts many users. The author can generate his income from the provision of support and consulting services, or by licensing "proprietary add-ons" (roughly this is the "open core" strategy). Another business model is the so-called dual licensing model. 345 This model uses—as the name suggests — two different licenses. The first license is often a strong copyleft license. This first — free — license ensures the work is circulated quickly and reaches a wide range of users. A second license without the copyleft conditions can then be obtained for a licensing fee by those who want to use the work in a wider application and at the same want to avoid that their own additions or the overall product are affected by the copyleft conditions, which is e.g. the case of proprietary applications using FOSS libraries and components

However, there is no straightforward theory of damages for a FOSS licensing violation. Arguably, if the program is dual-licensed, it would be easy to establish the damage as the lost profits that the copyright holder has suffered, which correspondis what the infringer ought to pay to obtain a proprietary license. If the infringing party has obtained licensing fees as a result of the infringement, again the damages could be determined relatively easily by calculating the share of the profit that has unfairly been generated as a result of the violation, using the

 $^{^{343}}Id.$

 $^{^{344}17}$ U.S. Code §101.

³⁴⁵17 U.S. Code §204.

fiction established in Art. 158. If this does not apply, the judge can refer to the costs unfairly avoided as a result of the violation (as if the FOSS developer had worked for the infringer), or the cost of the next most feasible proprietary alternative to the FOSS program — that the infringer has avoided licensing thanks to the violation — can be taken into consideration. This alternative can in fact be considered an indication of the price that the infringer ought to have paid to obtain a similar licensing from the FOSS developer at the same licensing conditions (in other words, as if the product was dual licensed). The problem with this latter approach is that in many cases the FOSS developer is unwilling or unable to license the software on proprietary terms. If he or she might issue a license, but refuses to do it on moral or other grounds, one could argue that this increases the damage instead of eliminating it, because the price to obtain this waiver to copyleft could be immensely high if negotiated ex ante. If the license is not possible (e.g., because of upstream constraints such as copyleft) again this is no reason to negate the compensation, because obtaining to an act of "violence"—the operative equivalent of a proprietary license from somebody who arguably would not be willing to license the software program on proprietary terms because moral motives—is a morally challenging act that must be compensated with moral damages. Moral damages can be awarded on an exbono et aeguo basis (Art. 2059, 2056 and 1226 ICC), which very frequently also takes into consideration the profit gained by the violator.

FOSS in the Public Administration

While the private sector is more or less free to decide what kind of software to adopt for their own use—there may be some restrictions coming from certain law, like the need to fill tax returns using a certain application, but this is seldom compelling—the public sector is forced to follow strict rules in the procurement of software. This goes beyond the rules imposed on public procurement procedures, aiming at ensuring equal treatment to all competitors ("par condicio"), it involves rules on what kind of software is to be procured.

The Code for the Digital Public Administration³⁴⁶ ("CAD") has provisions that dictate how the software for the public sector must be. It says that it has to have certain characteristics, such as enabling interoperability and services exchange. It also dictate which kind of *licensing conditions* are to be explored and chosen after a comparision through a formalized procedure ("Comparative analysis"). Art. 68.1 contains said list:

- Software made ad hoc for or by the concerned administration
- Reuse of software made $ad\ hoc$ for other administration [which is compelled to license it for free, and to hand over also the source code]³⁴⁷
- Free and open source software [FOSS]

³⁴⁶17 U.S. Code §201(a).

 $^{^{347}17}$ U.S. Code §101.

- Software obtained as a service (Cloud Computing)
- Software licensed under proprietary conditions
- Any combination of the above

Furthermore, Art. 68.1-ter provides that only when there is a motivated impossibility to procure software under the conditions of reuse and/or FOSS, then the public administration can redress to the acquisition of software under proprietary conditions. 348 . In other words, reuse and FOSS must be preferred 349 over proprietary software, even if on pure technical and economic bases proprietary solutions score better.

FOSS cases in Italy

No cases have been reported yet (November 2013).

Legal procedures

In Italy the nature of legal procedures in the field of copyright does not not differ in nature from that in general civil cases, and a procedure for temporary relief is also available. A copyright case is heard by one of the 11 specialized sections for Industrial and intellectual property Law. If a case falls within the jurisdiction of a court that has no specialized sections, jurisdiction in the whole case (even if it has other components which are not subject to this specialized competence, e.g., the interpretation of an agreement) is allocated to the court with the specialized section on a regional basis. The court decides with a panel of three judges.

Some special investigative powers have been given to the courts, such as ordering any involved third parties to provide information on the origin of the goods and their chain of distribution.³⁵⁰ Also the possibility of obtaining a description of the infringing goods in addition to their seizure is noteworthy. A temporary or permanent enjoinder to distribute the infringing works can be obtained. The decision may include an order for publication in the press of its operative part at the expense of the the infringing party.

The author of the work can always join the proceedings to protect his or her own interests even if he or she has already disposed of the economic rights in the work.

 $^{^{348}}$ 1-6 Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law. $^{349}\,Id$

 $^{^{350}}See,\ Id.$

Recommended literature

Articles

- FLOSS: gli indirizzi europei, la normativa italiana e le leggi regionali, Chapter 3 of the book "Finalmente libero! Software libero e standard aperti per le pubbliche amministrazioni" (2007, Mac Graw-Hill) edited by Michele Marchesi, Giulio Concas, Giulio De Petra, Flavia Marzano, Pietro Zanarini
- Marco Bertani: Profili giuridici delle licenze di software libero / open source nell'ordinamento italiano, in "I quaderni di dirittodautore.it", Anno III, n. 24, http://www.dirittodautore.it/quaderni.asp?mode=3&IDQ=82
- Nerina Boschiero: Le licenze F/OSS nel diritto internazionale privato: il problema delle qualificazioni, in AIDA 2004 (2005, Giuffrè)
- Marco Ciurcina, Carlo Piana: Le licenze FLOSS: stato dell'arte ed evoluzioni, Chapter 11 of the book "Il software libero in Italia" (Shake, 2009) edited by Andrea Glorioso
- Carlo Piana: Licenze pubbliche di software e contratto, in I contratti, n. 7/2006, IPSOA; http://www.piana.eu/repository/720_727.pdf
- Marco Ricolfi: Software e limitazioni delle utilizzazioni del licenziatario, in AIDA 2004 (2005, Giuffrè)
- Lele Rozza: Le principali iniziative legislative sul FLOSS, Chapter 10 of the book "Il software libero in Italia" (Shake, 2009) edited by Andrea Glorioso
- Marco Saverio Spolidoro: Open source e violazione delle sue regole, in AIDA 2004 (2005, Giuffrè)
- Vincenzo Zeno-Zencovich, Pieremilio Sammarco: Sistema e archetipi delle licenze open source, in AIDA 2004 (2005, Giuffrè)

Books

- Simone Aliprandi: Copyleft and Opencontent. L'altra faccia del copyright (2005, PrimaOra)
- Simone Aliprandi: Apriti standard! Interoperabilità e formati aperti per l'innovazione tecnologica (2010, Ledizioni), http://www.aliprandi.org/ apriti-standard
- Aa.Vv.: Open Source. Atti del Convegno (Foggia, 2-3 luglio 2004) (2005, Giuffrè)
- Giuseppe Sanseverino: Le licenze free e open source (2007, Edizioni Scientifiche Italiane)

Korea

author:[Park,Jongbaek]

Body of Law

Software, including computer programs, is protected as copyrightable work under the Copyright Act ("the Act") of Korea. Special provisions in Articles 101-2 through 101-7 of the Act address the protection of such programs. Previously, the Protection Act of Computer Programs addressed the safeguarding of computer programs until it was abolished and absorbed into the Act in 2009.³⁵¹

Under Korean law, international treaties, to which Korea is a party, are self-executing, meaning that no additional legislation is necessary to give effect to the treaty under domestic law. This means that international treaties addressing copyrights or intellectual property rights, such as the Berne Convention (effective in Korea as of 21 August 1996), the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS") (effective in Korea as of 1 July 1996) and the World Intellectual Property Organization Copyright Treaty ("WCT") (effective in Korea as of 24 June 2004), are given the same weight and effect as domestic law. As recently as 2012, Korea entered into Free Trade Agreements ("FTA") with the U.S. and the E.U., which have been in effect since 15 March, 2012 and 1 July, 2011 respectively. The Act has been revised to provide a wider range of protection for the software in range, remedies, technical protection measures, etc.

Object of Protection

According to the Act, 'computer program' means a work reduced to writing, composed of orders and directions, used in a device with information processing capability with the purpose of obtaining a specific result.³⁵² In other words, the program should 1) be functioning on a device capable of processing, controlling, and storing, 2) be able to perform meaningful work, 3) have at least two sets of instructions and orders, and 4) be expressed in code (and not just exist as an idea).³⁵³ Under the laws of Korea, the term 'software' has a broader meaning than just a computer program; it includes flow charts, system architecture and user manuals, which are afforded legal protection through the general provisions of the Act. Databases, while not included in the definition of 'computer program,' are protected separately under specific provisions contained in Articles 91 through Article 98 of the Act. The Supreme Court of Korea has

³⁵¹"(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^{352}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

 $^{^{353}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup 01 35.html.

stated that to be an author of a computer program, some level of creativity is required, just as it is required for other literary works under the Act. It declared that while the work does not need to be completely original or novel, the author must have expressed his/her own thoughts or emotions to the extent that his/her work is distinguishable from the work of another.³⁵⁴ The Act, however, excludes programming languages (characters, symbols and their systems as means of expressing programs), syntax (special agreement on the usage of the programming language in a specific program) and algorithms (combination methods of instructions and commands in program) from protection.³⁵⁵

Authors

Definition of Author

The general provisions of the Act applicable to authors of other type of literary works extends to the authors of computer programs: an author is a person who has created a work,³⁵⁶ and becomes the holder of exclusive and moral rights to such work.³⁵⁷ Under the Berne Convention, copyrights are composed of moral and exclusive rights. Moral rights are the author's right to have the work published, the right to indicate his/her name on the work, and the right to preserve the integrity of the content, format, and title of the work.An author automatically becomes the copyright holder upon the creation of a work since the Act does not require any registration procedures or other types of formalities for an author to be recognized as a copyright holder.³⁵⁸

Authors of Work Made for Hire

In contrast, under the laws of Korea, an employer who engages an employee for a work made for hire (sometimes referred to as work for hire or WFH) will be treated as the author of the work, and not just the holder of moral and exclusive rights. 359 Here, an employer may refer to a juristic person, legal entity, an organization, etc. 360

For a work to be recognized as a work made for hire, the following conditions must be satisfied: a work has to be made (i) under the supervision of an employer

 $^{^{354}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

 $^{^{355} \}rm For}$ example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{356}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

 $^{^{357}}$ World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

³⁵⁸The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

³⁵⁹The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of 1976.

³⁶⁰Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

(ii) by an employee working for the employer (iii) during performance of his or her duties, and (iv) the work must be published under the name of the employer.³⁶¹ In instances where computer programs are work made for hire, employers do not need to meet the fourth prong of the test as publication would be counter to the purpose of keeping confidential trade secrets.³⁶² However, even in the case where all of the above conditions are satisfied, if an employment contract or the employer's internal regulation states otherwise,³⁶³ the person who created the work may become the author of the work.

In Korea, many programs used by companies are developed on a contract ba- \sin^{364} meaning that a commissioning party can agree to pay remuneration in exchange for work produced by a commissioned party (also known as the developing party) to create certain programs. When the conditions for work made for hire are not met in the course of performance of the contract, the developing party, as the author, may transfer exclusive rights to the party who ordered the work by an agreement of assignment; however, the moral rights still belong to the developing party as these rights are alienable from the author. Therefore, it is important to analyze whether a commissioned work may be recognized as a work made for hire as this determines the rightful holder of moral rights. With regard to this issue, the courts have held that the doctrine of work made for hire is usually not applicable to most commissioned work. Generally, the commissioning party will not be considered the author in a customary computer program development contract. However, when the commission party is the sole investor, planner, and publisher of the ordered work, and the commissioning party borrows only the commissioned party's human resources, the work will be recognized as a work made for hire of the party who ordered the work.³⁶⁵ In other words, in cases where the contribution of the entity who ordered the work is dominant (while the developer has little discretion), the ordering entity is the sole financer of the program, and the work is developed to benefit only the commissioning party, the program will be recognized as a work made for hire, as described in the above.

Joint Authors

In case of a joint authorship, an author may not exercise the exclusive or moral rights without the unanimous agreement of all the copyright holders. However, a copyright holder may not discourage the other copyright holders from reaching an agreement on exercise of the copyright or unreasonably withhold his/her consent in bad faith. Authors of a joint work may designate a representative amongst them to exercise their copyrights, with the caveat that any limitations imposed on the authority of such representative should not take precedence over

³⁶¹17 U.S.C. §102(a).

³⁶²17 U.S.C. §411(a).

³⁶³17 U.S. Code §102(a).

³⁶⁴17 U.S. Code §201(a).

³⁶⁵17 U.S. Code §201(a).

 $^{^{366}}Id.$

a bona fide third party.³⁶⁷ With respect to the exclusive rights of a joint authorship, an author cannot transfer, assign or pledge his/her share of the exclusive rights without the consent of the remaining authors. Any profit accruing from the exploitation of a joint work will be apportioned among the authors according to the respective shares of each author, unless otherwise stipulated. In such cases, the share of each author shall be deemed equal unless otherwise clearly specified.³⁶⁸

Exclusive rights

According to the Act, the author of a program has exclusive rights to reproduce, ³⁶⁹ transmit or broadcast the work in public, ³⁷⁰ and to distribute, ³⁷¹ lease, rent, ³⁷² or produce derivative works ³⁷³. Characteristics worth noting are as follows. Based on the revision of the Act in 2011, which reflected the Korea-United States FTA, temporary reproduction was included in concept of a reproduction. The right of public transmission, which includes the pre-existing notion of rights of broadcasting and transferring, was introduced by the amendment of the Act in 2006. It was through this amendment that the Act was extended to include the right of transmission of a work or database or right of making such work or database available to the public via wire or wireless communication. As a result, uploading digital information of a work on the internet is now prohibited as a violation of right of public transmission. The right of distribution is only applicable to distribution in tangible media. The Court has declared that 'a user's connecting to a certain server to save a specific digital file in a shared folder to enable other users to download shall not be considered a distribution and that transferring a work or a copy only in a tangible media shall be construed as distribution.³⁷⁴ The author's leasing rights only applies when a computer program is leased for profit; the right to create derivative works means a right to create a new work based on the work by means of translation, modification, alteration, etc. of original work; and the right to make compilations falls under the right of reproduction.³⁷⁵

Exceptions to the Exclusive Rights

In relation to use of computer programs, there are several special exceptions to exclusive rights under the Act. For example, a user of a computer program

³⁶⁷17 U.S. Code §101.

³⁶⁸17 U.S. Code §204.

³⁶⁹17 U.S. Code §201(a).

 $^{^{370}17}$ U.S. Code §101.

³⁷¹1-6 Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.

 $^{^{372}}Id.$

³⁷³See, Id.

 $^{^{374}1-6}$ Nimmer §§6.02, 6.03.

 $^{^{375}} Id.$

may temporarily reproduce such program in a computer without consent of the exclusive right holder to the extent deemed necessary for the purpose of efficient information processing.³⁷⁶ Additionally, a user may reproduce a program to check the ideas or principles underlying such program for the purpose of research, study, or testing without the consent of the copyright holder and may temporarily reproduce a program for the purpose of maintenance and repair of such program. ³⁷⁷ Reverse engineering is the copying or modifying of a computer program copyright code in order to obtain information necessary for interoperability of independently created computer programs with other computer programs.³⁷⁸ The Act allows limited reverse engineering in cases where it is necessary to obtain information for the compatibility of such program with other program, provided that a user cannot obtain said information through an alternative source or method. A user may not transmit information obtained by reverse engineering to a third party other than for the purpose of establishing or testing compatibility. Furthermore, the user should not use the information obtained during reverse engineering for developing, producing, or selling substantially similar programs in infringement of the copyright of the program.³⁷⁹ In regard to the principle of exhaustion, once the original work or its copy has been sold with the copyright holder's express intention to do so, (excluding the holder of moral right, since the moral right is inalienable while exclusive right is not), the right of distribution by the copyright holder is exhausted.³⁸⁰ Therefore, a buyer may distribute the original work or its copy without any permission from the holder of exclusive right. However, it is not clear under the laws of Korea whether the principle of exhaustion applies to intangible digital works purchased through on-line networks as there are no current statutes or court precedents that address this issue.

Moral Rights

An author's moral rights belong exclusively to the author,³⁸¹ and these rights cannot be assigned or transferred. Moral rights are the author's right to publish the work, the right of attribution, and the right to preserve the integrity of the content, format, and title of the work. Exercising such rights through a proxy or an agent is possible, but only to the extent that it does not substantially infringe upon the author's moral rights.³⁸² A person who violates an author's moral rights will be subject to imprisonment for no more than three years or be charged with a fine not exceeding 30 million won, or both.³⁸³ Expression

³⁷⁶1-6 Nimmer §6.03.

³⁷⁷17 U.S.C. §201(a).

³⁷⁸1-6 Nimmer §6.06(A).

 $^{^{379}}Id.$

 $^{^{380}}Id.$

³⁸¹17 U.S.C. §103(a).

 $^{^{382}17}$ U.S.C. §101.

 ³⁸³1-3 Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S.
 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp.
 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565

of an author's intention on his or her right to the integrity of the work may be delivered by implied consent.³⁸⁴ A user may modify a computer program without consent of the copyright holder, only to the extent such modification is necessary to make the program which is designed for a specific computer available for other computers or to the extent such modification is necessary for efficiency of the specific computer.³⁸⁵ The right of attribution and the right of publication is governed by the general provisions of the Act. In cases where authors and copyright holders of unpublished work are not one in the same, and these authors, rather than the copyright holders, assign their exclusive rights to another person or grant the person the right to use or exclusively issue it, the authors will be deemed to have consented to its publication.³⁸⁶ If derivative or compilation work made with the consent of the original author has been published, the original work will be deemed to have been published.³⁸⁷

Terms of Protection

The 2011 amended version of the Act, effective as of 1 July 2013, provides that the author's exclusive rights to a program will be effective for the author's life time plus seventy years after the death of the author.³⁸⁸ The exclusive rights for work made for hire continues to exist for a period of 70 years after it has been published.³⁸⁹ The exclusive rights for a work with no author's name or second name continues to exist for a period of 70 years after it has been published.³⁹⁰ The exclusive rights to a joint work continues to exist for a period of seventy years after the death of the last surviving author,³⁹¹ and the exclusive right for derivative works is protected independently from the original work, under the Act, for the lifetime of the author of derivative works plus seventy years after the death of such author. The protection period of the exclusive rights starts from the year after the author's death or its publication,³⁹² since it may be difficult ascertain the exact dates of the author's death, creation or publication.

⁽¹¹th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

³⁸⁴Lothar Determan, Dangerous Liaisons — Software Combinations as Derivative Works? Distribution, Installation, and Execution of Linked Programs Under Copyright Law, Commercial Licenses, and the GPL, 21 Berkeley Tech. L. J. 1421, 1430 (2006).
³⁸⁵Id.

³⁸⁶1-6 Nimmer, §6.05.

³⁸⁷17 U.S.C. §103(a).

 $^{^{388}}Id.$

³⁸⁹1-3 Nimmer §3.02.

 $^{^{390}}Id.$

 $^{^{391}17}$ U.S.C.§ 101.

³⁹²¹⁻³ Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S.
340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp.
2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

Copyright Assignment

Assignment of Exclusive Rights

Exclusive rights may be assigned in whole or in part.³⁹³ Each of the exclusive rights, such as right of reproduction, right of public transmission, etc., may be assigned as a whole or in piecemeal. Additional constraints such as geographic limitations may be added. For example, the right of reproduction may only be available in the U.S. When the exclusive rights of a program are assigned as a whole, the right to make a derivative work will be presumed to have been included, unless otherwise stipulated.³⁹⁴ The exclusive right holder may grant permission to use the work instead of transferring the exclusive right by assignment.³⁹⁵ When it is uncertain whether the author assigned the exclusive rights or granted mere permission to use, the exclusive rights will remain with the author, according to the Supreme Court's decision. 396 According to Article 105 (1) of the Act, copyrights can be held in trust. Under the Trust Act, if the trustor creates a valid express trust, the trustee should manage and dispose of the trust corpus in the interest of the beneficiary or in the stated interests of the trust. Under the trust agreement, ownership of the trust property is completely transferred from the trustor to the trustee; and the trustee has all of the rights to the trust property, including the right to file a lawsuit. Therefore, the trustor is prohibited from instituting any claims for compensatory damages based on the copyrights in the trust property.³⁹⁷ Under Article 105(2) of the Act only those organizations satisfying the following criteria are permitted to carry out copyright trust services: (i) the organization must be comprised of holders of copyrights (or other rights protected under the Copyright Act) to the trust property; (ii) the organization must be not for profit; and (iii) the organization must possess the capability to conduct the collection and distribution of royalties.

Assignment of Moral Rights

Since the author's moral rights are inalienable and not transferable, ³⁹⁸ moral rights exhaust at the author's death. No special provisions under the Act limit the moral rights of computer programs, as such, moral rights for computer programs are recognized like other copyrighted works. Due to its inalienability, an author's moral rights cannot be held in trust.³⁹⁹

³⁹³17 U.S.C. §201(c).

³⁹⁴1-6 Nimmer §6.05.

 $^{^{395}}Id.$

 $^{^{396}}Id.$

 $^{^{397}}Id.$

³⁹⁸*Id.*

 $^{^{399}}Id.$

Special Measures

Civil Remedies

If a copyright holder's work is infringed, the copyright holder may file an application for a cease-and-desist order against the infringer. The copyright holder or holder of other rights under the Act may request an injunction for such infringement provided that such infringement continues, regardless of the infringer's intention or negligent conduct. 400 The copyright holder may file a petition to a court to take preventive measures or to provide a security for compensation for damages against a potential infringer of his or her exclusive rights. The court may issue a preliminary injunction to temporarily suspend the infringement, to seize the objects made by the act of infringement, or to take other necessary measures on behalf of the plaintiff whose copyright is being infringed.⁴⁰¹ The copyright holder' may also seek injunctive relief, which may be granted upon showing the existence of the claims to be preserved and the need to preserve such claims. The copyright holder's right to apply for a cease-and-desist order and right to request preventive measures constitute the existence of such claims. A pledge of security may not be required to grant injunctive relief. 402. Moreover, the copyright holder has the right to request actual damages for monetary loss or non-economic damages, such as mental or emotional damage, against the infringer. 403 The copyright holder may claim, taking into account the difficulty of proving the amount of damages, either (1) the amount of profit the infringer gained through infringement, or (2) the amount corresponding to the revenues that would have been acquired by the copyright holder by exercising his or her copyright in normal course of business. 404 Moreover, due to revision of the Act to reflect the Korea-US FTA, the copyright holder may claim statutory damages, instead of actual damages, if the copyright holder had registered his/her copyright prior to exercise of the claim of statutory damages. 405 In case the copyright holder fails to prove the infringer's intentional conduct or negligence or the three year period for statute of limitations has expired, the copyright holder may claim restitution for unjust enrichment pursuant to the Civil Act of Korea. When an author's moral rights (such as the right to decide when and how to publish a work—which may be done anonymously or pseudonymouslythe right of attribution, or right to the integrity of the work) are infringed, the author may claim damages arising from such infringements under Article 751 of the Civil Act of Korea. The court has declared that "although no express law exists, it is natural that copyright holder can claim damages for the infringement of his or her moral right which is inalienable in its nature. 406" In these situations, there is a rebuttable presumption that the copyright holder suffered

⁴⁰⁰17 U.S.C. §106.

 $^{^{401}}Id.$

⁴⁰²17 U.S.C. §109(a).

⁴⁰³2-8 Nimmer §8.12.

⁴⁰⁴Computer Assoc., 982 F.2d at 714.

⁴⁰⁵See, 4-13 Nimmer §13.02(B).

⁴⁰⁶See, Computer Assoc., 982 F.2d at 715.

damages, mentally or emotionally, as well as damages to reputation. ⁴⁰⁷ The copyright holder may request to take measures to restore his/her reputation in cases of defamation. In the event the moral rights are infringed or the dignity of the author has been damaged, the damaged party may request restoration of his or her reputation as well as monetary damages. ⁴⁰⁸ The Act also has separate provisions that apply to the infringement of moral rights after an author's death. This provision allows the author's bereaved family or executor of his or her will to demand preventive measures, provision of security for damages, or restoration of the author's reputation. ⁴⁰⁹

Joint Works

In the event there are concerns that the copyright of a joint work might be infringed, each joint author is entitled to seek preventive measures or a cease-and-desist order under Article 123 of the Act. If the exclusive rights are infringed, each of the holders of exclusive rights may claim monetary damages in proportion to his or her share of copyright under Article 125 of the Act. When the infringement of moral rights concerns all the joint authors, the copyright holders must act in unison to seek reparation. However, the amount of damages sought by each author is in his/her discretion. In cases where moral rights of just one of the joint authors are infringed, each author may act independently of the others when filing suit.

Collective Works

When there are concerns as to whether copyrights of collective works will be infringed or when copyrights of collective works are actually infringed, each copyright holder may respectively claim damages or seek prohibitive and preventive measures, or cease-and-desist orders for the works created by him or herself.

Derivative Works

The courts⁴¹¹ have held that the copyright of derivative computer program belongs to the author of the derivative computer program regardless of whether the copyright holder of the original work gave his/her consent for use of the original in the derivative work. The author of the derivative work may claim damages when the derivative work's copyright is infringed. However, a copyright holder of a derivative work may not use the derivative work without consent of the copyright holder of the original work.

⁴⁰⁷ Id

 $^{^{408}}$ Apple Computer, Inc v. Microsoft Corp., 35 F.3d 1435, 1445 (9th Cir. 1994).

⁴⁰⁹See, Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 819 (1st Cir. 1995).

⁴¹⁰See, Id. at 815.

⁴¹¹4-13 Nimmer §13.03(F).

Criminal Sanctions

Article 136 of the Act stipulates that copyright infringers are subject to criminal punishment. Before the inclusion of the Korea-USA FTA into the Act, Article 140 provided that a copyright infringer may not be criminally punished without a complaint by the copyright holder except in circumstances where infringements were committed habitually and with profit-making motives (emphasis added). With the passage of the Korea-USA FTA, the Act's exception clause was broadened to allow criminal prosecution of those who were habitual infringers or infringers who were profit-motivated ('emphasis added''). It is possible that this broadened exception clause subjects more infringers to criminal sanctions as compared to the previous version of the Act.

Unprotected Software and Public Domain Software

Works with expired copyright protection terms, works without a copyright holder, or works with express waivers from copyright holder are not be protected under the Act. In contrast, though Free and Open Source Software ("FOSS") makes available its source code for public use, it is not unprotected software or public domain software as defined under the Act.

Analysis of FOSS under Korean Law Copyright

The process of concluding FOSS licenses differs from that of other copyrighted works. Under Korean law, a FOSS license agreement is treated much like a contract because of the similarities between the two. First, the all-important intent to form a contract exists between the two parties. The offeror intends the offeree to use the copyrighted work by granting the offeree the permission to use the work; the offeree often manifests his/her intent to accept through some action that signifies his/her acceptance. Second, a FOSS license explicitly states the material conditions for using the copyrighted work. For the reasons mentioned above, the FOSS license agreement is binding and enforceable under Korean law as a contract. Although people might have the mistaken belief that authors of FOSS have waived their rights because of the free public availability of FOSS. from the legal perspective, the authors continue to hold their valid copyrights in FOSS, which are protected under the relevant laws while simultaneously allowing users the right to use the FOSS under certain conditions. The development environment of FOSS is radically different than the environment in which commercial proprietary software is developed. While several program developers may collaborate at the same time to create the first version of FOSS, FOSS is usually developed by successive combinations of derivative works taken from preceding derivative works based on its original work. Important legal issues

 $^{^{412}\,}See,$ Order Re Copyrightability Of Certain Replicated Elements Of The Java Application Programming Interface (hereinafter Order) found at http://www.groklaw.net/pdf3/OraGoogle-1202.pdf.

concerning FOSS are: who holds the copyrights, what is the object of copyright protection, and how copyright holders can enforce their rights emanating from the copyrights. All of which are reviewed in detail as follows:

Qualification of FOSS

Many users are expected to use, copy, modify, and redistribute FOSS after the creation of the first version. The works made during the process are classified into one of three categories: joint works, collective works, or derivative works. Joint work is created when two or more program developers collaborate, with the intention that their individual contributions be merged into one. Program developers need not work on the program contemporaneously in order to be considered joint work. Collective work is when each developer's contribution can be used separately and independently. Derivative work is when a developer modifies the pre-existing FOSS with significant variations while maintaining substantial similarities.⁴¹³

Rights of Joint Authors

Since the exclusive rights to a joint work must be exercised with the unanimous agreement of all the exclusive rights holders, it becomes more significantly harder to reach absolute consensus when many developers are involved. To solve this conundrum, copyleft FOSS licenses contain clauses that make it mandatory for each contributor (developer) to allow his or her contribution to be freely available to the public for copy, modification and redistribution. Moreover, in accordance with the principle of private autonomy, each contributor may agree in advance to make freely available his/her contribution even before he/she creates the code in accordance with the license agreement, which shall be effective under the laws of Korea.

Rights of Authors of Collective Works

The defining characteristic of a collective work is that each author's contribution can be separated into discrete parts. As such, each author of a collective work may, without the other authors' permission, assign his or her exclusive rights to another or permit others to use his/her own creation.

Rights of Copyright Holders of Derivative Works

The Korean Supreme Court held that creator of the derivative work of a computer program holds the copyrights to the derivative work, whether or not the copyright holder of the original work gave his/her consent to use the original work in the derivative one. Therefore, copyrights for the derived programs based on General Public Licensed ("GPL'd") software belong to the developer

⁴¹³17 U.S.C. §102(b).

⁴¹⁴1-2 Nimmer §2.02.

of the derivative work, to the extent that it is his/her own creation under the laws of Korea. 415 When an original work and its derivative are inseparable, a question arises of whether the consent of all authors is needed in order to modify or change the inseparable work. To deal with this issue, Article 6 of General Public License ("GPL") 2.0 states that recipients of each derivative work automatically receive a license from the original licensor to use, copy, distribute or modify such derivative work. Also, Article 2 of Apache 2.0 and Article 2.1 of the Mozilla Public License ("MPL") 2.0 state that each contributor gives users permission to use the work. All of the previously cited license clauses are valid under Korean law. Copyleft clauses in FOSS licenses may be a point of controversy when it comes to protecting derivative works or authors of derivative works under Korean law. Copyleft clauses obligate the source code of derivative works to be distributed under the same license as the original work, which results in limiting the exercise of the copyright by the copyright holder of the derivative works. However, under Apache and Berkeley Software Distribution ("BSD") licenses, which do not require the authors of the derivative works to disclose the source code of the modified programs, the copyrights of the authors of the derivative works are protected as provided in the Act. Since Korean law acknowledges the principle of private autonomy, except for certain rights that cannot be transferred or waived under the compulsory provisions, exercise of copyrights can be limited in accordance with a license agreement under the doctrine. For example, copyleft clauses may limit the moral right of a copyright holder of a derivative work by stipulating the method and time of publication of the work or by allowing free modification of the work by the public. However, an author is entitled to determine how to exercise his/her moral rights under the principle of private autonomy as long as he/she does not transfer his/her moral rights. Therefore, copyleft clauses are valid under Korean law if it falls within the previously described bounds of conduct. If an author of the derivative work does not fulfill his or her obligations under the license and argues that the copyleft clause is unfair and thus void under the Korean law, GPL auto-termination clauses may intervene by prohibiting the author of the derivative work from using the original work. While it's undecided if this would be a winning argument in court, the author of a derivative work most likely will not benefit from arguing that copyleft clauses are void.

The Assignment of Copyrights

The same principle on the assignment of copyrights applies to computer programs. Copyrights of software can also be held in trust; however, it is not frequently practiced in Korea. When FOSS is made as a work for hire, the employer becomes the author of the FOSS by operation of the Act and thus becomes the holder of exclusive and moral rights. In such instances, the employer may exercise its copyrights under the terms and conditions of a FOSS license.

⁴¹⁵4-13 Nimmer §13.03(B)(2)(a).

⁴¹⁶Computer Assoc., 982 F.2d at 708.

Moral Rights

Because most FOSS licenses allow liberal modifications to FOSS, a major legal issue is whether these modifications will severely infringe upon the author's right to the integrity of the work. Creating a derivative work inevitably causes limitations on the exercise of the original author's right to the integrity of the work since the derivative work is a new one that substantially modifies the original work. However, the author's right to the integrity of the work can also be waived under the doctrine of private autonomy. When a copyright holder allows its downstream users to create derivative works, the copyright holder may dictate the parameters within which the integrity of the content should be maintained. Therefore, by executing a license agreement, the original author may limit his or her moral right to maintain the integrity of the work by allowing free and substantial modifications of the original work without running afoul Korean law. There is a caveat to the original author's waiver of the right: when a user of FOSS modifies the original work in a manner against the original author's purpose of creation, which renders the author's intention suspicious, and is detrimental to the honor or reputation of the original author, infringement of the author's moral rights shall still be recognized, regardless of the effectiveness of the original author's waiver of the right to the integrity of the work under the terms of a license.

Enforcing FOSS Licenses

Various bodies of law such as Korean contract law, the Copyright Act, criminal law, etc. should be considered simultaneously in order to determine whether FOSS license agreements are binding and enforceable.

Contracting Parties

Unlike general license agreements, FOSS license agreements may involve several authors of the original work or derivative works. Assuming that an agreement is concluded, once FOSS is downloaded and used, identifying the contracting parties is an issue. In order to legitimately use FOSS as an end user at the end of development chain, the end user must receive permission from all legitimate copyright holders throughout the entire development and modification process of FOSS. When FOSS is distributed directly from the copyright holder of the original FOSS (the "Original Copyright Holder"), the contracting parties of the FOSS license agreement are the Original Copyright Holder and the recipient of the software. However, if the recipient of FOSS redistributes the software to a third party (the "Redistributor") without making any modifications, different opinions may arise on whether the Redistributor becomes either a contracting party or an agent of the Original Copyright Holder who is the contracting party. It is reasonable to recognize that the intent of the distributor is to distribute the software in his or her own capacity within the scope of his or her permitted use, instead of distributing as the copyright holder's agent, unless it was explicitly otherwise expressed. For example, when a distributor of non-copyleft

licensed original software distributes that software under a different license, the effect of the distribution is not binding on the author of FOSS because he/she never agreed to the different license. Therefore, the contracting parties of such distribution should be the distributor and the downstream recipient. Naturally, when a person who modified a program distributes the modified software, he/she would be the contracting party. 18

The Validity of FOSS Licenses

Contractual Relationship

Providing FOSS for free gives it the simultaneous status as a gift under the Korean Civil Act as well as a copyrightable work license agreement under the Act. 419 An offer and acceptance are required to form a legally binding contract. Under the current legal framework, the distribution of FOSS constitutes an offer. 420 Though the licensees may be numerous and unspecified, FOSS license agreements may be considered contracts as long as they contain material terms that are specific and definitive. The Court has held that 'offer should be specific and definitive to such an extent as to establish an agreement by its corresponding acceptance; the offer should include information which could determine the contents of the agreement.'421 Most FOSS licenses present specific and definitive terms and conditions which could determine the contents of the agreement in order to use the corresponding FOSS program. In order for a contract to come into existence, an offer and its corresponding acceptance should be present, and, in principle, the offeree should notify the offerror of his/her acceptance. Practically speaking, no means exist for a licensee of FOSS to notify anyone of his/her acceptance. Where no notice of acceptance is required for a contract to be validly executed, whether through the offeror's explicit permission or because of trade custom practice, the contract will come into existence upon the occurrence of an event, which may be construed as a declaration of the intention to accept. 422 Under a FOSS license agreement, the licensee does not need to give a notice of acceptance to the licensor. Instead, the licensee's download of FOSS⁴²³ or the modification or distribution of the program constitutes acceptance⁴²⁴. Experts are divided as to which of these events actually qualify as the formal acceptance. Further, FOSS licenses are regarded as standardized contract terms as defined under the Act on the Regulation of Terms and Conditions. Standardized contract terms means the contents of a contract that a party prepares in a specific form in advance in order to enter into a contract

⁴¹⁷See, BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

⁴¹⁸See, 4-13 Nimmer §13.03(B)(3).

⁴¹⁹See, 4-13 Nimmer §13.03(F)(2).

⁴²⁰4-13 Nimmer §13.03(F)(2).

⁴²¹See, Computer Assoc., 982 F.2d at 715.

⁴²²See, Computer Assoc., 982 F.2d at 715.

⁴²³Order *supra* Note XXX

⁴²⁴See, Id. at 710.

with unspecified multiple parties regardless of their name, type, or scope. 425

No Warranty

Limitation on 'no warranty clause' under the Civil Act

License agreements such as GPL, etc. provide that any copyright holder, or any other party who may modify or redistribute the program ("Contributors") may disclaim warranties against any defects of the FOSS program. In other words, Contributors are not liable for any damages arising out of defects of the program, even if the holder or other party was aware that the defects may have existed. According to Article 559 of the Korean Civil Act, 'a donor shall not be liable for any defect or deficiency in the thing or right which forms the subject of his or her gift; provided, that this shall not apply to cases where he/she was aware of such defect or deficiency and has nevertheless failed to inform the donee thereof.' The aforementioned article on the Korean Civil Act seems to conflict with the FOSS license no-warranties clauses. However, the terms of no-warranty clauses of FOSS license agreement such as GPL, which includes 'possibility of such defects,' does not extend to cases where copyright holder are fully aware of the defects. In other words, when the copyright does not disclose a known defect or deficiency to a recipient, the copyright holder will be liable for damages under the Korean Civil Act. No-warranty clauses will be ineffective in these situations. However, when the copyright holders only recognize the possibility of defects, without actual knowledge of such defect or deficiency, which is threshold conditions under the Korean Civil Act, the copyright holders can effectively disclaim its warranties. 426

Under the Act on the Regulation of Standardized Contracts

According to Article 7 of the Act on the Regulation of Standardized Contracts, ⁴²⁷ the standardized contract terms that concern the liability of contracting parties that fall under any of the following subparagraphs will be null and void: 1) a clause that exempts a business operator (a party to a contract who offers standard business terms to the opposing parties as the content of the contract), its agents, or its employees from liability arising from intentional conduct or gross negligence; 2) a clause which limits the extent of damages payable by the business operator, in circumstances without objective justifiable cause; 3) a clause which excludes or limits the warranty liability of a company in situations without objective justifiable cause. ⁴²⁸ The no-warranty clauses of the FOSS license agreements as in GPL, constitute standard business terms since a contracting party prepares such clauses in a specific form in advance in order to enter into a contract with unspecified multiple contracting parties. Since FOSS

⁴²⁵4-13 Nimmer §13.03(B)(4).

⁴²⁶ Id.

 $^{^{427}}See,$ John William See v. Christopher Durang and LA. Stage Co., 711 F.2d 141, 143 (9th Cir. 1983).

 $^{^{428}}Id.$

is provided for free, which could be seen as an "objective justifiable cause" under subparagraphs 2) and 3), a no- warranty clause would apply and thus would not be null and void. However, in the event that disclaimer clauses are applied to software providers who acted with intention or gross negligence, the clause would be null and void under the above referenced paragraph 1). In other words, if the licensor was aware of the defect of the software or should have been aware of the defect but for the gross negligence of the licensor, the licensor is liable for damages pursuant to Article 559 of the Korean Civil Act. If the licensor's gross negligence or intentional conduct is proven, the licensee is entitled to seek liabilities from the licensor pursuant to Article 7 of the Act on the Regulation of Terms and Conditions. 429 However, if the licensee under the GPL 2.0 seeks liabilities from the licensor claiming that the no-warranty clause is null and void, then the licensor may claim that the license agreement was automatically terminated because the licensee copied or distributed FOSS program except as expressly provided under GPL 2.0 and was in breach of a no-warranty clause. When a commercial distributor provides warranties for a FOSS in exchange for a fee, no warranties in the original FOSS license agreement will be deemed to have been modified between the commercial distributor and the end user, especially when these warranties did not exist in the original license agreement. Therefore, the distributor should be liable under the additional contractual obligations as a contracting party. Moreover, to the extent the scope of warranty under such agreement is narrower than the scope specified in the compulsory provisions of relevant laws, the warranties scope specified in the applicable law will apply.

Limitation under the Product Liability Act

Under the Korea Product Liability Act, 'product' means all movable goods, industrially manufactured or processed, including movable goods that is a part of another immovable or movable good. Because of the perceived intangible nature of a computer program, whether a 'computer program' is a product is a hotly contested issue. 430 According to Article 3 of the Korea Product Liability Act, a manufacturer who distributes software contained or embedded in tangible storage means or devices will be liable for damages, death, personal injuries, or property damage (this category excludes the damage to the defective product) that a person suffers as a result of a product defect, arising from defects in manufacturing, defects of design, or inadequate warnings on the product.⁴³¹ Any special agreement intended to exclude or limit the liabilities for damage in violation of the Product Liability Act will be null and void, provided that this will not apply to cases where a person who purchased a defective product to be used solely for his/her own business and entered into a special agreement to limit or exclude liabilities for damages incurred to his business property. 432 In order to apply the Product Liability Act to a FOSS distributor, the distributor

 $^{^{429}}Id$

 $^{^{430} \}mathrm{Mist}\text{-On Sys.}$ v. Gilley's European Tan Spa
, 303 F. Supp. 2d 974, 978 (W.D. Wis. 2002).

⁴³¹4-13 Nimmer §13.03(B)(4).

⁴³²Mist-On Sys., 303 F. Supp. 2d at 976 (W.D. Wis. 2002)

should be a manufacturer, which the Product Liability Act defines as a person who is engaged in the business of manufacturing, processing, or importing any product.⁴³³ If a company creates a FOSS program embedded in a device or devices meant for its own consumption, the liability exemption clause of the FOSS license may be valid under Article 6 of the Act. Therefore, in practice, product liability on FOSS would not often recognized.⁴³⁴

The Copyleft Principle

Principle

Strong copyleft clauses included in GPL 2.0 or 3.0, which obligate downstream users to distribute the source code of work based on the original program of the same copyleft license, may conflict with the Copyright Act and the Trade Secret Protection Act. The former acknowledges the independent copyrights of authors of derivative works while the latter protects trade secrets.

The Validity of Copyleft Clause

As mentioned above, copyleft clauses are valid under Korean law since the principle of private autonomy is applied to the exercise of copyright. However, copyleft clauses may conflict with the Trade Secret Protection Act. The Trade Secret Protection Act defines 'trade secret' as information (including production and sales methods, useful technical or business information for business activity), that is not publicly known and of which is the subject of considerable effort to maintain the secrecy and independent economic value. Though trade secrets are protected under the Trade Secret Protection Act, many licenses, including GPL, require disclosure of the original source code for derivative programs and thus may be in conflict with the Trade Secret Protection Act.. The Korean Supreme Court has held that when the person who modifies FOSS becomes the author of the derivative work by meeting the legal standard set forth by the courts, the original source code of the derivative work is still considered a trade secret provided that it remains unpublished, retains its independent economic value, and is kept confidential through the considerable effort of the trade secret holder. Although the author of derivative work may be liable for damages to the original author because the author of the derivative work failed to meet his/her duty to disclose the source code, more likely, the author of the derivative work will not have to disclose the source code since it i) is not known publicly, and ii) is the subject of considerable effort to maintain its secrecy, and iii) has independent economic value, and therefore is qualified as a trade secret. 435 This holding is to be criticized as described in the section entitled "FOSS Cases in Korea."

 $^{^{433}}$ Computer Assocs., 982 F.2d at 709-10.

⁴³⁴BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

⁴³⁵See v. Durang, 711 F.2d at 143.

Remedies for Infringement

Under the Copyright Act

The principles that apply to other copyrightable works apply to FOSS when authors claim remedies and criminal sanctions under the Act. Standing to sue differs depending on whether the work is a joint work, a collective work, or a derivative work as described in the section entitled "Analysis of FOSS under Korean Law." 436

Breach of License Agreement or Copyright Infringement, Compensation for Damages

When there is a breach of a FOSS agreement, a determination must be made of if the breach constitutes a breach of contract and further a copyright infringement. If the breach corresponds to exclusive rights, which are guaranteed under the Act, the breach may be treated as a copyright infringement. Because there are no court precedents that deal with this issue head-on, the herculean task of making such determinations is set before the Korean judiciary. While it is by no means a complete guide to the subject, there is a case that may shed some light on this particular issue. In the case where an author of a derivative work based on GPL'd FOSS failed his duty to disclose its source code, the Supreme Court did not clarify whether such was a breach of a contract or constituted an infringement of copyrights. The lack of clarity came from the Supreme Court's usage of the phrases "violation of the GPL agreement" and "the copyright holder" in its decision. The Court pointed out that such decisions are held separately from the issue of whether the author of derivative work who violates the GPL agreement may be liable for damages to the copyright holder of the original work. However, the lower court made it clear that the author of a derivative work who used a GPL'd FOSS, without disclosing the source code, is in violation of the GPL and is liable for damages to the copyright holder of the original work for copyright infringement.⁴³⁷ The details of the case are to be discussed in the following section. To determine the proper cause of action under which compensation for breach of a license agreement is sought, the form of the infringement and the nature of the infringed rights should be analyzed. If the object of the infringement is a component of the copyrights as defined under the Act, the Act is applicable and the special measures as stated in Part I will apply. On the other hand, when the object of infringement is a contractual license obligation, which is not fulfilled, contract law under the Korean Civil Act would apply. If a licensee breaches a FOSS license agreement, the licensor may apply for specific performance⁴³⁸ or terminate the license agreement⁴³⁹ upon occurrence of a termination event or upon expiry of period of notification

 $^{^{436}\}mathrm{Computer}$ Assoc., 982 F.2d at 715.

 $^{^{437}}See$, 1-2 Nimmer §2.03(G).

⁴³⁸17 U.S.C §105.

⁴³⁹ http://copyright.gov/help/faq/faq-definitions.html.

for performance as provided under FOSS license⁴⁴⁰ or claim damages.⁴⁴¹ The licensor may file under the Civil Execution Act, with a provisional disposition to keep the licensee from using the FOSS program or to disclose its source code until the relevant judgment is held.

FOSS Cases in Korea

Elimnet v. Haionnet

An employee of Elimnet (the Developer) created a derivative work using GPL'd FOSS during his employment and assigned the copyright to the company. Elimnet used the derivative work for its business. After a while, the Developer resigned from Elimnet without disclosing the source code of the derivative work to company. He later founded Haionnet and used the modified version of the derivative work for its Haionnet's business. Elimnet filed a complaint arguing that the Developer used Elimnet's trade secrets without permission. The Developer was charged with the violation of the Trade Secret Protection Act. The Supreme Court held that in view of the assignment contract of the copyright between Elimnet and the Developer, Elimnet was the copyright holder of the derivative work based on the GPL'd software; the same court did not address whether Elimnet should be liable for damages to the copyright holder of the original GPL'd software. The court further held that the source code of the derivative work was Elimnet's trade secret since the source code of the derivative work i) was not known publicly, ii) had independent economic value and iii) was maintained as a secret through considerable effort. However, a strict application of the court's decision in this case can be criticized as below. The purpose of protecting trade secret is to prevent infringers from gaining unjust profit through unfair competition, rather than to protect trade secret itself. 442 The copyright holder of the original work allowed users to modify the work under the condition that users disclose the source code of the modified program to the public, along wide public access to the modified program. A refusal by either a user or developer to fulfill his/her obligations would lead to the automatic termination of the license. The lower court held that refusing to disclose the source code of the modified program would be an infringement of the original copyright holder's right of modification: the act of using the modified program without disclosing its source code would be an infringement of the copyrights of the original author because it exploited the creativity of the original author without his/her permission.⁴⁴³ It is in doubt whether the derivative author of a GPL'd software who has violated the terms of the license agreement can be regarded as a fair competitor who should be protected under the Trade Secret Protection Act. Moreover, the information must be maintained in confidence to be recognized as a trade secret. Secrecy is maintained only when it is kept in

⁴⁴⁰ See, Id.

⁴⁴¹See, Computer Assocs., 982 F.2d at 710.

⁴⁴² http://www.copyright.gov/help/faq/faq-general.html.

⁴⁴³4-13 Nimmer §13.03(F)(4).

confidence by the legitimate holder, who holds the lawful right to use the trade secret. 444 The modifier holds the copyright of the derivative work, but does not hold the copyright for the original work. Because the derivative work is in generally inseparable from the original software, the modifier inevitably infringes the copyright of the original program whenever he/she uses the derivative work without permission of the original author. Therefore, in such circumstances, the derivative author may not necessarily be regarded as a holder of a lawful right to use the derivative work or a derivative author who should be protected under the Criminal Act. Protecting a company's derivative work as a trade secret when it was created by infringing the copyright holder's original work does not conform to the purpose of the Trade Secret Act. Moreover, as previously discussed, since the source code of the derivative work may not satisfy the conditions of a trade secret, the court's holding that acknowledged the derivative work, an undisclosed source code of FOSS, as a trade secret may be criticized. Such a court holding does not conform to the original copyright holder's intent to make the software as free and open as possible, which might hinder the active use and development of FOSS in Korea.

The Netherlands

author:[Dammers, Wouter] author:[van Kerkvoorden, Wanda]

Introduction to software protection under Dutch law Body of law

In the Netherlands, the protection of software by copyright is regulated in the Dutch Copyright Act ("Auteurswet", hereafter: "Copyright Act" or abbreviated as "CA"). This law transposes 445 the provisions of Council Directive (91/250/EEC) of 14 May 1991 on the legal protection of computer programs 446 (hereafter: "Software Directive") into Chapter VI of the Copyright Act.

As the Software Directive is transposed into the Copyright Act itself, the regulatory regime for the legal protection of computer programs is no different than for other literary, scientific or artistic works ("works"). Chapter VI of the Copyright Act, however, contains special provisions with regard to computer programs.

 $^{^{444} \}rm http://creative commons.org/licenses/public domain/.$

 $^{^{445}}$ "(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^{446}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

Copyright Act: Object of protection

Chapter 1, paragraph 3 of the Copyright Act refers to the works protected by copyright. Article 10, paragraph 1 states that, for the purposes of the Copyright Act, works include (amongst others) computer programs and the preparatory material. Thus, all computer programs, including the preparatory material, are subject to the Copyright Act. Note that the expression (in any form) of a computer program is protected. Ideas and principles which underlie any element of a program, including those which underlie its interfaces, are not protected by copyright. The copyright of the Copyright acts are not protected by copyright.

According to Dutch case law, only works that have their own, original character and posses the personal stamp of the author 452 can benefit from copyright protection. This means that the work's form must not be derived from any other work, and should be the result of the intellectual creation of human labour. Thus, the author should have made it's own creative choices, i.e. choices that are the product of it's own human mind. There should be a creative performance of the author that is reflected in its work. Thus technical, objective and inventive works are not subject to the creativity that the Copyright Act protects. 454

The Dutch requirements that a work should have its "own, original character" and that it should posses "the personal stamp of the author" seems to differ from Article 1, paragraph 2, of the Software Directive: "A computer program shall be protected if it is original in the sense that it is the author's own intellectual creation. No other criteria shall be applied to determine its eligibility for protection". Thus, if a computer program is an independent product of own creation, the requirement of originality should be fulfilled. ⁴⁵⁵

Until very recently 456 the Copyright Act also gave limited 457 protection for writings that are not original: 458 the protection of writings

 $^{^{447}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup 01 35.html.

 $^{^{448}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

⁴⁴⁹For example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{450}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

⁴⁵¹World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

⁴⁵²The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

⁴⁵³The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of_1976.

 $^{^{454}}$ Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

⁴⁵⁵17 U.S.C. §102(a).

⁴⁵⁶17 U.S.C. §411(a).

⁴⁵⁷17 U.S. Code §102(a).

⁴⁵⁸17 U.S. Code §201(a).

("geschriftenbescherming"), Article 10, paragraph 1, sub 1 CA. However, according to Article 10, paragraph 5, computer programs were already expressly excluded from this protection of writings. 459 .

Authors/Beneficiaries

The Copyright Act does not explicitly state that the actual creator of a work is the copyright owner. Nevertheless, when one reads Article 1 CA — which stipulates that copyright is the exclusive right of the author of a work, 460 or his successors in title, to communicate that work to the public and to reproduce it, subject to the limitations laid down by law — in conjunction with Articles 4-9 CA, it is made clear that, in principle, the person who has created the computer program is the author of the work and thus the copyright owner. 461

Rules of evidence

Article 4 CA provides the statutory rules of evidence: the person who is named as the author in or on the work or — for instance the name of the person, or the user of, or the entitled party to the logo or brand — shall be deemed the author of the work. If there is no such indication, then the person who, when the work is communicated to the public, is named the author by the party making the work known to the public, shall be deemed the author of the work, unless there is proof to the contrary. If the author is not named, the person who delivers a recitation which has not appeared in print shall be deemed the author thereof, unless there is proof to the contrary. 462

Compilations

With regard to compilations, Article 5, paragraph 1, CA provides that, if a work consists of separate works by two or more persons, then the person under whose guidance and supervision the work as a whole has been made or, if there is no such person, the compiler of the various works, will be deemed the author of the whole work, without prejudice to the separate copyright in each of the works.⁴⁶³

Joint works

With regard to joint works, Article 26 CA, provides that, when the copyright in a work belongs jointly to two or more persons, it may be enforced by either one of them, unless agreed otherwise. The rights to a joint work can, in principle, only be enjoyed if both authors agree upon such enjoyment (Article

⁴⁵⁹17 U.S. Code §201(b).

 $^{^{460}} Id.$

 $^{^{461}17}$ U.S. Code §101.

⁴⁶²17 U.S. Code §204.

⁴⁶³17 U.S. Code §201(a).

⁴⁶⁴17 U.S. Code §101.

3:166 ff. of the Dutch Civil Code ("Burgerlijk Wetboek", hereafter: "Civil Code" or "CC")). 465

Fictional authorship

Article 6 CA states that if a work has been made according to the draft and under the guidance and supervision of another person, then that person will be deemed to be the author of the work. If the supervisor, however, has provided such a detailed design of the computer program that the final programming is nothing more than just a straightforward, non-creative process, then the supervisor, in this event, is deemed to be the author of the computer program.⁴⁶⁶

More importantly, Article 7 CA provides that, where the labour carried out by an employee consists of the making of certain works, ⁴⁶⁷ then the employer will be deemed to be the author unless otherwise agreed between the parties. ⁴⁶⁸ Note that this article only applies to the employer/employee relationship. Thus, if such a relationship is absent, this article does not apply. However, in the event of, for example, secondment, freelancing or traineeships, one of the parties has to agree explicitly, by deed of transfer, ⁴⁶⁹ that the copyright will be assigned to the company.

Public institutions, associations, foundations and/or companies which communicate a work to the public ("openbaarmaken") as its own, without naming any natural person as its author, will be regarded as the author of that work, unless it is proved that the communication to the public in such a manner was unlawful, according to Article 8 CA.

Exclusive rights

The author of a work has the exclusive right to communicate the work to the public ("openbaarmaken", Articles 1 and 12 CA) 470 and to reproduce it ("verveelvoudigen", Articles 1 and 13 CA) 471 , subject to the limitations laid down by law. The special provisions concerning computer programs, as provided by Article 4 of the Software Directive, ⁴⁷² are implemented into Article 45j—45n CA. ⁴⁷³ As a consequence, communicating to the public includes selling or offering to sell the carrier of the software, or making the software available for third parties to consult. According to Article 45h CA, the rental of computer

⁴⁶⁵1-6 Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.

 $^{^{466}} Id. \\ ^{467} See, \ Id.$

⁴⁶⁸1-6 Nimmer §§6.02, 6.03.

⁴⁶⁹ Id

⁴⁷⁰1-6 Nimmer §6.03.

⁴⁷¹17 U.S.C. §201(a).

⁴⁷²1-6 Nimmer §6.06(A).

 $^{^{473}}Id.$

programs is also a communication to the public. Reproduction includes the normal use of computer programs, including the correction of errors (Article 45j CA); the reproduction of a back-up (Article 45k CA); the observation, study or testing of the computer program (Article 45l CA); as well as the decompilation of the computer program (Article 45m CA).

Exceptions to exclusive rights

Articles 15-17c CA^{474} provide general exceptions to the copyright of the author, including for instance the right to quote from works that are communicated to the public by or on behalf of public authorities, public lending rights and the use of works for teaching purposes.

Another exception is provided by the first sale doctrine⁴⁷⁵ and Article 4 sub c of the Software Directive, which stipulate that the first sale⁴⁷⁶ in the Community⁴⁷⁷ of a copy of a program by the rightholder, or with his consent, will exhaust the distribution right of that copy within the Community, with the exception of the right to control further rental of the program or a copy thereof. The ECJ decided that this first sale doctrine also applies to standard software downloaded from the internet: an owner of copyright in software cannot prevent a perpetual licensee who has downloaded the software from the internet from selling his 'used' licence.⁴⁷⁸

The Articles 45j — 45n CA provide the special exceptions to the exclusive rights concerning computer programs, based on Articles 5 and 6 of the Software Directive.

Reproduction of software

Article 45j CA⁴⁷⁹ provides that the reproduction of a computer program by the lawful acquirer⁴⁸⁰ of a copy of the said work, when this is necessary for the use of the work for its intended purpose,⁴⁸¹ shall not be deemed an infringement of copyright.⁴⁸² Such reproduction, in connection with the loading, displaying or

 $^{^{474}} Id.$

⁴⁷⁵17 U.S.C. §103(a).

 $^{^{476}17}$ U.S.C. §101.

⁴⁷⁷¹⁻³ Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

⁴⁷⁸Lothar Determan, Dangerous Liaisons — Software Combinations as Derivative Works? Distribution, Installation, and Execution of Linked Programs Under Copyright Law, Commercial Licenses, and the GPL, 21 Berkeley Tech. L. J. 1421, 1430 (2006).

 $^{^{479}}Id.$

 $^{^{480}1\}text{-}6$ Nimmer, §6.05.

⁴⁸¹17 U.S.C. §103(a).

 $^{^{482}}Id.$

correcting of errors⁴⁸³ cannot be prohibited by contract.⁴⁸⁴

Back-ups of software

Article 45k CA^{485} provides that the reproduction of a computer program by the lawful user⁴⁸⁶ of the said work, serving as a back-up copy, where this is necessary for the use of the work for its intended purpose, shall not be deemed an infringement of copyright.⁴⁸⁷

Ideas and principles

Article 451 CA⁴⁸⁸ provides that a person who is entitled to reproduce the software program, which includes the loading, displaying, running, transmission and storage, insofar as these acts are necessary for the reproduction of said work, shall also be entitled, while performing those acts, to observe, study or test the functioning of the work in order to determine the ideas and principles underlying it. The rightful user is allowed to use tools such as electronic testing and controlling tools.⁴⁸⁹

Decompilation

Article 45m CA⁴⁹⁰ states that the making of a copy of a computer program and the translation of the form of its code shall not be deemed an infringement of copyright if these acts are indispensable for obtaining information⁴⁹¹ necessary to achieve the interoperability of an independently created computer program with other programs,⁴⁹² provided that: a) these acts are carried out by a person who has lawfully⁴⁹³ obtained a copy of the computer program or by a third party authorised by him to carry them out; b) the information necessary to achieve interoperability is not already readily available⁴⁹⁴ to the persons referred to under a.; and c) these acts are limited to the parts of the original program which are necessary to achieve interoperability. The information obtained must not: i) be used for any other purpose than to achieve the interoperability of the independently created computer program; ii) be given to third parties except where

 $^{^{483}}$ 1-3 Nimmer §3.02.

 $^{^{484}}Id.$

 $^{^{485}17}$ U.S.C. § 101.

⁴⁸⁶1-3 Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S.
340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp.
2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

⁴⁸⁷17 U.S.C. §201(c).

⁴⁸⁸1-6 Nimmer §6.05.

 $^{^{489}\}overset{-}{I}d.$

 $^{^{490}}Id.$

 $^{^{491}}Id.$

 $^{^{492}}Id.$

 $^{^{493}}Id.$

⁴⁹⁴17 U.S.C. §106.

necessary for the interoperability of the independently created computer program; iii) be used for the development, production or marketing of a computer program that cannot be regarded as a new, original work or for any other act which infringes copyright.

Moral rights

The author of the work also has moral rights, or so-called personality rights ("persoonlijkheidsrechten"). 495 These rights protect the relationship between the author ⁴⁹⁶ and his work and includes the right for the author of a work — even after assignment of his copyright 497 — (a) to oppose the communication to the public of the work, without acknowledgement of his name or other indication as author, unless such opposition would be unreasonable: (b) to oppose the communication to the public of the work under a name other than his own, and any alteration in the name of the work or the indication of the author, in so far as it appears on or in the work or has been communicated to the public in connection with the work; (c) to oppose any other alteration of the work, unless the nature of the alteration is such that opposition would be unreasonable; and (d) to oppose any distortion, mutilation or other impairment of the work that could be prejudicial to the name or reputation of the author or to his dignity as such. Personality rights are inalienable, but some may be waived (see sub a), or may be waived in so far as alterations to the work or its title are concerned (see sub b and c), in accordance with Article 25 CA.⁴⁹⁸

Term of protection

For all works, including computer programs, the term of protection is 70 years as of January 1st following the death of the author (Article 37, paragraph 1 CA) or of the surviving author if more than one person is the joint author (Article 37, paragraph 2 CA). If the author is a legal entity this term begins on the January 1st following the first communication to the public (Article 38 CA). 499

Special measures

The Copyright Act provides the measures for enforcing copyrights. Besides the general measures, the Articles 31-36 CA set out specific criminal sanctions against copyright infringers and provide investigative powers for investigation officers. On the basis of these articles, for instance, a person who intentionally infringes another person's copyright, or who intentionally (a) publicly offers for distribution, (b) has in his possession for the purpose of reproduction or distribution, (c) imports, conveys in transit or exports, or (d) keeps for profit an object containing a work which infringes another person's copyright, is liable

 $^{^{495}}Id.$

⁴⁹⁶17 U.S.C. §109(a).

⁴⁹⁷2-8 Nimmer §8.12.

⁴⁹⁸Computer Assoc., 982 F.2d at 714.

⁴⁹⁹See, 4-13 Nimmer §13.02(B).

to a term of imprisonment of not more than six months or a fine of EUR 18,500. If these acts are committed by a person in the conduct of his profession or business, then that person is liable to a term of imprisonment of not more than four years or a fine of EUR 74,000. If a person acts in a manner stated under (a) to (d), and there are reasonable grounds to know that the object contains a work which infringes another person's copyright, he is liable to a fine of EUR 7,400. If a person intentionally acts in a manner stated under (a) to (d), any means designed exclusively to facilitate the removal or overriding, without the consent of the author or his successor in title, of a technical device for the protection of a computer program, is liable to a term of imprisonment of not more than six months or a fine of EUR 18,500. A person who intentionally makes any unlawful alterations to a work which is protected by copyright, or to its title or to the indication of the author or impairs such a work in any other way that could be prejudicial to the name or reputation of the author, or his dignity as such, is liable to a term of imprisonment of not more than six months or a fine of EUR 18,500. All these acts constitute serious offences. Moreover, reproductions which are declared forfeit by the criminal court shall be destroyed, according to Article 36 CA, or may be handed over to the copyright owner, if the latter applies to the office of the Clerk within one month of the judgment becoming final and conclusive. Upon such handing over, ownership of the reproductions shall be assigned to the rightholder. The court may order that the handing over be conditional on payment by the rightholder of an amount of compensation that shall accrue to the State.

According to Article 36a CA, investigating officers may at any time, for the purposes of investigating offences which are punishable under the Copyright Act, require access to any documents or other data carriers in the possession of persons who, in the exercise of their profession or business, import into the Netherlands, communicate to the public or reproduce works, where inspection of such documents or data carriers may reasonably be deemed necessary for the performance of their duties. Moreover, on the basis of Article 36b CA, investigating officers are authorised to enter any premises to investigate offences which are punishable under the Copyright Act and to seize that which is subject to seizure. If they are denied access, they may gain entry, if necessary with the assistance of the police. They shall not enter a house against the will of the occupant unless a special warrant is presented in writing from — or in the presence of — a public prosecutor or an assistant public prosecutor. An official report of such entry shall be drawn up by them within twenty-four hours.

Unprotected software and public domain software

As set forth above, only software that is original in the sense that it is an intellectual creation of the author benefits from copyright protection. Non-original software does not come into consideration for copyright protection and can, in principle, be used freely. In the Netherlands there is little to no case law about public domain software.

Analysis of free and open source software under Dutch law Copyrights

One of the most important characteristics of free and open source software ("FOSS") is that it is developed by the efforts of many programmers. The work evolves continuously through the improvements, additions and changes made by the open source community. These characteristics may have several legal effects. It is important, therefore, to examine, for instance, whether FOSS could qualify as a collaborative work under Dutch law; who owns the copyrights to FOSS software; and are contributions in themselves protected works in the sense of the Copyright Act?

Qualification of FOSS

More than any other type of computer program, FOSS is often the result of collaborative work between software developers. Modifications to FOSS can either be distributed as separate computer programs or integrated in the initial computer program.

Whether the collaborators could be regarded as authors in the terms of the Copyright Act depends, amongst other things (including the question whether Dutch law applies), on the extent of their creative input. Under Dutch law, each contribution may be protected under the Copyright Act if it meets the criterion of originality, either as a separate computer program or one which is integrated into the original computer program. Often, small contributions such as "bug-fixes" will not be protected under the Copyright Act, and thus, not all contributors will become authors.⁵⁰⁰

It is important, therefore, to examine whether a contributor is the author of their particular contribution to FOSS, as only the author has the right to decide on the use of the work. 501

If the FOSS is developed by an employed programmer, the employer, in principle, will be deemed to be the author of the work (Article 7 CA). If the employee is seconded, one can argue analogously that the copyrights then belong to the hirer. If a public or private entity communicates the work to the public without naming any natural person as author, that entity will be regarded as the author of the FOSS, unless the communication to the public in this manner was unlawful. In all of these situations it is better to avoid uncertainty by mutually and contractually agreeing that eventual emergence of copyright on created works will be transferred to the employer, the hirer or the (public or private) entity. So

One can also think of situations where contributions by a number of parties have

⁵⁰⁰See, Computer Assoc., 982 F.2d at 715.

⁵⁰¹ Id.

⁵⁰²Apple Computer, Inc v. Microsoft Corp., 35 F.3d 1435, 1445 (9th Cir. 1994).

⁵⁰³ See, Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 819 (1st Cir. 1995).

led to the creation of just one work. The Copyright Act does not provide many explicit provisions for cases such as these (just Article 26 CA, regarding the enforcement of joint authorship). Nevertheless, case law has developed the rules regarding the authorship and ownership of works created by multiple authors. These rules distinguish, on the one hand, situations where the work is the result of such close co-operation between authors that individual contributions cannot be separated from other contributions, and, on the other hand, situations where the individual contributions are clearly identifiable. Notwithstanding any specific contractual arrangements, if the contributions can be distinguished, then each author enjoys a separate right on his own particular contribution. If the contributions are all combined into one work, then all the authors enjoy the rights on the work in joint ownership; this means the rights can only be exercised with the consent of every author. So

Finally, copyrights on FOSS—just as for any other works—can also be obtained by succession or transfer.

Rights of the original (co-)authors

As stated, the author of a work has the exclusive right to communicate his work to the public and to make reproductions. This also means that the author can forbid or allow others to take these actions. Many FOSS licences do not restrict (copyright) the use of the software but allow (copyleft) others to use it under certain conditions in order to ensure the free and open character of the (modified) software.

Authors of modifications

As FOSS has developed, works are often built on the basis of another FOSS work that has been created by other individuals. In this light, it is important to distinguish between two *legal* ways of making modifications which are set out in Article 10, paragraph 2 and Article 13 CA.

On the one hand, Article 10, paragraph 2 CA states that reproductions of a work and other adaptations and collections of different works will be protected as if they were separate works, without prejudice to the copyright on the original work. Thus, if a modification to FOSS can be regarded as a new and original work, it is a new copyright protected work, and in principle, the exclusive right of the contributor.

On the other hand (which in practice is more likely), Article 13 CA states that the reproduction of a work generally includes any partial or total adaptation or imitation in a modified form, which cannot be regarded as a new, original form. Thus, a modification to FOSS that cannot be regarded as a new and original work is considered to be a reproduction of the original work and, in principle, the exclusive right of the person entitled to the original FOSS.

⁵⁰⁴ See, Id. at 815.

⁵⁰⁵4-13 Nimmer §13.03(F).

Certain FOSS licences stipulate that derivative works should be distributed under the same licence terms as the original work. The term "derivative work" is not known in the Netherlands, but Article 10, paragraph 2 and Article 13 CA may provide guidance as to how it should be defined.⁵⁰⁶

Moral copyrights

Moral rights play a more important role in relation to FOSS than they do for closed source software. The reason for this is because FOSS values the recognition of contributors very highly. Nevertheless, moral rights may also conflict with the ideas underpinning FOSS: the right to oppose any alteration of the work may conflict with the freedom to tinker 508 or with forked projects. The Open Source Definition even specifies that authors of FOSS cannot oppose the use of the software by certain people and groups or for certain areas of application. 509

However, in theory, the moral rights holders may oppose such alterations. Nevertheless, in practise, acknowledgments are desirable in FOSS communities. Many FOSS licences even oblige contributors to mention their names and their modifications in the mandatory notice. 510

Enforcing FOSS licences

If the FOSS is used, or distributed, in a way that is not allowed under the relevant FOSS licence and the law, then it amounts, in principle, to copyright infringement. The rightholders — or any one of them, unless agreed otherwise — can enforce their rights by seeking an injunction, compensation for damages, surrender of profits and seizure or destruction of the infringing software. In principle, licences do not have enforcement rights such as these, unless they are given the authorisation by the licensor. Most FOSS licences do not give this authorisation. In order to enforce FOSS licences effectively, the Free Software Foundation encourages the authors of FOSS to assign their rights to the software to the Free Software Foundation.

As FOSS licences have important differences from "normal" software licences, and most FOSS licences were developed from an Anglo-American perspective, it gives rise to the question as to whether the formation and content of the applicable FOSS licence would comply with Dutch law. How should the licence be qualified? Who are the contracting parties? Is its form and content valid under Dutch law?

 $^{^{506}\,}See,$ Order Re Copyrightability Of Certain Replicated Elements Of The Java Application Programming Interface (hereinafter Order) found at http://www.groklaw.net/pdf3/OraGoogle-1202.pdf.

⁵⁰⁷17 U.S.C. §102(b).

⁵⁰⁸1-2 Nimmer §2.02.

 $^{^{509}4-13}$ Nimmer \$13.03(B)(2)(a).

⁵¹⁰Computer Assoc., 982 F.2d at 708.

Introduction to the Dutch legal system

For a good understanding of the Dutch attitudes to FOSS licences and to appreciate the suggestions made about the contents of FOSS licences, it is necessary to briefly explain the pillars of the Dutch legal system.

In general, Dutch law does not provide mandatory requirements for the formation and content of an agreement. Thus, in principle, contracting parties have a lot of freedom. Moreover, Book 6 of the Dutch Civil Code provides a solid, though flexible, basis for contracting parties and sets out provisions that regulate the relationship between the contracting parties and the consequences of agreements. Most of these provisions have an additional effect, but some of them are mandatory (predominantly when regulating the relationship between professional parties and consumers). As most provisions are reasonably balanced, it is not necessary to include clauses in contracts regarding issues that are already included in the Dutch Civil Code, unless parties explicitly want to differ from these statutory provisions.

One of the most important principles in the Dutch Civil Code is the principle of reasonableness and fairness ("redelijkheid en billijkheid") which is laid down in Articles 6:2 and 6:248 CC. This principle is implied in all agreements and has both an added effect as well as a derogatory one. It may have legal consequences on the agreement made between the contracting parties, but it could also affect the validity of the contractual terms in a way that the parties did not contemplate or intend when they entered into the contract. For instance, a contractual clause may not apply, if under the given circumstances, according to reasonableness and fairness, a clause such as this would be unacceptable. 511

Nature of the agreement

FOSS licences are agreements that create mutual obligations for the contracting parties. Although FOSS licences have not yet been "tested" in Dutch courts, most commentators argue that open source agreements can be qualified as a contract under Dutch law, in the same way as any other software agreement can. A contract consists in the parties' manifestation of their actual or apparent intention to be bound by obligations and to give them legal effect. FOSS licences are generally referred to as licence contracts, which actually form an unnamed category of contracts in the Dutch Civil Code. What the nature of the relevant FOSS licence is, should be examined on a case-by-case basis, in accordance with the intention of the parties. The object of the licence is to regulate the private law aspects of the transaction of the licensed rights, such as the extent of the guarantee granted on the FOSS, and the copyright law aspects of it, such as the extent of the use that the licensee is entitled to make of the copyright protected FOSS. The object of software

 $^{^{511}}See,\,\mathrm{BUC}$ Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3
d 1129, 1143 (11th Cir. 2007).

 $^{^{512}}See, \, 4\text{-}13$ Nimmer \$13.03(B)(3).

 $^{^{513}}See, 4-13 \text{ Nimmer } \$13.03(F)(2).$

licences, most Dutch commentators argue that software licences should be seen as conferring a right of use ("gebruiksrecht") on the licensee. Accordingly, a software licence must be regarded as an agreement whereby the licensor grants the licensee permission to perform certain acts with respect to a copyrighted work, which would otherwise be prohibited on the basis of the licensor's exclusive right on the work. The majority of FOSS licences, therefore, do not substantially differ from most conventional software licence agreements.⁵¹⁴

Contracting parties

Who are the contracting parties to a FOSS licence? It is clear that the licensee is one—this is the person who is using a copy of the FOSS—but who is the licensor? The text of a FOSS licence does not always contain a clear indication of the name(s) of the licensor(s), let alone the address(es) of the natural or legal person(s) granting the licence. As said, the question as to who is the copyright owner is a factual one which must be decided on a case-by-case basis, taking into account eventual subsequent transfers of copyrights. It is more difficult to examine who the licensor is: this has to be established according to the principle laid down in the *Haviltex* case. This landmark case states that one should take into account the respective expectations of the parties concerned.⁵¹⁵

The licensor and the copyright owner can be the same person, but not necessarily. Following the FOSS ideology one would argue that the licensee receives the licence from all the other developers in the chain. However, as the licence is not clear about the identity of the licensors at each step of the development process, it is unclear for a subsequent user to determine who he is contractually bound with. In practice, little case law has emerged in relation to FOSS licences and so the difficulty of ascertaining the identity of the parties to the agreement has not raised any legal difficulties, yet. Nevertheless, whoever the licensor may be, the licensee has a right to expect that the (legal or natural) person granting the licence is indeed competent to do so. The next question is whether the licence agreement is properly formulated so as to bind the user. ⁵¹⁶

Validity of the contract

FOSS is made available to users in various ways. The terms of the FOSS licence may appear in a variety of ways as well. For instance, for online distribution, the terms of the licence may be programmed to appear on the user's computer screen display, or the user may download the FOSS only after he has given his consent to the terms of the online screen licence, by clicking the tick box "Yes, I agree to these terms of use". The user can also be linked to the licence terms somewhere else online. In other cases, the user may even be expected to consult the COPYING or LICENSE file that is distributed with the software. For offline distribution, FOSS licences are often inserted in an instruction manual

⁵¹⁴4-13 Nimmer §13.03(F)(2).

⁵¹⁵See, Computer Assoc., 982 F.2d at 715.

⁵¹⁶See, Computer Assoc., 982 F.2d at 715.

or packed inside a box, or only communicated to the user when the software is installed.⁵¹⁷ Do these acts constitute a legal agreement between the concerned parties, under Dutch law?

Article 6:213 CC defines a contract as a multilateral juridical act under which one or more of the parties assumes an obligation towards one or more of the other parties. Juridical acts require an intention to produce a juridical effect, an intention which is manifested by a declaration (Article 3:33 CC). The absence of intention corresponding with that declaration cannot be invoked against a person who interpreted another person's declaration or conduct in conformity with the sense which he could reasonably attributed to it in the circumstances as a declaration of particular implication made to him by that other person (Article 3:35 CC). Thus, the impression created by someone's apparent intention to produce juridical effects is enough cause for it to qualify as a juridical act.

Article 6:217 CC provides that the multilateral juridical act is formed by the exchange of an offer and its acceptance.⁵¹⁹ With regard to juridical acts which are done for free (juridical acts for no consideration, "rechtshandelingen om niet"), acceptance is presumed to have taken place more rapidly.⁵²⁰

Note that contracts can be validly concluded via electronic means, irrespective of whether a consumer is involved in the transaction or not. 521 However, for electronic transactions by "Information Society Services" the Dutch laws requires that anyone who provides an Information Society Service must make certain information accessible to the recipients of the service in an easy, direct and permanent manner (Article 3:15d CC). 523

Moreover Article 6:227b CC provides that, before a contract is concluded via electronic means, any Internet Society Service is required to give certain information in a clear, comprehensible and unambiguous way to the other party. More specifically, the Information Society Service must indicate the different technical steps which must be taken in order to conclude the contract, ⁵²⁴ and it should specify the technical means for identifying and correcting input errors, prior to the placing of the order. Before or during the conclusion of the contract, the Information Society Service must make the terms available to the recipient in a way that allows him to store and reproduce them so that he can access them at a later stage. Failure to comply with the obligations of Article 6:227b CC can result in annulment of the contract or the contract can be presumed null.

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517 Order supra Note XXX
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 $^{^{518}}See,\ Id.$ at 710.

⁵¹⁹4-13 Nimmer §13.03(B)(4).

⁵²⁰ Id.

 $^{^{521}}See,$ John William See v. Christopher Durang and LA. Stage Co., 711 F.2d 141, 143 (9th Cir. 1983).

⁵²² Id.

 $^{^{523}}Id.$

 $^{^{524} \}rm Mist\mbox{-}On \ Sys. \ v. \ Gilley's European Tan Spa, 303 F. Supp. 2d 974, 978 (W.D. Wis. 2002).$

Besides that, a distinction should be made between professional users and consumers, since one would expect that professional users, more than ordinary consumers, would be aware of the FOSS licence. Moreover, the user may also be bound to the terms of the licence by the sheer act of reproducing, modifying or distributing the software. The criterion is, in our opinion, whether the user actually accepted the legal consequences of his actions, and whether he accomplished these actions with the specific intention of being bound by the licence. 526

General terms and conditions

Moreover, FOSS licences generally take the form of a standard agreement, or of general terms and conditions ("algemene voorwaarden"), insofar as the terms of the licence are not individually negotiated between the licensor and licensee. 527 For this reason, the European and Dutch legislature have subjected the use of general terms and conditions to legal requirements relating to the formation of such contracts, even if a user has manifested his intention to be bound by the terms. Article 6:232 CC provides that the other party is bound by the general terms and conditions even if, at the time of entering into the contract, the user understands, or ought to understand, that the other party did not know the content of the conditions. The intention to enter into the contract needs to be directed to the applicability of the whole set of conditions to the actual transaction. When accepted, the other party cannot invoke the fact that he was not aware of the content of the terms.⁵²⁸ The other party must have been given sufficient opportunity to acknowledge the general terms and conditions before, or during, the formation of the contract (Article 6:233b CC). Specifically for contracts concluded by electronic means, Article 6:234 CC provides that an Information Society Service must make the general terms and conditions available to the other party during, or before, the formation of the contract in such a manner that allows the other party to store and reproduce them so that he can access them at a later stage. If this is not reasonably possible, the user of the general terms and conditions must inform the other party, before the conclusion of the contract, of the site where the conditions may be electronically consulted, and of the fact that a copy of the general terms and conditions may, upon request, be sent electronically or by other means to the other party. In determining whether the other party was given sufficient opportunity to take notice of the general terms and conditions, a Dutch court will make a distinction between professional users and ordinary consumers. Thus, the key question is whether the other party understood or must have understood, by ticking a box "I agree" or by performing another certain act, that he accepted the applicability of the general terms and conditions.⁵²⁹

⁵²⁵4-13 Nimmer §13.03(B)(4).

⁵²⁶Mist-On Sys., 303 F. Supp. 2d at 976 (W.D. Wis. 2002)

⁵²⁷Computer Assocs., 982 F.2d at 709-10.

⁵²⁸BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

⁵²⁹See v. Durang, 711 F.2d at 143.

The manner in which FOSS licences are presented to the other party varies considerably. Therefore, a case-by-case examination must be completed to ascertain whether the FOSS distributor is complying with the mentioned legal requirements and whether the mere act by a user of downloading FOSS onto his computer constitutes a manifestation of intention on his part to be bound by the licence agreement. Nevertheless, in the light of the foregoing, we believe that the FOSS community should adapt its licensing practises to ensure that the contract formation process meets the requirements of the law.

Waiver and liability

In the case of software one can think of three possible forms of liability: liability resulting from a) breach of contract (Article 6:74 CC); b) tort ("onrechtmatige daad") (Article 6:162 CC); or c) product liability (Article 6:185 CC and following). However, most FOSS licences contain provisions according to which the licensor limits all his liability for damages which result directly or indirectly from the use of the program. The question is whether such a (full) limitation of liability is valid under Dutch law.

As a result of the principle of the freedom of contract, ⁵³⁰ a limitation or exclusion of one's liability in a "business-to-business" relationship is, in principle, permitted under Dutch law. However, this freedom of contract is restricted by a number of legal provisions. For instance, limitation or exclusion of liability may not be contrary to common decency ("goede zeden") (Article 3:40 CC). ⁵³¹ Thus, it is generally accepted that an agreement which limits a person's liability for damages which were caused by his own deliberate behaviour, is void. Similarly, liability for damages which result from a person's own gross negligence cannot be restricted. Also, if the agreement is not acceptable according to the principle of reasonableness and fairness ("redelijkheid en billijkheid") (Art. 6:248, paragraph 2 CC), then the agreement is invalid. ⁵³² Nevertheless, limitation of liability for software is not considered to be unreasonable per se. Thus, the assessment of a limitation or exclusion of liability should be dealt with on a case-by-case basis. ⁵³³

Consumers or small businesses benefit from a protective regime.⁵³⁴ This protective regime states, in Article 6:233 CC, that a clause in the general terms and conditions can be voidable if the clause is "unreasonably onerous" ("onredelijk bezwarend") when one considers the nature and further content of the agreement, the way in which the general terms and conditions are formed, the mutual knowable interests of both parties and the remaining circumstances of the case.⁵³⁵ In addition, Articles 6:236 and 6:237 CC contain a "black list" and

⁵³⁰Computer Assoc., 982 F.2d at 715.

 $^{^{531}}See$, 1-2 Nimmer §2.03(G).

⁵³²17 U.S.C §105.

⁵³³http://copyright.gov/help/faq/faq-definitions.html.

⁵³⁴See, Id.

⁵³⁵See, Computer Assocs., 982 F.2d at 710.

a "grey list" (respectively) of terms that are either invalid because they are regarded as unreasonably onerous to the other party or are terms that, unless proven otherwise, are presumed to be unreasonably onerous. For FOSS licences, it is important to note Article 6:237 sub f CC as this article provides that a term is deemed to be unreasonably onerous if it frees the user or a third person, in whole, or in part, from a legal obligation to repair damage. The fact that most FOSS licences are distributed for free constitutes an important factor to take into consideration when evaluating the onerous character of the limitation of liability. Nevertheless, circumstances may illustrate that the limitation or exclusion of liability cannot be upheld.

Article 6:185 CC provides that the producer shall be liable for the damage caused by a defect in his product, unless the product has not been manufactured for the purpose of sale by the producer or for any other form of distribution by him with an economic object; or unless it has not been manufactured or distributed within the framework of the course of his profession or business. Nevertheless, we argue that product liability may possibly be irrelevant for FOSS, as software may not be qualified as a "product" 536

The copyleft principle

Principle

The copyleft principle, or share-alike principle, in FOSS licences purports to perpetuate certain obligations under the licence from one developer or distributor to another. Thus, everyone in the chain of the FOSS licence needs to distribute the FOSS, including their own contributions, and/or derivative works, under the same FOSS licence to other users, if they choose to distribute such contributions and/or derivative works. In return, the developer can make free use of the FOSS, in accordance with the terms of the applicable licence.

Validity

The copyleft clause raises a number of questions under Dutch law. More specifically, one could ask oneself how obligations are passed on to a subsequent licensee and do the rights and obligations under a FOSS licence bind the subsequent licensee? And thus, is a contract automatically formed every time the FOSS is distributed? 537

The question of the binding character of a copyleft clause is a matter of the doctrine of offer and acceptance (as discussed above), and the legal requirements regarding the presentation of the general terms and conditions of sale to the other party. The licensee may obtain an automatic licence from the initial licensor, but this does not mean that the sublicensee has automatically accepted it.⁵³⁸ However, the sublicence may be automatically accepted if the acceptance

 $[\]overline{}^{536} http://www.copyright.gov/help/faq/faq-general.html.$

⁵³⁷4-13 Nimmer §13.03(F)(4).

 $^{^{538} \}rm http://creative commons.org/licenses/public domain/.$

can be inferred from the conduct of the sublicensor. As already indicated, the binding character of the copyleft clause is complex due to the fact that the identity of the licensor(s) is/are not always made clear. All in all, the process of the formation of a contract is a very important issue with regard to FOSS licences.

In Dutch literature, 539 the copyleft clause has been interpreted in light of the principle of the relative effect of contracts and of the third party effects of an agreement. These principles mean that a legal action between parties can only have an effect on those contracting parties. Thus, third parties are not affected by a contract to which they are not bound. As a consequence, the rights created under a contract are relative rights: they are only enforceable against the other party to the contract. The copyleft clause in FOSS licences may be passed onto a sublicensee according to Article 6:253 CC. This article states that an agreement creates the right for a third party to claim a performance from one of the parties, or to appeal against one of them regarding the observance of their agreement, if the agreement contains a stipulation to that effect (a third-party clause) and the third party has accepted this stipulation. A stipulation of the sort referred to in the previous sentence (third-party clause) may be revoked by the person who has stipulated it until the time that it is accepted by the third party. An acceptance or rejection of the stipulation (third-party clause) is made by a third party making a declaration to one of the parties to the agreement. If the third-party clause has been made irrevocable and it has been stipulated, towards the third party, for no consideration, it will be regarded to have been accepted if the third party did not reject it immediately after he obtained knowledge of its existence. In the context of some FOSS licences, it is not clear whether the licensee has accepted or rejected such stipulations. The construction of the copyleft clauses in FOSS licences fails to accurately reflect this process. The clause creates a relationship between the licensor and each of the licensees, regardless of the number of legal transactions between them. 540

Legal remedies

If one does not comply with the provisions of the relevant FOSS licence, one may infringe the copyrights of the author and/or commit a breach of contract. Notwithstanding the limitations and exclusions of liability in most FOSS licences, Dutch law provides the rightholder with several legal remedies for both situations. The most suitable course of action may depend on the specific facts of the particular case.

Damages

For instance, on the basis of Article 27 CA, the author retains his right—even after assignment of his copyright wholly or in part to another—to bring an

⁵³⁹17 U.S.C. §102(b).

⁵⁴⁰Feist, 499 U.S. at 350 (1991).

action for damages⁵⁴¹ against persons who infringe his copyright. After his death, this right belongs to his successors or legatees, until the copyright expires.

In addition to claiming damages,⁵⁴² Article 27a CA provides the author or his successor in title with the right to request the court to order anyone who has infringed the copyright to surrender the profits⁵⁴³ flowing from the infringement and to render account therefor. These claims may also be filed by the author, or his successor in title, partly or wholly on behalf of a licensee, without prejudice to the licensee's right to intervene in the proceedings instituted independently or partly or wholly on his behalf by the author, or his successor in title, in order to obtain compensation for the damage he has suffered, or to obtain a proportionate share of the profits to be surrendered by the defendant. A licensee may only file these claims if he has obtained the authority to do so from the author or his successor in title.

The Copyright Act does not provide specific provisions concerning the accountability for the damages, the different kinds of damage and how the damages should be calculated. One should, therefore, take into account Section 10, Title 1, Book 6 of the Dutch Civil Code, as discussed below.⁵⁴⁴

On the basis of Article 6:74 CC, every imperfection in compliance with an obligation is considered to amount to non-performance of the debtor and makes him liable for the damage which the creditor suffers as a result, unless the non-performance cannot be attributed to the debtor. Save to the extent that the performance is and will remain impossible, the debtor is only liable if he is in default, on the grounds of the Articles 6:81-6:83 CC (as described above).

Article 6:81 CC provides that the debtor is in default ("verzuim") during the period that the performance of the obligation is not once it has become exigible and the requirements of Articles 6:82 and 6:83 CC have been met, unless the delay cannot be attributed to him or it has become permanently impossible for him to perform the obligation.

Article 6:82 CC states that default commences when the debtor is given written notice of default ("ingebrekestelling"), in which the creditor grants him a reasonable period of time during which he still may perform in conformity with his obligation, and there is no performance within that period. If the debtor is temporarily unable to perform or if it has become clear from his attitude that a warning would serve no purpose, then he may be held liable solely by a written notice to the effect that he is held liable for his non-performance.

Finally, Article 6:83 CC provides that the debtor will automatically be in default, without the necessity of a prior letter of formal notice to perform or a notice in which he is held liable for his non-performance: (a) when the obligation is subject to a time stipulation (expiry date) and he has failed to perform within

 $^{^{541}\}mathrm{Assessment}$ Techs. of WI, LLC v. WIRE data, Inc., 350 F.3d 640 (7th Cir. 2003).

 $^{^{542}}$ 1-3 Nimmer $\S 3.04(B)(3)(a)$.

 $^{^{543}17}$ U.S.C. § 107.

⁵⁴⁴Id.

the specified period, unless this time stipulation has another purpose; (b) when the obligation results from tort ("onrechtmatige daad", Article 6:162 CC) or when it forces the debtor to pay for damages as meant in Article 6:74 paragraph 1 CC, and the obligation is not performed instantly; or (c) when the creditor must conclude from a communication from the debtor that the latter will fail in the performance of the obligation.

In the event that the debtor is indeed liable, Section 10, Title 1, Book 6 of the Dutch Civil Code applies. For relevance to the FOSS context we will only discuss some of the articles. Article 6:95 CC states that the damage that has to be compensated by virtue of a statutory obligation to repair damages (due by virtue of law), consists of loss to property, rights and interests and other prejudice, the latter as far as the law confers a right to damages therefor. According to Article 6:96 CC loss to property, rights and interests includes the loss incurred and the profit deprived. Also the reasonable costs (a) to prevent or minimise damage which could be expected to result from the event which caused someone to be liable: (b) for determining the nature and scope of the damage and of the liable persons; and (c) for attempts to get satisfaction via an out of court settlement, but, as far as the costs under point (b) and (c) are concerned, unless, in the prevailing case, the provisions for costs of litigation are applicable (Article 241 of the Dutch Code of Civil Procedure ("Burgerlijke rechtsvordering", hereafter: "Code of Civil Procedure" or abbreviated "CCP"), and qualify for compensation as loss to property, rights and interests. The court estimates the extent of the damage in the manner that is most consistent with the nature of the damage caused. Where the extent of the damage cannot be assessed exactly, it will be estimated (Article 6:97 CC). Only damage that is connected in such a way to the event that made the debtor liable, that it, in regard of the nature of his liability and of the damage caused, can be attributed to him as a consequence of this event, is eligible for compensation (Article 6:98 CC).

Another important provision is Article 6:104 CC, which concerns the estimation of damage and the surrender of profits. If someone, who is liable towards another person on the ground of a tort or failure to comply with an obligation, has derived profit from this tort or failure, then the court may, upon the request of the injured person, estimate the damage in line with the amount of that profit or a part of it.

Other legal remedies

As said, the Copyright Act gives the author of a work the exclusive right to communicate the work to the public and to reproduce it, subject to the limitations laid down by law. This means that the author can prohibit others from performing these actions. The copyright owner can also claim ancillary measures, such as a recall, a rectification, an account of profits and a claim for damages. More specifically, Article $28~\mathrm{CA}^{545}$ provides that the rightholder

⁵⁴⁵ Id.

may claim goods which are not filed in the public records and which have been communicated to the public in violation of the copyright of the author, or are unauthorised reproductions, as his property. He may also apply for them to be destroyed or rendered useless. The rightholder may bring a claim for the surrender of the said goods so that they can be destroyed or rendered useless. The same right to claim goods exists (amongst others) with respect to monies that may be assumed to have been obtained by, or as a result of, an infringement of copyright. The rightholder may also apply for the destruction or the rendering unusable of goods (or the handing over of goods — eventually on the condition of payment — so that they can be destroyed or rendered unusable) which have been used to effect an infringement of copyright. The licensee will have these rights as well, so far as their purpose is to protect the rights he is entitled to exercise.

Besides these copyright-specific measures, the licensor also has some legal remedies on the basis of the law of obligations. For instance, the creditor (i.e. the licensor) may immediately⁵⁴⁶ demand performance ("nakoming") by the debtor (i.e. the licensee).⁵⁴⁷ This is specifically an effective remedy for demanding that a licensee make available the source code of the distributed FOSS, as obliged by the concerning FOSS licence, if he has not done so already.

Moreover, the creditor also has the possibility of rescinding the FOSS licence, under certain circumstances. This is regulated by Article 6:265 CC which states that if a party fails in the performance of its obligations, the opposite party is given the right to rescind the mutual agreement either in its entirety or in part, unless the failure, given its specific nature or minor importance, does not justify the rescission and its legal effects. If performance is not permanently or temporarily impossible, the right to rescind the mutual agreement only arises when the debtor is in default (as discussed above). According to Article 6:267 CC, the rescission of a mutual agreement is effectuated by means of a written notification from the party who is entitled to rescind the agreement, addressed to the opposite party to that agreement. If the mutual agreement has been concluded solely by electronic means, it may be rescinded in a similar manner by means of a notice conveyed to the other party by electronic means. A mutual agreement may also be rescinded by a judgment of the court upon a right of action (legal claim) of the party who is entitled to rescind the agreement.

A rescission releases the parties from all obligations created by the rescinded mutual agreement. If these obligations have already been performed, the legal basis for performance remains effective, but the law imposes an obligation on the parties to undo the performances they have already received by virtue of the rescinded agreement. In situations where the nature of the received performance makes its return impossible, it is replaced by a compensation of its value, calculated at the moment on which it was received. Where the received perfor-

⁵⁴⁶17 U.S. Code §117(a).

⁵⁴⁷17 U.S. Code §117(c).

⁵⁴⁸Visual Artists Rights Act of 1990, 17 U.S. Code §106A.

mance was not in conformity with the obligation, this compensation is limited to the value of the benefit that the recipient, in the circumstances, has actually gained from the performance, calculated at the moment on which he received it. Please note that the rescission of a mutual agreement as it is used in this context has no retroactive effect, except that an offer from the debtor to perform his obligation, made at a moment that the creditor has already brought a right of action (legal claim) to court in order to rescind the mutual agreement, will have no effect if the court subsequently decides to rescind that agreement.⁵⁴⁹

FOSS cases in the Netherlands

In the Netherlands, no cases concerning FOSS licences have been reported yet (July 2010). A search in the case law on the website for the Dutch judicial system (www.rechtspraak.nl) only gives twelve results mentioning "open source". none of which is really relevant to the legal issues concerning FOSS licences. Two case does, however, briefly deal with certain FOSS characteristics, but the court does not provide any final thoughts.⁵⁵⁰ does not address the question as to whether the incorporation of open source software in Marktplaats" own software is allowed. Also, it does not address the question, as to what extent Marktplaats is obliged to make its own software available, in the event that such incorporation would be allowed. (Is Marktplaats obliged to make available its own software (its "crown jewels", as they themselves call it), or only the part of the proprietary software that is associated with the filter that is the subject in this case?) Nevertheless, the Court finds that it is clear that there would be necessary costs involved for making use of open source software and incorporating open source software into Marktplaats" own software. There would also be costs involved for Marktplaats for adapting its own software to the needs of the open source software. Moreover there would be some drawbacks. Therefore, the Court considered that, in the event of Marktplaats being required to install a filter, Marktplaats" choice not to use open source software is — given the crucial importance of the software to Marktplaats—a perfectly legitimate one.]⁵⁵¹ Thus, as stated earlier in this article, the Netherlands is still waiting for its first "real" FOSS case before any certainty on the different legal issues can be established.

Legal procedures

Parties

Depending on the circumstances of the case, the FOSS licensor may need to enforce his rights either on the basis of an alleged breach of the contractual obligations of the FOSS licence, and/or on the basis of an alleged infringement of copyright. As previously mentioned, one of the issues in this case is the difficulty

⁵⁴⁹17 U.S. Code §302(a).

⁵⁵⁰17 U.S. Code §302(b).

⁵⁵¹17 U.S. Code §302(c).

of establishing the chain of ownership of rights on the FOSS. A consequence thereof is that it may be unclear who is entitled to institute proceedings against alleged infringers. Therefore, one should first enquire who the parties to the licence are. Also the question of authorship of rights with respect to the FOSS is of importance to determine who is entitled to exercise the exclusive rights on the software.

For instance, the authors of a work whose individual contributions cannot be distinguished cannot exercise their copyrights without the consent of the other co-authors; if the contributions can be distinguished, each individual author may enforce these rights (as long as the parties have not provided otherwise in a contractual arrangement).

The enforcement of rights on a collection of works may be easier, since the person under whose guidance and supervision the work as a whole has been made has the power to institute legal proceedings against the other parties.

If one has obtained a FOSS licence, one has become a licensee. The licensee has a right to institute legal proceedings if he has obtained the authority to do so from the author, or his successor in title (Article 27a CA).

As there is a lot of uncertainty as to who legally has the right to initiate proceedings, the Free Software Foundation has introduced the Fiduciary License Agreement ("FLA"). The FLA intends to remove this uncertainty by allowing authors to make the Free Software Foundation their fiduciary in all legal matters. 552

Procedures

The rightholder can initiate different legal proceedings in the Netherlands to enforce his rights under the Copyright Act and/or the Dutch Civil Code. For instance, the rightholder can initiate interlocutory proceedings ("kort geding") at short notice, in an attempt to put a halt to the infringement, or the impending or potential infringement of its copyright. Interlocutory proceedings can only be initiated in relation to a matter of urgent interest, but a copyright infringement—or a threatened or potential infringement—is usually considered sufficiently urgent to justify such proceedings. A hearing can take place within a few weeks and it is often possible to obtain an injunction within just six to eight weeks. The judge in interlocutory proceedings ("voorzieningenrechter") will render a decision on the basis of his preliminary assessment. Normally he will issue such an injunction if he is satisfied, by preliminary assessment, that the copyright is valid and infringed.

Interlocutory proceedings may also be initiated by the copyright owner to request ancillary orders, such as a recall, a rectification, an account of profits and an advance payment for the damages, but the urgent need for such measures must be clearly explained by the copyright owner.

⁵⁵²17 U.S. Code §201(d)(1).

The copyright owner also has the possibility of requesting permission from the judge in interlocutory proceedings to conduct a seizure for the surrender of infringing goods at the premises of the alleged infringers (see: Article 28, paragraph 1 CA). The copyright owner can also request permission for a conservatory seizure of any type of goods, not necessarily the infringing goods, as a security for a monetary sum that he is claiming from the infringer. The copyright owner also has the possibility of requesting a seizure of goods for the preservation of evidence, on the basis of Articles 843a and/or 1019b and 1019c CCP. ⁵⁵³ In such a case, the copyright owner must make it plausible that the other party, who is not heard by the judge in interlocutory proceedings, is infringing his copyright or that there is a serious threat of this occurring; he must also demonstrate an interest in the requested measures. After such a seizure for the preservation of evidence, the copyright owner does not automatically gain access to the results, but must put forward a specific claim for this access before the court.

In very urgent matters, the copyright owner can request the judge in interlocutory proceedings to render an "ex parte injunction" (Article 1019e CCP).⁵⁵⁴ This means that the (allegedly) infringing party is not heard. Ex parte injunctions are preliminary and can be requested in cases with an extraordinary urgent interest, especially if irreparable harm will be caused and normal (interlocutory) proceedings cannot be awaited (periculum in mora).⁵⁵⁵ It is necessary for the copyright to be legal and valid at first sight (prima facie fumus boni iuris), and for the infringement to be clear-cut actual and, at least, imminent. In order for this to be seen as reasonable, the applicant should give full and frank disclosure. The judge in interlocutory proceedings only briefly assesses the request for an ex parte injunction on these grounds. An ex parte injunction can be obtained within two to three days. If the enforcement of an ex parte injunction is subsequently lifted or if proceedings on the merits lead to a different outcome, the enforcing party can be held liable for damages.⁵⁵⁶

Interlocutory proceedings, as well as the ex parte injunctions and seizures, should be promptly followed by proceedings on the merits, or the related preliminary injunction will lapse. Moreover, definitive remedies, such as declaratory judgments, revocation of copyrights, rescissions of agreements and the payment of damages cannot be awarded in interlocutory proceedings. For such remedies, the rightholder should initiate proceedings on the merits. Of course, the rightholder can also request an injunction or ancillary orders during proceedings on the merits, such as a declaratory judgment, a recall of the infringing products, rectification, information about the distribution channels, an account of profits, destruction of the infringing goods and/or the materials for the production of the infringing goods, publication of the decision, the payment of damages or the surrender of profits and the payment of reasonable legal costs (provided that the copyright owner proves that he has an interest in such measures).

⁵⁵³17 U.S. Code §201(d)(2).

⁵⁵⁴17 U.S. Code §204(a).

⁵⁵⁵17 U.S. Code §205(d).

⁵⁵⁶17 U.S. Code §205(e).

In intellectual property rights cases, the successful party in the proceedings is awarded a payment from the other party of all the reasonable costs that he incurred in taking the proceedings (Article 1019h CCP).

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Poland

author:[Rychlicki,Tomasz]

Introduction to software protection under Polish law

The legal framework regarding software protection in the Republic of Poland comprises the Constitution of 2 April 1997, acts passed by Parliament, ratified treaties, and regulations issued by the Prime Minister or the Council of Ministers. As far as international treaties and agreements relating to copyright protection of computer programs/software are concerned, the Republic of Poland has acceded⁵⁵⁷ to several international treaties which have the same legal effect as the legislation directly established by Parliament.

Unsurprisingly, legal norms affording protection of software are categorized in civil law as opposed to criminal law. However, the Polish Criminal Code (hereinafter the CRC) provides for protection of computer programs⁵⁵⁸. Copyright protection of software is regulated in Poland by the Act on Authors' Rights and Neighbouring Rights (hereinafter the ARNR)⁵⁵⁹.

The ARNR is deemed *lex specialis* with regard to provisions of the Civil Code⁵⁶⁰. The Polish Codification Commission preparing the 1964 draft of the Civil Code (hereinafter the CC) did consider adding the new law on copyright to the CC, but the pragmatic view that it was best not to disturb the existing regulations of the separate law on copyright prevailed. Another reason to regulate this area of law outside the CC is that, although it focuses on private law matters, it also encompasses the closely related areas of administrative and criminal law⁵⁶¹.

The ARNR transposes Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs⁵⁶² into Polish national law (hereinafter the Software Directive).

In cases where international agreements to which Poland is a party provide for a higher level of protection than is envisaged under the ARNR, the international convention prevails. This rule is in compliance with the Polish Constitution,

^{557&}quot;(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries"

 $^{^{558}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

 $^{^{559}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{^{560}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

 $^{^{561}}$ For example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{562}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

which provides that international treaties are self-executing⁵⁶³. The more beneficial rules under international conventions apply not only to beneficiaries under the relevant conventions, but also to works whose country of origin is Poland⁵⁶⁴.

Copyright: Object of protection

Copyright is defined as any expression of creative activity having individual character and manifested in any material form, regardless of the value, intended purpose or manner of expression thereof (the work)⁵⁶⁵. Case law and the Polish legal doctrine share the view that an immaterial work under copyright law should demonstrate all of the following characteristics:

- it must be the result of the activity of a person, i.e. the creator of the work, whereby manifestation of activity means every manifested result of action,
- it must be a manifestation of creative activity,
- it must have an individual character⁵⁶⁶.

The ARNR provides a non-exhaustive list of works that may be subject to automatic copyright protection⁵⁶⁷ for which no formalities are required. The ARNR does not require the use of copyright notices, but such notices are very often used in order to identify protected works. The Polish Supreme Court has repeatedly indicated that copyrighted work can be of any kind, provided — in terms of form at least — it shows a minimum degree of creativity⁵⁶⁸.

Polish copyright law provides no definition of a computer program or computer software. Computer programs are eligible for protection as literary works. The protection granted to a computer program should extend to all related forms of expression, including design, production and utilisation. The ideas and principles underlying any element of a computer program, including those underlying its interfaces, are not protected⁵⁶⁹.

The program interface is protected in the same way as other components of a computer program. If it appears that information obtained through decompilation of the interface does not allow for the development of a substitute interface (for instance, to achieve interoperability with other programs), then the conclusion must be that such interface is "determined" and, therefore, it is not eligible

 $^{^{563}}$ World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

⁵⁶⁴The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

 $^{^{565} \}rm The~U.S.$ Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of_1976.

 $^{^{\}overline{566}} \text{Public Law 96-517}$ found at http://law.copyrightdata.com/amendments.php.

 $^{^{567}17}$ U.S.C. \$102(a).

⁵⁶⁸17 U.S.C. §411(a).

⁵⁶⁹17 U.S. Code §102(a).

for copyright protection and cannot legally be transferred to another program⁵⁷⁰. The Supreme Administrative Court has ruled that whether a given work is copyrightable is not determined by the will of the contracting parties, but by the findings of fact. A computer program cannot be copyrighted unless the activities of its creator have the characteristics of originality and individuality⁵⁷¹.

Authors/Beneficiaries

Copyright belongs to the creator, unless otherwise stated by law. The creator should be that person whose name is clearly marked on the copies of the work or whose authorship has in any other way been brought to the notice of the public in connection with the disclosure of the work.

Insofar as the creator has not revealed his authorship, he should be replaced in the exercise of his copyright by the producer or publisher, and in their absence by the appropriate organization for the collective administration of authors rights⁵⁷².

Joint creators should have joint ownership of copyright and their shares are presumed equal. Each joint creator may demand to have the size of the shares determined by a court of law in proportion to the individual contributions of creative work. Each of the joint creators may exercise the copyright in that part of the work created by him, provided said part has intrinsic value, but without prejudice to the rights of the other joint creators. Exercising copyright in the overall work requires approval from all the creators. In the absence of such agreement, each creator may seek resolution of the dispute in court⁵⁷³, which should reach a decision taking the interests of all the joint creators into consideration. Each of the joint creators may bring action claiming violation of copyright in relation to the whole work. Sums won in such action are awarded to the creators depending on their share of the copyrighted work. The provisions on joint ownership⁵⁷⁴ apply similarly to the economic rights of joint creators⁵⁷⁵.

Where the creators have assembled their separate works with a view to joint distribution, each may demand permission from the other(s) to distribute the entire work, except where there is a valid reason for refusing such permission or where the contract between them provides otherwise⁵⁷⁶.

The economic rights in a collective work, particularly those in an encyclopaedia or periodical publication, should accrue to the producer or editor, whereas the rights in the separate parts of the work that have intrinsic value should accrue to

⁵⁷⁰17 U.S. Code §201(a). ⁵⁷¹17 U.S. Code §201(b).

 $^{^{572}}Id.$

 $^{^{573}17}$ U.S. Code §101.

⁵⁷⁴17 U.S. Code §204.

⁵⁷⁵17 U.S. Code §201(a).

⁵⁷⁶17 U.S. Code §101.

the creators thereof. The right to the title is deemed to belong to the producer or publisher 577 .

Exclusive rights

Copyright is deemed as an absolute right that protects the spiritual and material interests of the creator connected with his/her work. Traditionally, there are two groups of the so-called author's rights: personal rights and economic rights. The economic rights of a computer program/software consist of:

- the right to reproduce the program in its entirety or in part, either permanently or over a fixed period, by any means and in any form; where the installation/loading, display, running, transmission or storage of a computer program calls for such reproduction, those acts should not require the consent of the owner of rights;
- the right to translate, adapt, arrange or in any other way transform a computer program, without prejudice to the rights of the person who makes such modifications;
- the right to distribute the original or copies of a computer program to the public, including rental or lending. The first sale of a copy of the program made by the owner of the rights or with his consent cause the right of distribution for that particular copy to lapse, without prejudice to the right to monitor any subsequent rental or lending of a computer program or of copies thereof⁵⁷⁸.

Exemptions to exclusive rights

Exceptions to the author's monopoly are usually accepted because of the public interest in free access to creativity⁵⁷⁹. The provisions on exercising copyrights that apply to computer programs are very restrictive, compared to those applying to other objects of copyright protection. The following acts should not require authorization from the owner of rights:

- the making of a backup or reserve copy, provided such copy is necessary
 for using a computer program; unless otherwise provided in the contract,
 the copy may not be used at the same time as the computer program;
- analysis and study, as well as experimentation with the operation of a computer program by the person authorized under the contract to make use of a copy of the program, in order to ascertain its underlying ideas and principles, provided the person concerned performs the above acts in

 $^{^{577}1\}text{-}6$ Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.

⁵⁷⁸ Id.

⁵⁷⁹ See, Id.

conjunction with the installation/loading, display, running, transmission or storage of the computer program;

- reproduction of the code or translation of its form where that is essential for obtaining the information required for achieving interoperability between an independently created computer program and other programs, provided that the following conditions are met: (a) the acts are performed by the licensee, or by another person enjoying the right to use the copy of a program, or, by a person authorized to do so on their behalf; (b) the information required for achieving interoperability is not already easily and rapidly accessible to the persons referred to under (a); (c) the acts are confined to those parts of the original program that are required for achieving interoperability.
- The information mentioned above may not be:
 - used for purposes other than for achieving the interoperability of the independently created computer program,
 - communicated to other persons, except where essential to the interoperability of the independently created computer program,
 - used for the development, production or marketing of a computer program of essentially similar form, or for any other act in violation of the copyright.

Contractual provisions contrary to these exceptions are deemed null and void. The ARNR makes no distinction between physical distribution and online distribution of computer programs. All the above-mentioned exemptions apply to all types/kinds of software, irrespective of the way in which it is received.

• Computer software is excluded from so-called "personal use" provisions, which grant the user the right to a copyrighted work without having to obtain consent from the copyright holder⁵⁸⁰.

Moral rights

According to the provisions of the Polish law, personal rights or moral rights protect the bond between the creator and the work. This bond is not limited in time or susceptible to renunciation or assignment, in particular with regard to the creator's right to claim authorship of the work and to make the work appear under his name or pseudonym, or to make his anonymous work available to the public. However, the right to make changes to the work (to supervise one's work), the right to safeguard the content and form of the work and its proper use, and the right to control the work's manner of use do not apply to computer programs⁵⁸¹.

 $^{^{580}1\}text{-}6$ Nimmer §§6.02, 6.03.

⁵⁸¹ Id.

Term of protection

The economic rights lapse on expiry of a period of seventy years, calculated:

- (1) from the death of the creator, and in the case of works of joint authorship from the death of the last surviving joint creator,
- (2) from the date of first publication if the creator is not known, and if the work has not been published, from its production in material form, unless—before that period expires—the name of the creator has been revealed with his consent,
- (3) from the date of first publication if the economic rights belong by operation of law to a person other than the creator himself, and if the work has not been published, from its production in material form⁵⁸².

Copyright assignment

An employer whose employee has created a work under an employment contract acquires, on accepting the work, the economic rights of the work developed during employment, as contractually agreed by the parties.

If, within two years of acceptance of the work, the employer does not proceed with disclosure of the work as contractually agreed, the creator may grant the employer in writing a sufficient period of time for such disclosure. If that period expires to no avail, the rights acquired by the employer revert to the creator and the material object in which the work is embodied becomes the creator's property, unless the contract provides otherwise. The parties are free to contractually agree on their own disclosure period.

Unless otherwise provided in the contract, the economic rights in a computer program created by an employee during his or her employment belong to the employer⁵⁸³. This provision has specific nature and should not therefore be interpreted broadly. For instance, if computer software is created under a contract similar to an employment agreement (or any other contract such as a commission or work for hire), all copyrights remain with the creator, unless the contract stipulates otherwise.

Unprotected software and public domain software

As set forth above, only software that is original enjoys copyright protection. Non-original software is not eligible for copyright protection.

⁵⁸²1-6 Nimmer §6.03.

 $^{^{583}17}$ U.S.C. $\S 201(a).$

Analysis of FOSS under Polish law

The issue of free documentation

Polish law has not yet extensively handled the issue of software documentation not released under a free licence. Under German law for instance, as has been mentioned by legal commentators, provisions may be invoked under which an author acting in good faith may not refuse to allow the processing of documentation. However, there is a lack of support for this interpretation in Polish law, due to exclusion of the rule which states that, without the consent of the creator, a legal successor may not make any alterations to the work except where they are dictated by an obvious necessity and where the creator has no valid reason to object to them⁵⁸⁴. This should apply by analogy to works in which the economic rights have expired⁵⁸⁵.

The laws applicable to the distribution of copyrighted works

While analyzing the specific provisions of the GPL governing the distribution of copyrighted works, the issue of the waiver of rights arises. Polish copyright law has adopted the concept of dualistic author's rights (i.e. personal and economic rights), which includes the copying right. The waiver would be a consequence of a unilateral legal act that is communicated to the public by an author/creator. In the case of the GPL, the author/creator makes his software available under the GPL, thereby waiving all his rights in that particular work. Concurrently, Polish law contains provisions that conflict with the concept of waiving rights. Hence the conclusion is as follows: it is impossible to waive the right to remuneration⁵⁸⁶ (among the author's economic rights) and then waive all other economic rights. There is also a prohibition on transferring economic rights for types of exploitation not known at the time the contract is concluded; another argument that economic rights cannot be waived under the Polish copyright law⁵⁸⁷.

Concept of civil partnership

The legal nature of joint activity performed by people who are developing open source software has also been analyzed and treated as a unique form of civil partnership⁵⁸⁸. This follows from the conclusion that individuals who contribute to the development of open source software work together as a quasi-civil partnership⁵⁸⁹. One of the requirements is that the partners undertake to achieve

⁵⁸⁴1-6 Nimmer §6.06(A).

⁵⁸⁵ Id.

⁵⁸⁶ *Id*.

⁵⁸⁷17 U.S.C. §103(a).

⁵⁸⁸17 U.S.C. §101.

 $^{^{589}}$ 1-3 Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore

a joint economic purpose⁵⁹⁰. However, as has been observed, the contractual obligation to support the goal of a civil partnership⁵⁹¹ does not arise by merely downloading open source software from the Internet. Moreover, no legal obligations are incurred by altering software for personal use⁵⁹².

Contract of donation or a sales contract

Ways of receiving open source software have been analyzed in order to determine whether it should be categorized as a donation or a sales contract, or whether it is an ex-parte action⁵⁹³. Undoubtedly, computer programs/ software are deemed economic assets of a given value and are treated as a different kind of "goods"⁵⁹⁴. The nature of a program allows it to be regarded as the autonomous subject-matter of the contract/licence⁵⁹⁵. So one must distinguish between the act of receiving software, and the licensing/contractual issues that focus on actual use of the software. First, a distinction is made between the act of acquiring a software program and the legal implications of such act (gaining possession) on the one hand, and the acquisition of a wide range of rights (of use/distribution, etc.) in the software under a licence agreement on the other⁵⁹⁶.

Attention has to be drawn to two distinct steps: (i) acquisition of the actual program, and (ii) acquisition of the relevant rights. The first step may take place by legally downloading the open source software, permitting limited use of the software as indicated by the provisions of Article 75(1) and (2) of the ARNR. ⁵⁹⁷. This is a *sui generis*, relatively obligatory, statutory licence. To date, the terms and conditions of open source software licences are not part of the legal relationship between an authorized user and the proprietor of the software.]. A licence agreement applies later on, when the user starts to use the software ⁵⁹⁸. The separate nature and chronological order of these agreements are in relation to the user's familiarization with the provisions of the agreement ⁵⁹⁹.

The sole authorization to download the program can be characterized as a donation of property (the property of the proprietor of the program). It has been discussed whether in such cases an independent contract has to be concluded

Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)). $^{590} {\rm Lothar~Determan},~Dangerous~Liaisons - Software~Combinations~as~Derivative~Works?~Distribution,~Installation,~and~Execution~of~Linked~Programs~Under~Copyright~Law,~Commercial~Licenses,~and~the~GPL,~21~Berkeley~Tech.~L.~J.~1421,~1430~(2006). <math display="inline">^{591} Id.$

 $^{^{592}1\}text{-}6$ Nimmer, $\S 6.05.$

⁵⁹³17 U.S.C. §103(a).

⁵⁹⁴ Id.

⁵⁹⁵1-3 Nimmer §3.02.

 $^{^{596}} Id.$

 $^{^{597}17}$ U.S.C. § 101.

⁵⁹⁸1-3 Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S.
340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp.
2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).
⁵⁹⁹17 U.S.C. §201(c).

for the acquisition of the program, which is separate from the licence agreement and precedes it, and whether such an agreement should be treated as a donation agreement 600. There is a statutory requirement that in order to maintain its validity, a donation agreement has to be issued in notarized form as a deed documenting the will of the donor⁶⁰¹. However, the opposite may also be argued: a donation agreement is valid without notarization if the promised performance has been rendered⁶⁰². Most convincing is the argument pointing out that a donation is made at the expense of a donor—namely the permanent depletion of the substance of the donor's property. This is not the case as far as free software is concerned. The logical conclusion is that an anonymous contract is concluded between the proprietor of the software and the user who downloads/acquires it 603. It should be emphasized that under Polish law, free transfer of ownership of a tangible medium containing open source software (DVD, CD — the so-called *corpus mechanicum*) is without a doubt a contract of donation. The provisions of Article 75(1) and $(2)^{604}$ of the ARNR govern specific forms of software exploitation, and so it is unnecessary to issue a software licence in the shape of either an agreement or a unilateral legal act.

The specificity of FOSS licences under Polish law

Software as a subject of FOSS licences

After some deliberation, Polish legal doctrine acknowledged that the existence of open source licences is based on the assumption that this kind of software uses copyright protection⁶⁰⁵. This is nothing new, because even though Stallman himself once strongly criticized the notion of intellectual property (IP), he also supports the main principles of copyright law⁶⁰⁶. It is widely acknowledged that all GPL licences are built upon the framework of copyright law. As was once said, "to stay free, software must be copyrighted and licensed"⁶⁰⁷ — assuming that the program can be copyright protected i.e. that it is a creative work of individual nature as defined by Polish law. It should also be mentioned that there is no presumption that the results of actions/works are copyright protected, unless counter-proof is furnished⁶⁰⁸.

The owner/licensor/employee as a subject of FOSS licences

The basic issue is to determine who is entitled to the economic author's rights (right to copy etc.) as the primary copyright owner, and whether these rights

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600 1-6 Nimmer §6.05.

601 Id.

602 Id.

603 Id.

604 Id.

605 Id.

606 17 U.S.C. §106.

607 Id.

608 17 U.S.C. §109(a).
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can also be enjoyed by successors in title 609 . Copyright is vested in the creator/author (creators/authors) at the time of the creation of the work—this principle is transferred to computer programs. The situation is different with employees' works—copyright is passed to the employer $ex\ lege$.

An employer using open source software to which one of his employees has made changes should make the altered software available on the same terms on which the original software was distributed and licensed⁶¹⁰.

In this case, the issue of payment for making changes to the program is not recognized as a fee for the licence or for the transfer of rights in the software, but only as remuneration for the employee's work⁶¹¹.

Software copyright cannot be encumbered or restricted if a program is distributed/published under an open source licence by an authorized person (successor) at the time when such person holds all the rights in the wake of general succession.

Legal issues on co-authorship

The situation regarding ownership of the program is more complicated when an undefined number of persons is involved in working on the program. The following questions may arise: who is the author, and how does someone come to be regarded as the author? This is certainly the outcome of the bazaar approach in developing FOSS. The concept of co-authorship was adopted with the in casu legal construction of "combined work" However, this situation poses certain problems relating to, *inter alia*, the exercising of the copyright in the whole work, because that should require the agreement of all the joint creators. In the absence of such agreement, each joint creator may seek settlement of the dispute by a court, which should rule taking the interests of all the joint creators into consideration hould rule taking the interests of all the joint creators into consideration had any such case the principle of a majority vote cannot be applied, and the only effective solution to this problem may be a Fiduciary Licence Agreement had a Fiduciary Licence Agr

Minors and FOSS

FOSS is and should be used by minors⁶¹⁵ but there are some important issues to be considered. The Civil Code requires the consent of a guardian to acts done by a minor⁶¹⁶. As a rule the licensee may be a minor and the minor may also accept a donation, but without creating any encumbrance on the minor's part⁶¹⁷.

⁶⁰⁹²⁻⁸ Nimmer §8.12.
610 Computer Assoc., 982 F.2d at 714.
611 See, 4-13 Nimmer §13.02(B).
612 See, Computer Assoc., 982 F.2d at 715.
613 Id.
614 Apple Computer, Inc v. Microsoft Corp., 35 F.3d 1435, 1445 (9th Cir. 1994).
615 See, Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 819 (1st Cir. 1995).
616 See, Id. at 815.
617 4-13 Nimmer §13.03(F).

The question arises however as to whether the minor can effectively participate in the development of open source software, and whether under Polish law the distribution of FOSS should be limited to adults only⁶¹⁸. Unfortunately, Polish law and legal doctrine have failed to make a more thorough analysis of the legal issues relating to the participation of minors in using and developing free software. Allowing a minor to exercise the privileges of an open source licence is justified by the concept that permission from his or her statutory representative has been issued implicitly (by implication), a general assumption in the sphere of legal actions relating to the use of free software⁶¹⁹. This issue is also very interesting in view of the fact that work or other paid activities may only be performed by a child under the age of 16 for the benefit of an entity that is involved in cultural, artistic, sporting or advertising activities, and only with the prior consent of his or her statutory representative or guardian as well as permission from the competent labour inspectorate⁶²⁰.

Concluding individual FOSS licences under Polish law

An agreement is concluded when an offer 621 is submitted and then accepted 622 . Such an agreement has many unusual characteristics 623 indicated by the manner in which the contract is concluded. A statement is made offering non-exclusive rights to every user, so an offer is directed to all (ad incertas personas) to use the work (the reproduction, distribution, alteration rights, etc.). It is considered a definite offer to conclude a contract when the author or other entitled party makes software available under similar conditions and enables the downloading of a program. This is not considered a typical invitation to call for bids (invitatio ad offerendum 624). The offer to conclude an agreement may also be submitted in other circumstances, i.e. if there is a third party between the offeror (licensor) and offeree (licensee), and if such third party is deemed a messenger or representative who provides information about the contract offer 625 .

The individual contract is not concluded on commencing use of the software, but when distribution of the program begins. The user accepts the offer by performing such actions as modification or distribution⁶²⁶. It is not important for the conclusion of the contract that the licensor has to receive an approval message⁶²⁷. This is implicit conclusion of a contract performed. There is also the issue of how to assess the nature of distribution of a computer program

⁶¹⁸ See, Order Re Copyrightability Of Certain Replicated Elements Of The Java Application Programming Interface (hereinafter *Order*) found at http://www.groklaw.net/pdf3/OraGoogle-1202.pdf.

⁶¹⁹17 U.S.C. §102(b).

 $^{^{620}1\}mbox{-}2$ Nimmer $\S 2.02.$

⁶²¹4-13 Nimmer §13.03(B)(2)(a).

⁶²²Computer Assoc., 982 F.2d at 708.

⁶²³ See, BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

 $^{^{624}}See, 4-13$ Nimmer $\S13.03(B)(3).$

 $^{^{625}}See, 4-13$ Nimmer $\S13.03(F)(2).$

⁶²⁶⁴⁻¹³ Nimmer §13.03(F)(2).

 $^{^{627}}See,$ Computer Assoc., 982 F.2d at 715.

that is based on an order placed by a potential user by e-mail. It is assumed that this constitutes the conclusion of an agreement to transfer intangible rights that has the characteristics of a contract of donation or an innominate contract, to which the statutory regulations pertaining to donation agreements should apply. Article 75(1) of the ARNR regulates the permissible exploitation of the program.

The characteristics of an individual open source licence

This is an individual non-exclusive licensing agreement 628 . The rights to use open source software are provided on a resolutive condition 629 .

The scope of rights/content of FOSS licences under Polish law

It has been discussed whether the scope of rights under the GPL2 can be extended to the lease right that is not explicitly mentioned in this licence. The popular opinion issued by J. Marly⁶³⁰ has also been accepted by Polish legal commentators⁶³¹. As regards the distribution right, it has been agreed that this right may be exercised under a donation contract or a special form of innominate contract, but definitely not under a sales agreement⁶³².

Obligations

The program's author or developer is required to grant non-exclusive rights free of charge. There is a conflict here with the copyright of works created during an employment relationship, because under statutory regulations the entitled party is $ex\ lege$ the employer. As already mentioned, the issue of copyleft also conflicts with the provisions of the Civil Code concerning minors⁶³³.

Termination of license contract

The licence expires ex nunc if the licensee violates the conditions of Section 4 of the GPLv2. This means that continued use/exploitation constitutes a violation of absolute copyright laws. However, this does not grant entitlement to assert the claims provided for such cases when Article 75 of the ARNR is applied. The problem of the principle of exhaustion of rights arises. If it is assumed that a licence agreement is not disposable, then the provisions of Article 365\$^1\$ of the CC should be applied⁶³⁴. However, under Polish law the nullity of a legal action involving the termination or rescission of a licence agreement has to be considered, taking into account the rules on open source movement, if a

⁶²⁸See, Computer Assoc., 982 F.2d at 715.

⁶²⁹Order supra Note XXX

 $^{^{630}}See$, Id. at 710.

⁶³¹4-13 Nimmer §13.03(B)(4).

⁶³² Id

 $^{^{633}\}mathit{See},$ John William See v. Christopher Durang and LA. Stage Co., 711 F.2d 141, 143 (9th Cir. 1983).

 $^{^{634}}Id.$

licence agreement is terminated or a unilateral licence is withdrawn without the provisions of such agreement having been infringed by the licensee. This would be a declaration of will that is clearly contrary to the rules of social coexistence as defined in Article 58 § 2 of the CC^{635} . If this interpretation is not feasible, an alternative would be to invoke the abuse of rights by the holder of the open source software 636 .

Distribution of open source software by 3rd parties

The messenger⁶³⁷ who passes on an offer, as defined in the GPL and submitted by the author or producer of open source software, is regarded in Polish law as being the distributor of the open source software. In any such case, the offer is accepted *per facta concludentia* (both parties have voluntarily started to render their contractual performance) by starting the exploitation of the program⁶³⁸. A legal relationship is then brought about between the author/entitled person and a third party (distributor). The parties may be bound by any of the following contractual relationships: a licence agreement for reproduction, distribution and circulation; a sub-licence agreement; a sales contract; a consignment agreement; or an agency contract⁶³⁹.

Breach of the conditions of FOSS licence

Any breach of the licence automatically renders it void. However, termination in this manner will not affect the interests and rights of third parties if they acquired the right to use the software from the party who violated the licence. The question arises as to whether the party who violates the GPL also loses the status of "the lawful user of the program". i.e. the party entitled to use a copy of the program, meaning that it is not allowed to exercise the rights conferred by Article 75 of the ANRN. After obtaining a program released under an open source licence/GPL, this applies both to the stage following conclusion of the licence agreement and to the stage preceding conclusion of an individual contract under the provisions of the GPL. Any violation of the GPL beyond the permitted limits effectively terminates not only the agreement itself, but also the ability to use the program⁶⁴⁰.

The conditions of the GPL are also breached if software is installed on embedded systems where the source code is not made available/shared, and/or if a written offer to supply the software has not been released/submitted⁶⁴¹. If an open source licence agreement is breached, all the claims relating to copyright

⁶³⁵ Id

 $^{^{636}\}mathrm{Mist}\text{-On Sys.}$ v. Gilley's European Tan Spa
, 303 F. Supp. 2d 974, 978 (W.D. Wis. 2002).

⁶³⁷4-13 Nimmer §13.03(B)(4).

⁶³⁸Mist-On Sys., 303 F. Supp. 2d at 976 (W.D. Wis. 2002)

⁶³⁹Computer Assocs., 982 F.2d at 709-10.

⁶⁴⁰BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

 $^{^{641}}See$ v. Durang, 711 F.2d at 143.

infringement may be asserted. The entitled party whose economic rights have been infringed, may demand that the person infringing these rights:⁶⁴²

- 1) put an end to the infringement;
- 2) eliminate the consequences of the infringement;
- 3) compensate the losses:
- a) either on the basis of general principles⁶⁴³, or
- b) by paying a sum of money equal to twice or, if the infringement is culpable, three times the equitable remuneration, which at the time of enforcement would be due to the entitled party in return for granting permission to use the work:
- 4) surrender any benefits received.

Regardless of the aforementioned claims, the entitled party may demand:

- 1) a one-off or repeated press announcement of appropriate content and form, or (part) publication of the court ruling in the case at issue, in accordance with the court's specifications;
- 2) payment by the infringer of an appropriate sum of money, not less than twice the amount of the benefit attained by the infringing party, to the Fund for the Promotion of Artistic Creation, if the infringement is culpable and occurred during business activities carried out in the infringer's own name or for thirdparty account.

Each of the joint creators may bring action claiming violation of copyright in relation to the whole work 644 . The FSFE's Fiduciary Licence Agreement is a perfect solution for all problems connected with co-authorship and joint ownership 645 .

FOSS licences and private international law

The provisions of standard open source licence are within the limits and scope of contractual freedom as adopted in civil law in Article 353\$^1\$ of the CC⁶⁴⁶. In accordance with the provisions of the Polish Act of 12 November 1965 on Private International Law (hereinafter the PIL), in the absence of the choice of law, an obligation is subject to the law of the state in which the contract was concluded⁶⁴⁷.

Interpreting the provisions of Article 7 of the PIL, it may be argued that Polish law applies to contracts/agreements permitting use of open source software in

⁶⁴²Computer Assoc., 982 F.2d at 715.

⁶⁴³See, 1-2 Nimmer §2.03(G).

 $^{^{644}17}$ U.S.C §105.

⁶⁴⁵http://copyright.gov/help/faq/faq-definitions.html.

⁶⁴⁶ See, Id.

 $^{^{647}}See$, Computer Assocs., 982 F.2d at 710.

Poland⁶⁴⁸. It may also be assumed that a contract/agreement on using open source software is brought about on saving the software to the computer memory, and in conjunction with the provisions of Article 70 \S 2 of the CC⁶⁴⁹ the conclusion is that the location of the computer determines the location of the conclusion of the contract⁶⁵⁰.

FOSS licences and consumer law

The GPL has been the subject of analysis from the point of view of Polish consumer law. The first important issue to be raised is the fact that only the English-language version is legally binding⁶⁵¹. This situation makes the GPL subject to application of the provisions of the Act of 7 October 1999 on the Polish Language⁶⁵². According to Article 7 of the Act, all contracts to which a Polish entity is a party and which are to be executed on Polish territory must be written in Polish. Although versions of such contracts may also exist in a foreign language, the Polish version of the contract prevails for interpretation purposes, unless the parties expressly stipulate otherwise in the contract. The Act explicitly forbids using a foreign language version of a contract to provide evidence of the contract's existence. This means that in a dispute before a Polish court, parties to a contract executed only in a foreign language are denied the right to furnish evidence to prove the existence of the contract. For goods and services, all product manuals and specifications, terms and conditions of warranties, invoices, bills and receipts must be in Polish. The Act requires the names of merchandise to be in Polish, although individually designated names, brands and trademarks — despite their foreign wording — do not have to have Polish equivalents. The Act requires that offers, advertisements and descriptions of merchandise and services which are in a foreign language be accompanied by a Polish translation⁶⁵³. If the obligations laid down in Article 7 of the Act are violated, the relevant provisions of Article 74 § 1 sentence 1 and 74 § 2 of the CC apply 654 .

This does not imply the invalidity of such an agreement, but it has an effect in the sphere of evidence — $ad\ solemnitatem^{655}$. The documents referred to in Article 7 also relate to standard contract forms, and that is what the GPL and other open source model licences undoubtedly are 656 .

The obligation to use the Polish language cannot be eliminated by indicating that the applicable law is other than Polish law 657 . Polish courts are obliged to

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^{648} http://www.copyright.gov/help/faq/faq-general.html.  
^{649} 4-13 Nimmer 13.03(F)(4).  
^{650} http://creativecommons.org/licenses/publicdomain/.  
^{651} 17 U.S.C. 102(b).  
^{652} Feist, 499 U.S. at 350 (1991).  
^{653} Assessment Techs. of WI, LLC v. WIREdata, Inc., 350 F.3d 640 (7th Cir. 2003).  
^{654} 1-3 Nimmer 3.04(B)(3)(a).  
^{655} 17 U.S.C. 107.  
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apply the provisions of Articles 7 and 8 of the Act on Polish language 658 . Thus a Polish court is bound to settle any dispute arising from the contractual provisions by invoking the restriction pursuant to Articles 7 and 8, which will always be applied even if under Polish Private International Law the law governing the standard contract form is foreign law 659 .

The issue of concluding an open source licence/contract has been analyzed from the point of view of the protection of consumer interests, based on the provisions of Act of 27 July 2002 on Specific Terms and Conditions of Consumer Sale and Amendments to the Civil Code⁶⁶⁰. However, the application of these provisions has been questioned, due to the fact that this Act should be applied to the sale — in the context of an enterprise's business activities — of a movable chattel/tangible asset to a natural person who purchases the item for a purpose other than carrying out professional work or business (consumer goods)⁶⁶¹.

Another aspect of consumer law is the analysis of contractual provisions of open source licences in terms of distance dealing, and the provisions of the Act of 2 March 2000 on the Protection of Consumer Rights and Liability for Damage Caused by a Dangerous Product (hereinafter the PRCLL)⁶⁶². Such contracts are concluded in a situation where the two parties are not simultaneously present in one place, and methods or means of distance communication—including electronic means of communication within the meaning of Article 2 pt. 5 of the Polish Act of 18 July 2002 on Providing Services by Electronic Means—PSEM—(in Polish: ustawa o świadczeniu usług drogą elektroniczną)⁶⁶³—are used to conclude the agreement. Downloading a program from the Internet that is distributed under the GPL satisfies the conditions of a contract/agreement/licence concluded at a distance. The application of these laws is limited due to the fact that the consumer is acting as licensee, whilst the other party is the entrepreneur/professional entity doing business operations. The burden of proof that an agreement has been concluded at a distance lies with the consumer.

• In addition, if the open source licence/agreement/contract is concluded at a distance and is subject to regulations laid down in the PRCLL, other legal standards provided in this Act may be applicable. The rights of the consumer may not be excluded or limited under a contract, even where foreign law has been chosen⁶⁶⁴. A consumer who concludes a distance contract may withdraw from it without giving reasons, by issuing a written statement to that effect within a period of ten days after conclusion of the contract⁶⁶⁵. This right is not conceded in the provisions of the GPL, but

⁶⁵⁸17 U.S. Code §117(a).

 $^{^{659}17}$ U.S. Code \$117(c).

⁶⁶⁰Visual Artists Rights Act of 1990, 17 U.S. Code §106A.

⁶⁶¹17 U.S. Code §302(a).

⁶⁶²17 U.S. Code §302(b).

⁶⁶³17 U.S. Code §302(c).

⁶⁶⁴17 U.S. Code §201(d)(1).

⁶⁶⁵17 U.S. Code §201(d)(2).

this does not have any serious legal implications⁶⁶⁶.

FOSS licences and model contracts

The general terms of licence agreements on open source software, such as the GPL, satisfy the conditions for applying the provision laid down in Article 384 of the $\rm CC^{667}$ and are deemed "previously formulated contractual terms". There is no special treatment for general licence terms drawn up as standard contracts with international scope⁶⁶⁸. The provisions of Articles 384-3854 of the CC are applied regardless of the nature of the contract, and no matter whether the contract/agreement is paid or free of charge.

Polish law also distinguishes recognition of a standard contract from the question of its approval and inclusion in the wording of an individual agreement on using a software program. This is not precluded by the fact that the standard contract is drawn up in English⁶⁶⁹. The provisions of Article 385 §2 of the CC require only that the standard contract be formulated explicitly and clearly.

Polish legal doctrine favours liberal and flexible interpretation of the term "delivery/service" of a standard contract following its conclusion, under provisions laid down in Article 384 §1 of the CC in conjunction with Article 384 §4 of the CC. The provisions of a standard contract are implemented in an individual agreement at the time of its conclusion⁶⁷⁰.

However, general acknowledgement that the terms of the GPL effectively apply in Poland, does not rule out doubts and questions regarding the effectiveness of certain provisions of the GPL⁶⁷¹. It has also been noted that the abusive nature of these provisions is subject to specific presumption⁶⁷².

Tax law

The Polish tax system is divided mainly into tax on earnings and tax on $turnover^{673}$.

Tax on legal entities and private income

The Polish Undersecretary of State has issued an opinion 674 regarding tax consequences associated with the use of free software programs. The circular was addressed to the directors of all tax offices and chambers in order to ensure uniform application of the law under Article 14 \S 1 no. 2 of the Tax Code and

⁶⁶⁶¹⁷ U.S. Code §204(a).
66717 U.S. Code §205(d).
66817 U.S. Code §205(e).
66917 U.S. Code §203(a)(1-2).
67017 U.S. Code §203(a)(3).
67117 U.S. Code §203(a)(4).
67217 U.S. Code §203(b)(1).
67317 U.S. Code §501(a).
67417 U.S. Code §411.

convey an explanation of Article 12(1) no. 2 of the Polish Act of 15 February 1992 on Legal Entities' Income Tax (hereinafter the LEIT)⁶⁷⁵.

The opinion stated that in the case of rights obtained free of charge, income is determined on the basis of prices used in market sales of similar rights, in particular in terms of their condition and degree of use and the time and place of such use. Tax law provisions establishing the value of taxable income for performance received gratuitously do not foresee a situation where such performance is free for all stakeholders. Article 12(6) of the LEIT covers cases where the value of gratuitous performance can be compared to other paid performance by the taxpayer. The value of "comparable" performance of a given kind—in this case, of free software that is available to all on an equal (free-ofcharge/gratuitous) basis — cannot be determined, and so there is no basis for ascertaining earnings. If certain performance (including the transfer of rights) is inherently free-of-charge to all taxpayers, and not an individual case applying to a single entity, establishing taxable income from such performance is not permitted pursuant to Article 12(1)(ii) of the LEIT. This does not mean, however, that in assessing the possible tax consequences associated with the use of such software, there is no need to examine all the circumstances connected with it. Each case therefore requires individual analysis. This explanation of the tax consequences associated with using free software applies to individuals engaged in non-agricultural business operations who are liable to income \tan^{676} .

Tax on civil law transactions

The Tax Office in Tarnowskie Góry⁶⁷⁷ has ruled that the unconditional free sharing of a computer program with unlimited recipients is not a civil law act, and that donations sent to its creators by users of the program are not a form of payment for its use. There is therefore no legal relationship between the creators of the program and its users, and no rights are transferred by the creator to the user, and so this form of activity is not liable to tax on civil law transactions⁶⁷⁸.

Tax on goods and services (VAT)

The Tax Office in Chorzów⁶⁷⁹ has ruled that publishing a computer program free of charge in the Internet, enabling it to be used by anyone, is not necessarily based on any legal title incurring the obligation to provide service and demand payment, and that the amount of donations does not depend on the actual service provided, and so this act is not deemed performance for remuneration. Furthermore, the Office has ruled that there is no reason to believe that such

⁶⁷⁵17 U.S. Code §412.

⁶⁷⁶17 U.S. Code §501(b).

⁶⁷⁷ Id.; Eden Toys, Inc. v. Florelee Undergarment Co., 697 F.2d 27 (2d Cir. 1982); Random House, Inc. v. Rosetta Books LLC, 150 F. Supp. 2d 613, 617 (S.D.N.Y. 2001), aff'd per curiam, 283 F.3d 490 (2d Cir. 2002)

⁶⁷⁸Eden Toys, 697 F.2d at 32 (1982).

⁶⁷⁹17 U.S. Code §§502-505.

actions are services provided free-of-charge, and so they are not subject to tax on goods and services 680 .

The above-mentioned position of the Polish tax authorities is undoubtedly beneficial to those involved in the production and use of free software. In principle, it also includes closed source software, because that primarily concerns software that is distributed "free of charge" and not the rights granted to users. Of course, it must be remembered that interpretations by the tax authorities do not apply universally and are not binding: they are merely issued with regard to a specific taxpayer and the circumstances relating to that taxpayer⁶⁸¹.

FOSS and legal issues of open standards

Polish administrative courts have ruled that requests concerning access to public information relating to open standards may be excluded, because protection of secrecy (other than state secrets) is a matter for the civil courts and not subject to administrative jurisdiction⁶⁸². The civil courts have held that in accordance with the obligation to disclose public information laid down in Article 13 of the Act on the Informatization of Activities Undertaken by Entities Fulfilling Public Tasks⁶⁸³, the President of the Social Insurance Institution (hereinafter the ZUS, in Polish: Zakład Ubezpieczeń Społecznych) has to disclose public information concerning the technical specifications of the KSI MAIL format that is used in Płatnik software⁶⁸⁴.

FOSS cases in Poland

No cases have been reported so far (April 2014).

Legal procedures

Copyright holders in the Republic of Poland may protect their rights in civil and criminal proceedings. Moreover, they may also resort to procedure before the customs authorities. The Republic of Poland is not a common law country and the courts are not bound by the decisions of other courts. However, Polish judges tend to recognize widely the decisions and verdicts of the Polish Courts of Appeal and the Polish Supreme Court. Only rulings by the Supreme Court that are issued as a legal norm are universally binding. The decisions of foreign bodies such as the General Court and Court of Justice of the EU may be recognized only as so-called "persuasive precedents".

Action for infringement of copyright is brought before a District Court in the first instance. There are no special courts which have exclusive jurisdiction for

⁶⁸⁰28 U.S. Code §1338.

 $^{^{681}\}mbox{Wooster}$ v. Crane & Co., 147 F. 15 (8th Cir. 1906).

 $^{^{682}}$ Diamond v. Diehr, 450 U.S. 175 (1981).

 $^{^{683}}$ In re Bilski, 130 S. Ct. 3218 (2010).

⁶⁸⁴In re Bilski, 130 S. Ct. at 3226 (2010).

resolving copyright disputes, except for matters relating to the criminal prosecution of copyright infringement. These cases are brought before the regional courts located in cities where particular district courts are also seated. The litigation costs depend on the amount in dispute.

Protection of databases

Poland has also adopted *sui generis* protection for databases in a separate law, entitled the Act on Protection of Databases (hereinafter the APD)⁶⁸⁵. The Polish Supreme Court has held⁶⁸⁶ that acquiring an electronic database and selling it to customers under a different name is a tortious act of unfair competition.⁶⁸⁷

Recommended literature

- J. Barta, R. Markiewicz, Oprogramowanie open source, w świetle prawa. Między własnością a wolnością, Zakamycze, Kraków 2005.
- K. Siewicz, Towards an Improved Regulatory Framework of Free software, Protecting user freedoms in a world of software communities and eGovernments, Universiteit Leiden, EM Meijers Instituut voor RechtswetenschappelijkOnderzoek 2010.

Relevant legislation

- The Civil Code of 23 April 1964, Journal of Laws No. 16, item 93, with subsequent amendments.
- The Act on Authors Rights and Neighbouring Rights of 4 February 1994, published in Journal of Laws No. 24, item 83, consolidated text of 16 May 2006, Journal of Laws No. 90, item 631 with subsequent amendments.
- The Act on Specific Terms and Conditions of Consumer Sale and Amendments to the Civil Code.
- The Act of 2 March 2000 on the Protection of Certain Consumer Rights and on the Liability for Damage Caused by a Dangerous Product.
- The Civil Proceedings Code of 17 November 1964, Journal of Laws No 43, item 296, with subsequent amendments.
- The Criminal Proceedings Code of 6 June 1997, Journal of Laws No 89, item 555, with subsequent amendments.

Portugal

author:[Quintais LL.M.,João Pedro] author:[Ramalho LL.M.,Ana B.]

 $[\]overline{^{685}}$ 35 U.S.C. §271(a)&(g).

⁶⁸⁶Adams v. Burke, 84 U.S. 453 (1873).

⁶⁸⁷United States v. Univis lens, 316 U.S. 241 (1942).

Introduction to software protection under Portuguese law Body of law

In Portugal, software is protected by copyright under the Software Act⁶⁸⁸, which implements the Software Directive.⁶⁸⁹ Unlike the majority of European Member States, the Portuguese legislator chose to implement the Software Directive through a separate legislative measure, instead of incorporating it into the Portuguese Copyright Act (hereinafter, the "PCA").⁶⁹⁰

According to the preamble of the Software Act, the reason for using this legislative technique is the difference between the core concepts of software protection and common copyright protection for other types of works. This does not mean, however, that provisions of the PCA will not apply to software — being the general law in the field of copyright, the PCA will be fully applicable where the Software Act does not provide otherwise. Still, since the Software Act is lex specialis vis-à-vis the PCA, it shall prevail where its provisions are different from the PCA, even if the application of the latter is not expressly set aside.

It has been noted by several commentators that the Software Act deviates significantly from the Software Directive it seeks to implement. The following sections will analyze the specific relevant provisions of the Software Act, while pointing out its disparities in relation to the Software Directive.

Object of protection

According to Article 1(2) of the Software Act, computer programs⁶⁹³ that are creative will receive analogous protection to the one granted to literary works. Differently from the Software Directive, computer programs are not protected as literary works, but rather they are granted an analogous protection.

The Software Act also departs from the Software Directive in relation to the creativity requirement. The Directive mandates that a computer program be protected if it is "original in the sense that it is the author's own intellectual creation." Some authors have held that creativity and originality are not substantially different for purposes of a computer program qualifying for copyright

 $^{^{688}}$ "(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^{689}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

 $^{^{690}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{^{691}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup 01 15 10 22.html.

 $^{^{692}}$ For example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{693}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

protection. 694 In any case, given the principle of harmonious interpretation, which requires national law to be interpreted in light of directives, it seems that in practice the semantic differences will not be relevant. 695

The requirement is in line with the general provisions of the PCA, and in particular with its Article 1(1), which defines a work as an intellectual creation — and therefore as an expression of creativity. Neither the Software Act nor the PCA, however, define the concepts of "intellectual creation" or "creativity." Legal doctrine, on the other hand, highlights that an assessment of "creativity" does not imply a judgment of merit of the work. Rather, the creativity requirement is linked to the author's individuality or personality. It follows that the author must have creative choices; if there is only one or few ways of expression of a computer program due to technical constraints (e.g., programming language), the protection threshold will not be met. 199

Authors/Beneficiaries

Article 3(1) of the Software Act establishes that the general rules on copyright authorship and ownership (Articles 11 to 26 of the PCA) apply to computer programs. These are, e.g., the prohibition of formalities as a requirement for protection (Article 12 of the PCA); the ownership of copyright in case of subsidized works (Article 13 of the PCA); or the definition and regime of joint works (Articles 16-18 of the PCA), collective works (Articles 16 and 19 PCA), and composite works (Article 20 of the PCA).

Nevertheless, the following paragraphs of the provision set forth specific rules for computer programs.

Firstly, the computer program created within a company shall be deemed to be a collective work. Following the rules of the PCA, the rights are thus vested in the person (natural or legal) who organized and managed the process of creating the computer program. Such person will be the one under whose name the program is released. However, if it is possible to identify separately the personal input of any collaborator, the regime of joint works shall apply to that specific part. As a result, according to Article 18 of the PCA, the individual author of that part is entitled to exercise his rights in relation to his particular work.

 $^{^{694}}$ World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

 $^{^{695}\}mathrm{The}$ final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

⁶⁹⁶The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of_1976.

 $[\]overline{^{697}}$ Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

⁶⁹⁸17 U.S.C. §102(a).

⁶⁹⁹17 U.S.C. §411(a).

⁷⁰⁰17 U.S. Code §102(a).

⁷⁰¹17 U.S. Code §201(a).

¹⁹³

It is in addition noteworthy that this qualification is a rebuttable legal presumption. Therefore, it is possible that some computer programs are considered to be joint works — namely, if they are divulged or published under the name of some or all of its creators.⁷⁰² Should that be the case, the rights to the program will belong to all co-authors jointly and will be regulated by rules on co-ownership as provided by the Civil Code.⁷⁰³ It follows therefrom that the rights to the computer program can be exercised by either of its co-authors, so long as the program is used for its intended purposes and the other co-authors are not prevented from exercising their rights too.⁷⁰⁴ Still, despite this common exercise of rights, each individual author is entitled to exercise his rights to his part of the program, if his creative input is identifiable.⁷⁰⁵

Moreover, the computer program can also be considered a derivative or a composite work. The former results from a transformation (e.g., arrangement or translation) of a pre-existing work, ⁷⁰⁶ while the latter incorporates the whole or part of a pre-existing work. ⁷⁰⁷ Both require an authorization from the copyright owner of the previous work, but do not involve his participation or collaboration. ⁷⁰⁸ Consequently, the author of the composite or derivative work is the holder of the rights alone, without prejudice, however, to the rights of the copyright owner in the pre-existing work. ⁷⁰⁹

Secondly, the general rules on works created by employees and commissioned works (Article 14 (1)-(3) of the PCA) do not apply to software. Such rules grant ownership in those works in accordance with what was contractually agreed between the parties. In the absence of a contract, the individual creator is deemed to be the author, unless his name is not mentioned in the work (in which case copyright belongs to the employer or to the client who commissioned the work).

By contrast, the Software Act establishes that the rights will be granted to the employer or the client who commissioned the work, unless (i) the employment contract provides otherwise or (ii) the purpose of the contract is in contradiction with such solution.⁷¹⁰ The law does not clarify, however, whether the employer or client is the original owner of the rights or whether he is an assignee.

⁷⁰²17 U.S. Code §201(b).

⁷⁰³ Id.

 $^{^{704}17}$ U.S. Code §101.

 $^{^{705}17}$ U.S. Code §204.

⁷⁰⁶17 U.S. Code §201(a).

⁷⁰⁷17 U.S. Code §101.

⁷⁰⁸1-6 Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.

 $^{^{709}}Id.$

 $^{^{710}}See, Id.$

Economic rights

Articles 5 and 8 of the Software Act bestow upon the right holder three exclusive economic rights. The first is the permanent or temporary reproduction of the computer program, by any means or in any form, in whole or in part. Secondly, the right holder has the right of alteration of the program and reproduction of the results thereof,⁷¹¹ without prejudice to the rights of the person who alters the program. Thirdly, the Software Act grants the right of distribution of the program (or its copies) to the right holder, which includes rental. However, following Article 8(2) of the Software Act, the right of distribution has its scope limited by the rule of exhaustion in what sale is concerned.

In addition to these exclusive rights, the original individual creator might be entitled to a special remuneration right if the following conditions are met: (i) the program far exceeds the function or job for which he was engaged; (ii) the computer program was put to other uses or generated benefits that were not included nor foreseen when the payment was agreed.⁷¹²

Finally, according to Article 49 of the PCA — applicable to software via Article 11(2) of the Software Act — the original individual creator might also be entitled to a supplementary compensation where he assigned or encumbered his economic rights against payment. This compensation is due if the creator has undergone severe economic damages derived from the disproportionality between that payment and the profit made by the exploiter. This right, however, lasts only for two years counting from when the creator became aware of the existence of damages.

Exceptions to Exclusive Rights

Unlike the Software Directive, the Software Act does not devise exceptions only. Instead, the Portuguese legislator granted certain rights to the lawful user, which correspond to the exceptions in Article 5 of the Software Directive. The different terminology can in theory have some implications—namely, while rights can be interpreted broadly, exceptions must be narrowly construed. Hence, it is possible that these "rights" of the lawful user are in practice broader than the corresponding exceptions put forth by the Software Directive.

Article 6 of the Software Act allows the lawful user to make a back-up copy (paragraph 1 (a)); to observe, study or test the functioning of the program in order to determine the ideas and principles that underlie any element of the program if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the program (paragraph 1 (b)); and to load, display, run, transmit or store the program, in order to use it or for purposes of error correction (paragraph 2).

⁷¹¹1-6 Nimmer §§6.02, 6.03.

 $^{^{712}}Id.$

Out of these rights, only the last one can be overridden by contract—any contractual provisions contrary to the first two rights shall be null and void. 713

The Software Act further implemented the decompilation exception in more or less the same terms as the Software Directive. However, while the Directive prescribes as null and void contractual clauses contrary to the whole provision, the Software Act only makes mandatory the rules on access to information. The rules on the use of the information obtained — e.g., use for purposes other than interoperability — can be overridden by contract.

Deviating further from the Software Directive, the Software Act extended the general copyright exceptions to the regime of computer programs, save for the private copy exception. Article 75 of the PCA is the main provision that regulates copyright exceptions and, following the implementation of the Information Society Directive, establishes 19 exceptions to the exclusive rights. Article 10 of the Software Act clarifies that such exceptions are only applicable if compatible with computer programs, but the provision might still have the effect of granting a higher number of exceptions than those allowed by the Directive.

Moreover, Article 10(2) puts forth another exception that was also not part of the Software Directive: the free analysis of computer programs as objects of scientific research and teaching. This differs from Article 6(1)(a), which links the observation, studying or testing to the functioning of the program in order to determine its ideas or principles — probably, e.g., to improve the performance of that particular program. Article 10(2), on the other hand, has a more general nature, in that its aims are scientific research and teaching.⁷¹⁶

Moral Rights

The Software Act does not expressly mention moral rights. Still, Article 9 grants to the "original right holder" the right to be named as the author of the program and the right to claim authorship over it, which comes down to the moral right of paternity. Here, the term "original right holder" should be taken to mean the individual creator and not a legal person - it is commonly accepted that Portuguese law only allows natural persons to hold moral rights. The

The PCA establishes more moral rights in favor of the right holder — namely, the integrity right and the right of withdrawal. The question of whether the moral rights established in the PCA were also applicable in the context of computer programs was the subject of some controversy. This question was

⁷¹³1-6 Nimmer §6.03.

⁷¹⁴17 U.S.C. §201(a).

⁷¹⁵1-6 Nimmer §6.06(A).

 $^{^{716}} Id.$

 $^{^{717}}Id.$

⁷¹⁸17 U.S.C. §103(a).

⁷¹⁹17 U.S.C. §101.

⁷²⁰1-3 Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp.

somehow settled in late 2012 by the Portuguese Supreme Court, which ruled that the author of a computer program has "minimum moral rights, being entitled not only to the right of paternity, but also to the right of integrity." The right of integrity was at the center of the case, but it can be argued that the Court's ruling might be extended to also include the right of withdrawal in the "minimum moral rights" granted to the author of a computer program.

Moreover, the regime of moral rights as established by the PCA should be applicable to these moral rights admitted in the context of the Software Act. Thus, the moral rights of the author of a computer program are unwaivable and inalienable.⁷²²

Term of protection

As a result of the Council Directive 93/98/EEC, harmonizing the term of protection of copyright and certain related rights, the same term applies for computer programs and other works of authorship. The duration of protection will thus last until 70 years after the death of the author. If however the rights are originally granted to someone other than the intellectual creator (i.e., the natural person who created the program), the duration is counted from the date when the program was first lawfully published or divulged. The counter of the program was first lawfully published or divulged.

Copyright contracts

Apart from the rules on ownership of programs created by employees or contractors—which, as seen above, might be considered to establish either original ownership or assignment in favor of a company, Article 11 of the Software Act lays down the contractual regime applicable to computer programs.

Paragraph 1 of the provision mandates the application of the general regime of contracts and in particular of the norms relating to the specific contract at stake, or the most similar one, i.e. that which presents the greatest degree of analogy.⁷²⁵ This refers back to the Civil Code, but also to the Electronic Commerce Act,⁷²⁶ which regulates electronic contracts, with an emphasis on consumer related provisions.⁷²⁷ It is here important to note the general connection between the PCA and the Civil Code, as set forth in Article 1303(2) of the

²d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

⁷²¹Lothar Determan, Dangerous Liaisons — Software Combinations as Derivative Works? Distribution, Installation, and Execution of Linked Programs Under Copyright Law, Commercial Licenses, and the GPL, 21 Berkeley Tech. L. J. 1421, 1430 (2006).

 $^{^{722}}Id$

 $^{^{723}1\}text{-}6$ Nimmer, $\S 6.05.$

⁷²⁴17 U.S.C. §103(a).

 $^{^{725}} Id.$

⁷²⁶1-3 Nimmer §3.02.

⁷²⁷Id.

Civil Code.⁷²⁸ According to this provision, the rules of the Civil Code apply in the alternative to intellectual property rights (including copyright), when they are coherent therewith and do not contradict special rules set forth in relation thereto.⁷²⁹ In any case, the mention of typified contracts and analogy means that civil rules and legal theories applying thereto prevail over those applying to atypical contracts, requiring a case by case assessment of potential analogies to regulated contracts (e.g. sale and purchase, donation, lease, etc.) and its careful application by the interpreter.⁷³⁰

Paragraph 2 of Article 11 establishes that certain provisions of the PCA are applicable to computer programs.⁷³¹ These concern, inter alia, the norms on usufruct and pledge of copyright,⁷³² and the assignment of rights in future works (which is only valid for works created within the following 10 years).⁷³³

The reference to particular norms of the PCA on copyright contracts leads to the conclusion that the other norms not referred to are not applicable to software contracts.⁷³⁴ Significantly, it is the case of Articles 43 and 44 of the PCA, which regulate the formalities inherent to assignments of copyright. Because of the lack of reference to these provisions, then, it seems that assignments of rights in software are not subject to the same formal requirements as any other type of copyright assignments (written contract with signatures recognized by a notary public in the case of partial assignment, and public deed in the case of total assignment).⁷³⁵

The same goes for the formalities applicable to licensing. According to Article 41 of the PCA, copyright licenses must take the form of a written agreement and must contain certain elements, such as the authorized form of use, geographical scope and price. Since Article 41 of the PCA is not part of the provisions that the Software Act refers to, these formalities would not be applicable to software licensing either.

Finally, Article 11(3) stipulates that software contracts must be interpreted in accordance with the principle of good faith and their ambit construed according to their purpose. 736

All in all, Article 11 combines different legal sources to form the legal regime of software contracts. This might bring about some legal uncertainty for purposes

⁷²⁸17 U.S.C.§ 101.

 $^{^{729}1\}text{--}3$ Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

⁷³⁰17 U.S.C. §201(c). ⁷³¹1-6 Nimmer §6.05.

⁷³² *Id*.

⁷³³Id.

⁷³⁴ *Id*.

 $^{^{735}}Id.$

 $^{^{736}}Id.$

of identifying the nature of a given software contract, and the regime thereby applicable to that specific situation. In any case, it should be kept in mind that, in the context of contract law, the rule is the contractual freedom of the parties.⁷³⁷ Therefore, parties can choose the legal regime that better suits their needs, provided that no mandatory rules are infringed.⁷³⁸

In this context, it should be emphasized that the Software Act does not establish a legal regime for the formation, formal requirements and effects of software licensing agreements.⁷³⁹ Such regime must therefore be found by articulating the rules explained above.

There is some controversy about whether the specific rules on typified contracts apply to software agreements. 740 Some authors resort to a purpose bound interpretation of software agreements to identify parallels between these agreements and typified contracts—such as lease—thus rejecting the qualification of those as atypical.⁷⁴¹ Consequently, the rules of the identified typical contract would apply directly to the software agreement, in combination with rules for typified copyright contracts (e.g. publishing); an example would be the application of the rules of lease (in the Civil Code) and those of publishing agreements (in the PCA) to OEM software deals that involve the production and distribution of software. 742 Conversely, other authors focus on the immaterial nature of software works, rejecting the direct applicability of rules on contracts that regulate the use and exploitation of material goods. This position would lead to the application of rules from typified contracts only through analogy, meaning that matters of formation, formal requirements and efficacy could only be regulated by general rules on juridical relations as applied to contracts, implying a greater degree of flexibility.⁷⁴³ We are of the opinion the latter interpretation is more coherent when confronting the legal regime with contractual practices on software, most notably end-user license agreements concluded online.

In fact, online software license agreements are an instance of electronic distance contracts, meaning that they may call upon the application not only of the rules mentioned above (such as the Software Act, the PCA, the Civil Code and the Electronic Commerce Act), but also rules on distance contracts (in the Distance Contracts Act⁷⁴⁴), and standardized agreements (in the Standardized Terms in Contracts Act or "STCA"⁷⁴⁵), which are particularly protective of consumers and translate into additional restrictions to freedom of contract.

This complexity is notorious considering that most end-user software licenses are in fact standard contracts, where there is no possibility for users to negotiate

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737 17 U.S.C. §106.
738 Id.
739 17 U.S.C. §109(a).
740 2-8 Nimmer §8.12.
741 Computer Assoc., 982 F.2d at 714.
742 See, 4-13 Nimmer §13.02(B).
743 See, Computer Assoc., 982 F.2d at 715.
744 Id.
745 Apple Computer, Inc v. Microsoft Corp., 35 F.3d 1435, 1445 (9th Cir. 1994).
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particular clauses. Such standard contracts are entered into by the user following the signing of the terms and conditions, by opening the packaging, by clicking or selecting an "I agree" button, or by any other action whereby acceptance can be assumed. That being the case, the STCA applies.

The STCA states a general principle of prohibition of clauses contrary to principles of good faith. The Moreover, it forbids the use of certain clauses in standardized B2B contracts and in standardized B2C contracts. Two types of open lists are put forth in each context: absolutely forbidden and relatively forbidden clauses (also called, respectively, "black list" and "grey list"). Both types of clauses are considered to be null and void; the difference between them is that the qualification as a relatively forbidden clause depends on a case-by-case assessment, taking into account the specific features of the contract at stake.

In relation to standardized B2B contracts, some relevant examples of absolutely forbidden clauses include: exclusion of liability for non-contractual damages; ⁷⁵⁰ exclusion of defaulting liability for intentional misconduct or gross negligence; ⁷⁵¹ attribution of the exclusive right to interpret any clause of the contract to its drafter; ⁷⁵² or exclusion of compensation, when admitted by law. ⁷⁵³ On the other hand, still in the context of B2B contracts, the following are examples of relatively forbidden clauses: establishment of excessively long deadlines for acceptance and rejection of proposals in favor of the drafter; ⁷⁵⁴ establishment of said deadlines for compliance with contractual obligations; ⁷⁵⁵ or clauses mandating disproportionate criminal sanctions. ⁷⁵⁶

With regard to standardized B2C contracts, Article 21 prescribes as absolutely forbidden clauses, e.g., the unilateral alteration of obligations;⁷⁵⁷ the unilateral verification and establishment of the quality of goods and services supplied;⁷⁵⁸ or the vouching for the parties' legal or factual knowledge in relation to the contract.⁷⁵⁹ Article 22 focuses on the relatively forbidden clauses in B2C contracts, namely: the excessively long duration of contract;⁷⁶⁰ the free termination of

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<sup>746</sup>See, Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 819 (1st Cir. 1995).
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⁷⁴⁷See. Id. at 815.

⁷⁴⁸4-13 Nimmer §13.03(F).

⁷⁴⁹ See, Order Re Copyrightability Of Certain Replicated Elements Of The Java Application Programming Interface (hereinafter *Order*) found at http://www.groklaw.net/pdf3/OraGoogle-1202.pdf.

⁷⁵⁰17 U.S.C. §102(b).

⁷⁵¹1-2 Nimmer §2.02.

⁷⁵²4-13 Nimmer §13.03(B)(2)(a).

⁷⁵³Computer Assoc., 982 F.2d at 708.

⁷⁵⁴See, BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

⁷⁵⁵See, 4-13 Nimmer §13.03(B)(3).

 $^{^{756}}$ See, 4-13 Nimmer §13.03(F)(2).

⁷⁵⁷⁴⁻¹³ Nimmer \$13.03(F)(2).

⁷⁵⁸See, Computer Assoc., 982 F.2d at 715.

⁷⁵⁹See, Computer Assoc., 982 F.2d at 715.

 $^{^{760}\}mathrm{Order}\ supra$ Note XXX

contract; 761 the unjustified prohibition of repairs or supply by third parties; 762 or the demand of formalities not prescribed by law. 763

In the context of software contracts, the type of clauses deemed null and void by the STCA can thus effectively curtail some choices of the right holder when entering into a contract with potential licensees or assignees.

Enforcement

Enforcement of copyright in Portugal is regulated by Articles 195 to 211-B of the PCA, which have inter alia implemented the Enforcement Directive 764 and provide for a broad range of criminal provisions, preliminary administrative measures and civil actions. Criminal and civil liability are independent and can be exercised simultaneously, either in separate actions or jointly in a criminal procedure. 765

Preliminary administrative measures can be requested by the author to police and administrative authorities with jurisdiction over the place of occurrence of the unauthorized use; they amount to a request that the authority causes such use to cease and, in accumulation, apprehends the totality of the revenue from such unauthorized uses. 766

Civil actions include: (i) rights of prior communications, information and supervision 767 ; (ii) specific evidence gathering and preservation measures 768 ; (iii) provisional and preliminary injunctions (which include both copyright specific measures and those available under the general civil procedure law) 769 : and (iv) measures to redress infringement, including a broad right to information regarding the infringing activity, the application of corrective and inhibitory measures post-infringement and the establishment of specific criteria for damages (the latter aspect is addressed in greater detail below in the "Damages" section. 770 / 771). The possibility of application of some of these measures or their application above a certain threshold is limited to infringing acts occurring on a commercial scale. 772

Preliminary administrative measures and civil actions (ii) through (iv) above seem to apply to software as a copyright protected subject matter.⁷⁷³ This is

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761 See, Id. at 710.
762 4-13 Nimmer §13.03(B)(4).
763 Id.
764 See, John William See v. Christopher Durang and LA. Stage Co., 711 F.2d 141, 143 (9th Cir. 1983).
765 Id.
766 Id.
767 Mist-On Sys. v. Gilley's European Tan Spa, 303 F. Supp. 2d 974, 978 (W.D. Wis. 2002).
768 4-13 Nimmer §13.03(B)(4).
769 Mist-On Sys., 303 F. Supp. 2d at 976 (W.D. Wis. 2002)
770 Computer Assocs., 982 F.2d at 709-10.
771 BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).
772 See v. Durang, 711 F.2d at 143.
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⁷⁷³Computer Assoc., 982 F.2d at 715.

coherent with the Software Act's specific provision on the seizure of counterfeit software copies.⁷⁷⁴ Under this provision, the seizure follows the general regime applicable to seizure of counterfeit works, being also possible to seize any devices in commerce the sole intended purpose of which is to facilitate the unauthorized removal or circumvention of any technical safeguard which may have been applied to protect a computer program.⁷⁷⁵

Procedural legitimacy for taking action belongs to the copyright holder and, where collective rights management applies, to collecting societies. The Portugal, the only collecting society representing software rights holders is ASSOFT - Associação Portuguesa de Software. Importantly, the position of exclusive or non-exclusive licensees of an infringed work is not addressed in the law; however, it is possible to interpret some provisions as allowing a licensee that can prove he/she is entitled to use the work (e.g. by presenting the license agreement in a judicial action) to benefit from said measures. In any event, nothing seems to prevent that a third party — such as a fiduciary — is authorized by the rights holder to take action on his/her behalf, as Portuguese law does not expressly forbid fiduciary transmission of rights (e.g. to a collecting society), although some legal scholarship believes it to be invalid.

The above considerations apply to actions based on economic exclusive rights; they do not apply regarding any claims for breach of moral rights, for which only authors (or their successors) have legitimacy.⁷⁸⁰

In what regards criminal law, the Software Act states that software is protected against unlawful reproduction and makes an express reference to Law 109/91, of 17 August⁷⁸¹, which has been replaced by the new Cybercrime Act.⁷⁸² The articulation of the relevant legal instruments suggests that the Cybercrime Act should be qualified as lex specialis regarding the PCA and its criminal sanctions for copyright infringement.⁷⁸³ That being the case, the Cybercrime Act limits the criminal sanctions for software infringement to acts of unlawful reproduction, dissemination and communication to the public of a computer program (presumably including any derivatives), providing jail sentences up to three years and/or equivalent fines.⁷⁸⁴ The attempted form of the unlawful acts is punishable, as are acts carried out by legal persons.⁷⁸⁵ Additionally, the court may rule as lost in favor of the state any objects, materials, equipment or devices used and

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774 See, 1-2 Nimmer §2.03(G).
775 17 U.S.C §105.
776 http://copyright.gov/help/faq/faq-definitions.html.
777 See, Id.
778 See, Computer Assocs., 982 F.2d at 710.
779 http://www.copyright.gov/help/faq/faq-general.html.
780 4-13 Nimmer §13.03(F)(4).
781 http://creativecommons.org/licenses/publicdomain/.
782 17 U.S.C. §102(b).
783 Feist, 499 U.S. at 350 (1991).
784 Assessment Techs. of WI, LLC v. WIREdata, Inc., 350 F.3d 640 (7th Cir. 2003).
785 1-3 Nimmer §3.04(B)(3)(a).
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Unprotected software and public domain software

As explained above, only software that is original in the sense that it is the author's own intellectual creation—or in the Software Act's formulation, has "creative character"—benefits from protection analogous to copyright.⁷⁸⁷

Non-original software does not come into consideration for copyright protection and can, in principle, be used freely from copyright exclusive rights.⁷⁸⁸ However, the functional nature of most software dictates that the threshold of creativity required for protection is relatively low, meaning in practice that most software that is not a copy from another computer program and bears a minimum trait of connection to its author will in principle be afforded legal protection.

Under Portuguese law, there are no software subject matter specific public domain rules. Instead, the general rules in the PCA apply, meaning that public domain is limited to works for which the copyright term has expired.⁷⁸⁹

Public domain software — if any exists — can be used, reproduced or executed freely without permission or the payment of a fee. It can in certain cases even be presented by third parties as their own work⁷⁹⁰, and by modifying the original work, third parties can take certain versions of said software out of the public domain.

Analysis of FOSS under Portuguese Law

From a conceptual and legal perspective, FOSS is identical to other types of software, and benefits from similar protection. Portuguese copyright law fully supports the rights of the copyright holder to stipulate terms and conditions in a software license, having the exclusive right to exercise or authorize the use of the rights of reproduction, transformation, distribution, and communication to the public/making available. Therefore, absent public policy prohibitions, a rights holder is entitled to select the conditions under which he/she licenses software to third parties, such as via a FOSS license.

Under Portuguese law, FOSS should be considered as software to which users generally have more rights of use than under a proprietary or "non-free" software license. This is so due to the breadth and scope of the underlying FOSS license agreement. As such, and assuming the validity of a FOSS license, its terms and conditions must be respected by the user-licensee.

That being said, it is important to note that FOSS licenses deviate significantly from conventional license agreements. Such deviation raises issues as to the

⁷⁸⁶17 U.S.C. § 107.

 $^{^{787}} Id.$

 $^{^{788}}Id$

⁷⁸⁹17 U.S. Code §117(a).

⁷⁹⁰17 U.S. Code §117(c).

application thereto of specific qualifications that may be valid for other software agreements. To compound on the problem, and as noted above, the wording of the Software Act has led to extensive debate in Portugal as to the different possible legal qualifications of software agreements.⁷⁹¹ In the balance of this debate, we believe that FOSS licenses should be considered as sui generis or atypical license agreements, even if they are still based on similar mechanisms to those of license contracts in general, and of end-user software license agreements in particular.

Copyrights

Although FOSS can be written and owned by one person or be owned by one legal entity⁷⁹², generally speaking, after some time the software is the result of the work of several authors who can make claims to it.

The crucial question is whether later additions create a joint work—i.e. a work created by collaborating authors giving rise to co-authorship configurations, or whether the original software is the end work and every contribution created during the further development of the software is to be deemed a composite or derivative work. 793 The legal consequences are different at both authorship and ownership levels.⁷⁹⁴

Qualification of FOSS

For FOSS to be qualified as a joint work of co-authors it is not necessary for every co-author to have contributed equally, nor are co-authors required to work on it simultaneously; however, it is necessary that each contributor intervenes during the creative process and that the contribution is worthy of copyright protection.⁷⁹⁵ The provider of an idea is not a co-author⁷⁹⁶, nor is the person who corrects a technical error or merely follows instructions.⁷⁹⁷

Whereas the first version of the software, if written by several people, can in many cases be qualified either as a collective work (when created in the context of a company) or as a joint work, this seems much less the case for the later versions, which are based on the original work, without however there being any "consultation" between the authors. These later versions will be qualified as composite or derivative works, ⁷⁹⁹ or possibly (although less likely) collective works, if the individual or entity author/editor of the new version collated or organized and directed a series of different programs to form a distinct new

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^{791}\mathrm{Visual} Artists Rights Act of 1990, 17 U.S. Code §106A.
<sup>792</sup>17 U.S. Code §302(a).
<sup>793</sup>17 U.S. Code §302(b).
<sup>794</sup>17 U.S. Code §302(c).
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⁷⁹⁵17 U.S. Code §201(d)(1).

⁷⁹⁶17 U.S. Code §201(d)(2).

⁷⁹⁷17 U.S. Code §204(a).

⁷⁹⁸17 U.S. Code §205(d).

⁷⁹⁹17 U.S. Code §205(e).

software based on the original. Therefore, in terms of the legal consequences, a distinction needs to be made between the rights of the original owner, the original co-authors and the rights of people or entities who carry out work based on the original work.

Rights of the original co-authors

The general authorship and ownership rules of the PCA apply to the creation/production of software. However, if a software work is made in the context of a company, there is a legal presumption that the software is a collective work. Collective works are regulated in Articles 16-19 of the PCA. The law defines collective works as those organized by initiative of an individual or collective entity and that are divulged or published in said entity's name. The copyright of a collective work is granted to the entity that has organized and directed its creation and in the name of which it has been divulged or published. So

The full application of the collective works regime presupposes that the individual contribution of every author in the software work cannot be discerned or clearly distinguished, i.e. that the work is "indivisible".⁸⁰⁴ If however it is possible to make a distinction of individual contribution(s) within the collective work, then the law foresees the application of a different legal regime to that contribution(s), namely the regime of joint works.⁸⁰⁵

A distinction then must be made between two potentially applicable legal regimes. First, if a FOSS work is made in the context of a company and individual contributions cannot be distinguished, the rules on collective works apply. Likewise if the FOSS work is created by an employee in the performance of his professional functions or as a result of instructions of the employer, unless the employment contract (i) states otherwise or (ii) is silent and the purposes of the contract lead to a different conclusion. 806

Most FOSS works will likely not be made in the context of a company, meaning that the legal presumption of application of the collective work provisions will not operate. This leads to the second possibility, where the FOSS work is deemed a joint work, which the law defines as the work divulged or published in the name of all the collaborators (co-authors) or some of them, whether or not individual contributions can be distinguished.⁸⁰⁷

In sum, severable contributions both in collective works and joint works are

^{800 17} U.S. Code §203(a)(1-2).

 $^{^{801}}$ 17 U.S. Code §203(a)(3).

 $^{^{802}}$ 17 U.S. Code §203(a)(4).

^{803 17} U.S. Code §203(a)(4).

⁸⁰⁴17 U.S. Code §501(a).

⁸⁰⁵¹⁷ U.S. Code §411.

⁸⁰⁶17 U.S. Code §412.

⁸⁰⁷17 U.S. Code §501(b).

subject to the same rules.⁸⁰⁸ Indivisible contributions follow different regimes, specific to the type of work: for collective works the rights of the contributors in their indivisible contribution are vested in the individual or entity that is presumed to own the work; for joint works, the legal regime is different and allows for a degree of contractual freedom among co-authors.

The legal regime for joint works can be summarized as follows. First, the copyright ownership of the work, in its unity, belongs to all co-authors and is regulated pursuant to the rules on co-ownership for the common exercise of the rights in that work, as set forth in the Civil Code. Consequently, for indivisible works, each of the co-authors must be authorized by the other in order to exercise his/her copyright separately; in other words, joint exercise is mandated as general rule. However, if no agreement is reached, then it will be possible for any of the co-authors to use the joint work, as long as he/she does so for the purposes for which the work was created and does not exclude the remaining co-authors from its use. Moreover, exercise of copyright over the indivisible joint work is possible pursuant to decisions taken by simple majority of the co-authors.

Second, the specific value of each contribution may be freely stipulated amongst the co-authors; if it is not agreed to in writing, then all contributions are deemed to be of identical value.⁸¹³ As mentioned above, those individuals that merely provide assistance to authors in the production and divulgation of the work are not deemed co-authors and, for that reason, do not participate in the copyright on the joint work.⁸¹⁴

Third, it is possible that a joint work is divulged or published solely in the name of one or a few of the collaborators, in which case a legal presumption operates: if there is no specific designation of the remaining co-authors in any part of the work, the law assumes that the non-designated collaborators have assigned their rights to the named co-authors. 815

Portuguese law provides for two exceptions to this general regime, applying to severable contributions of individual co-authors (or, by reference, to homologous contributors to collective works).⁸¹⁶ On the one hand, any contributor can request the divulgation, publication, exploitation or modification of the joint work; in case of dispute, the matter must be settled under rules of good

 $^{^{808}} Id.;$ Eden Toys, Inc. v. Florelee Undergarment Co., 697 F.2d 27 (2d Cir. 1982); Random House, Inc. v. Rosetta Books LLC, 150 F. Supp. 2d 613, 617 (S.D.N.Y. 2001), aff'd per curiam, 283 F.3d 490 (2d Cir. 2002)

 $^{^{809}}$ Eden Toys, 697 F.2d at 32 (1982).

⁸¹⁰17 U.S. Code §§502-505.

⁸¹¹28 U.S. Code §1338.

 $^{^{812} \}mbox{Wooster}$ v. Crane & Co., 147 F. 15 (8th Cir. 1906).

 $^{^{813}{\}rm Diamond~v.~Diehr,~450~U.S.~175~(1981).}$

 $^{^{814} {\}rm In}$ re Bilski, 130 S. Ct. 3218 (2010).

 $^{^{815} {\}rm In} \ {\rm re} \ {\rm Bilski}, \, 130 \ {\rm S. \ Ct.} \ {\rm at} \ 3226 \ (2010).$

 $^{^{816}35}$ U.S.C. $\S 271(a)\&(g)$.

faith.⁸¹⁷ That is a deviation from the simple majority rule applicable to indivisible works.⁸¹⁸ On the other hand and in addition, any contributor can, without prejudice to the joint exploitation of the overall work, individually exercise the rights pertaining to his identifiable contribution.⁸¹⁹

On balance, the default legal regime described above, together with the principle of freedom of contract, seem sufficiently compatible with overall authorship and ownership stipulations in typical FOSS licenses. What such regime does not allow and the general Portuguese regime does not permit are agreements that constitute waivers to moral rights, as discussed in greater detail below.⁸²⁰

Authors of derivative or composite works

After some time FOSS will, in most cases, be a composite or derivative work.⁸²¹ Composite works are those that incorporate, in the whole or in part, a pre-existing work, while derivative works are those that imply a transformation of a pre-existing work; in both instances, the incorporation or transformation would be done with the authorization but without the collaboration or "consultation" of the rights holder of the underlying work.⁸²² The last aspect distinguishes composite or derivative works from joint works.

The authors of the composite or derivative work are the only persons with a copyright on their work.⁸²³ This is an independent and full copyright, which is restricted insofar as the composite or derivative work cannot be operated without the consent of the owner of the copyright on the original or pre-existing work.⁸²⁴ For typical FOSS licenses, this consent should theoretically not pose a problem as it is included in the license; this, of course, subject to the compliance with the terms and conditions of said license (e.g. regarding further distribution of the derivative work).⁸²⁵ In fact, such consent would equate to an authorization for a specific use (incorporation, adaptation or transformation), meaning that it would in principle not trigger the application of the most problematic formal requirements applying to assignments or transmissions of copyright under Portuguese law.⁸²⁶ This contractual structure would also in principle allow authors in both works to judicially enforce their respective copyrights.

Management of copyrights

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817 Adams v. Burke, 84 U.S. 453 (1873).
818 United States v. Univis lens, 316 U.S. 241 (1942).
819 Intel Corp. v. ULSI System Technology, 995 F.2d 1566 (Fed. Cir. 1993).
820 Cyrix Corp. v. Intel Corp., 77 F.3d 1381 (Fed. Cir. 1996).
821 35 U.S.C. §154.(a)(2).
822 America Invents Act, Public Law 112-29 found at http://www.gpo.gov/fdsys/pkg/PLAW-112publ29/html/PLAW-112publ29.htm.
823 35 U.S.C. §271(f)(1).
824 AT&T v. Microsoft, 550 U.S. 437 (2007).
825 35 U.S.C. §271(a).
826 35 U.S.C. §271(b).
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With the purpose of controlling the chain of copyright ownership in a more efficient manner, it may be useful to concentrate all copyrights concerning a FOSS project within one organization, with the aim to simplify the management and jointly enforce rights. The contractual method underlying such concentration of rights is however a crucial issue under Portuguese Law.

One of the possible methods is via a transfer or assignment, as suggested for example by the Free Software Foundation Europe ("FSFE"), which provides a Fiduciary License Agreement ("FLA") for rights holders to assign their rights to a fiduciary, preferably the FSFE itself.⁸²⁷ In general terms, the fiduciary transfer means that the assignee shall not act on his own name and behalf but on account of the assignors (typically the original authors).

Such contractual arrangement does not correspond per se to an instance of collective rights management, which is subject to specific authorization and supervision requirements under Portuguese law. 828 Moreover, contrary to other countries, 829 collective rights management in Portugal is not so much based on a fiduciary transfer of copyrights, but more on a licensing and representation mechanism. 830

Not being a case of (regulated) collective rights management, such agreements would need to conform to the general rules on contractual assignments of copyright applicable to software works, which are far from uncontroversial under Portuguese Law. 831

In general, there are two possible interpretations of the legal rules of assignment in this field, depending on how one articulates the relevant provisions of the Software Act, the PCA and the Civil Code.

On the one hand, it is possible to argue that the Software Act contains a special regime for contracts, whereby a particular agreement is subject to the general rules on contracts in the Civil Code plus the rules on typified contracts that present the greatest similarities to the underlying deal, but excluding provisions of the PCA not expressly mentioned by the Software Act in its Article 11(2). Among the omitted provisions are those anachronistic PCA rules on partial and total assignments, which impose severe formal requirements on copyright assignments, under penalty of nullity. Under this interpretation, an agreement such as the FLA would probably be valid vis-à-vis Portuguese Law.

Alternatively, if it is considered that the PCA provisions on assignments apply, it is difficult to defend the validity of a transfer under the FLA, as it fails to comply with essential formal requirements; this would entail the nullity of

⁸²⁸35 U.S.C. §§283-285.

⁸²⁷35 U.S.C. §282.

⁸²⁹35 U.S.C. §284.

 $^{^{830}35}$ U.S.C. §287.

 $^{^{831}\}mathrm{Magnuson\text{-}Moss},\,15$ U.S.C. §2301 et seq..

⁸³²¹⁵ Code of Federal Regulations §742.15.

⁸³³Jacobsen v. Katzer, 535 F.3d 1373 (Fed. Cir. 2008).

such agreements. S34 However, if the agreement in question contains provisions whereby an assignment is converted into a broad grant of rights in countries where the first contractual method is not legally admissible—as is the case with the FLA^{835} —, then it is possible to argue in favor of the validity of such agreement.

Given the lack of legal certainty as to requirements applying to assignments and the formal requirements the PCA attaches thereto, it is arguable that a concentration of rights in a single organization via broad authorization of use contractual schemes constitutes a superior solution to secure the validity and effectiveness of the method.

Moral rights and FOSS

The US origin of FOSS is perhaps in no issue clearer than in its treatment of moral rights, a subject to which it attaches comparatively less importance than countries in civil law systems.⁸³⁶ In this respect, the Open Source Definition specifies that the author of software distributed under a FOSS license cannot oppose the use of the software by certain people and groups or for certain areas of application.⁸³⁷ The question then becomes what is the admissibility of such provisions when they purport to constitute a waiver of moral rights.

Here, again, Portuguese law is not clear. As mentioned before, the Software Act does not expressly mention moral rights, but its Article 9 is usually interpreted as covering this topic. This provision guarantees the original rights holder (understood in this Chapter as the natural person) the right to be mentioned by name in the program and that of claiming its authorship, being silent on the applicability of other moral rights set forth in the PCA.

Also as mentioned above, some legal scholarship has interpreted this provision as meaning, a contrario sensu, that no other moral rights are granted to authors of software works. Such interpretation would mean that an author of a FOSS work would not even have to proceed to a global renouncement of the future exercise of moral rights (other than mention of name and paternity), as he would not be deemed to have such rights.

Even if this argumentation is solid, we note that it's not unanimous, with relevant legal scholarship defending that software authors have the same moral rights as prescribed for most authors under the PCA, although to a reduced

 $^{^{834}3\}text{-}10$ Nimmer on Copyright $\S10.15$.

⁸³⁵ Wallace v. International Business Machines Corp., 467 F.3d 1104 (CA 7 2006).

⁸³⁶Wallace, 467 F.3d at 1107 (2006).

⁸³⁷ See the Clauses 5 and 6 of the Open Source Definition ("OSD"), http://opensource.org/osd.

 $^{^{838}\}mathrm{See}$ supra section "Moral Copyrights". See also ROCHA & CORDEIRO, pp. 44-45.

 $^{^{839}}$ See arts 14(3) and 27-30 of the PCA, regulating moral rights and issues related to the name of the author. See also arts 56-62 of the PCA regarding specific moral rights.

 $^{^{840}\}mathrm{See}$ ROCHA & CORDEIRO, p. 45. Apparently accepting such limited interpretation, see DIAS PEREIRA 2011, p. 348.

degree, given the specific nature of software as a work of authorship. 841 That reduced degree is particularly important, as the Software Act grants a broad right of transformation, the scope of which limits to a significant extent that of the moral right of integrity, 842 and would probably accommodate most FOSS licensing provisions enabling downstream derivative works. Such interpretation is likely the most coherent with the aforementioned Portuguese Supreme Court ruling of 2012 recognizing "minimum moral rights" to authors of computer programs. 843

Enforcing FOSS licenses

General Considerations

The question of whether a FOSS license can be enforced under the Portuguese legal system depends on whether a valid license was issued. For the assessment of such validity inquiry, two essential questions must be answered: (i) who are the contracting parties, and (ii) has the license been validly reached? We will answer these questions in turn against the backdrop of our previous framing of the regime applicable to software contracts under Portuguese law.⁸⁴⁴ Some preliminary remarks are however required.

Copyright protection of software via exclusive rights implies that use of protected works (such as FOSS) requires authorization by the respective owners, except when such use is covered by an exception or limitation. FOSS licenses are designed to provide such authorization, a construct which is conceptually distinct from that of a copyright assignment or transmission. As noted above, Article 11 of the Software Act opens the door for the use of external contractual rules not only of the PCA, but also of the Civil Code and a myriad of other legal instruments.⁸⁴⁵

The application of some of these rules impacts directly the discussion on the validity of FOSS licenses. For example, as noted above, the PCA contains general provisions on formal and content requirements of copyright contracts.⁸⁴⁶ The validity of FOSS licenses is discussed in greater detail below; however, it is important to note that, in what concerns content requirements, the application of the general PCA rules on copyright contracts to FOSS licenses would likely not be problematic, as these licenses in principle meet such minimum requirements.⁸⁴⁷

Moreover, in what regards qualification of FOSS licenses, these present such a specific type of use regulation that the direct application thereto of typified

⁸⁴¹See VIEIRA 2005, pp. 719-741.

⁸⁴²Id., pp. 736-740.

 $^{^{843}\}mathrm{See}$ above the section "Introduction.../ Moral Rights".

 $^{^{844}}$ See above the section "Copyright Contracts".

 $^{^{845}}$ Id.

⁸⁴⁶Id.

 $^{^{847}}$ Id.

contracts (either in the PCA or Civil Code) seems a conceptual stretch. The predominant non-commercial purpose of the licensing aspect in such agreements (not only in terms of reproduction but also in terms of distribution or conveyance), and the focus on allowing transformations on the immaterial work that constitutes the license object do not satisfactorily overlap with existing contractual types. Thus, matters of validity and efficacy must be addressed and evaluated in light of general rules — notably mutual consent and freedom of form — applying to software agreements, as well as admissible analogies to existing types.

Finally, part of the legal instruments and rules applying to agreements such as FOSS licenses translate into obligations of information and transparency to consumers prior to the conclusion of the contract, together with safeguards of his/her position as the party with a weaker bargaining position (i.e. the user-licensee). To that extent, taking into consideration the nature and configuration of FOSS licenses, such rules do not seem to challenge per se their validity. Insofar as these rules may translate into imperative provisions in addition to the legitimate user's minimum rights in the Software Act, it is however important to ascertain whether FOSS licenses conflict with them.

Contracting parties

The issue of who are the contracting parties in a FOSS licensing scheme depends on its constitution. In the simplest formulation the answer is clear: if an author makes his/her work available under a FOSS license, the license is reached as between the author and the licensee. However, if there are different co-authors, the issue becomes more complicated. With whom the licensee concludes a contract depends then on the mutual agreement between the co-authors.

In the majority of cases, a FOSS work will be the creative result of the output of several authors, who developed it in separate and not in joint consultation with each other. In fact, FOSS is typically realized via a chain of authors who all contributed to the realization of the program.

Insofar as a new author makes an original contribution to the work (i.e., with the "creative character" required by the Software Act), a composite or (most likely) a derivative work is produced.

Given that both the rights to use (reproduction) and make derivatives (transformation or adaption) fall within the purview of the author's exclusive rights, each potential licensee will require the consent of every author in the chain who made an original contribution to the eventual FOSS work, starting with the

⁸⁴⁸An argument to the contrary would likely seek the application to FOSS agreements of rules governing the lending ("locação") agreement in arts 1129ff. of the Civil Code. See A.L. DIAS PEREIRA, "Contratos de Software", in Textos de apoio ao Curso de Direito da Comunicação no ano lectivo de 1995/1996, A. Pinto Monteiro, Direito dos Contratos e da Publicidade, Coimbra, 1996 (hereinafter, "DIAS PEREIRA 1996"), p. 117, admitting the possibility of application of these agreements to end-user software licenses where the use of the software is authorized for free.

author of the first work. This consent can be direct (i.e. to the next licensee in the chain), or indirect by giving consent in the FOSS license to the next author to modify and distribute the work to subsequent authors/contributors or users.

The majority of FOSS licenses address this potential problem by introducing "viral" provisions establishing a contractual bound between the licensee and all authors in the chain of derivative works, in such a way as to expressly cover the possibility of onward licensing of each author's contribution. This has certainly been true for the several iterations of the GPL licenses, from version 1 to the current version 3⁸⁴⁹, Article 10 of which (on "Automatic Licensing of Downstream Recipients") reads, in the relevant part: "Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License... You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License."⁸⁵⁰

This provision builds upon and extends the homologous provisions in previous versions. It allows each user of the FOSS work to obtain a license from all authors in the chain. Insofar as this licensing chain of (mostly) derivate works is configured as a chain of agreements for specified uses of software works to which the respective authors have consented to, it should be considered valid under Portuguese law.

Validity of the FOSS licenses

The choice of a FOSS license by an author is motivated by the desire to distribute and make available his work to third parties, possibly subject to certain use restrictions. In that sense, it is essential that such restrictions be enforceable.

The valid formation of a contract under Portuguese Law generally requires an offer and acceptance of the offer via a manifestation of consent to be bound by the terms of the offer. Conventional IT agreements are entered into by the explicit acceptance of the terms and conditions by the licensee following the signing of the terms and conditions, by opening the packaging, by clicking or selecting an "I agree" button or by any other action from which acceptance can be recognized. The latter examples are — similarly to FOSS licenses — preformulated standard contracts. These methods to reach a licensing agreement have been sufficiently tried and tested and, at least between commercial parties, are generally considered to be valid. The same

⁸⁴⁹See: GPL version 1, article 6; GPL version 2, article 6; and GPL version 3, article 10.

⁸⁵⁰See GPL version 3, article 10. The sections omitted in the citation refer to enforcement (first paragraph), "entity transaction" (whole second paragraph) and examples on restriction on the exercise of rights (part of third paragraph).

 $^{^{851}}$ See arts 217ff. of the Civil Code and, for electronic contracts, arts 24-33 of the Electronic Commerce Act.

 $^{^{852}}$ See DIAS PEREIRA 1996, p. 118, noting that the same are subject to the STCA. On the STCA, see above the section "Copyright Contracts".

⁸⁵³ See DIAS PEREIRA 1996, pp. 116-120, analyzing the issue from the perspective of the STCA. See also DIAS PEREIRA 2011, pp. 366-367, referring to both B2B and B2C agreements

way will be valid.

Typically, in a FOSS environment, however, software is made available with the simple specification on a website (e.g., "licensed under the GPLv3 license") or in the source code of the software that it concerns FOSS.⁸⁵⁴ In such configurations, there is no requirement that the license is explicitly accepted via an affirmative manifestation of consent by the licensee. Having to click and confirm every time could in some cases interfere with the use of the software. The Open Source Definition opposes demanding explicit agreement with the license conditions with the aim of confirming the agreement between licensor and licensee.⁸⁵⁵ The main question that arises here is whether in these cases a valid license is entered into.

The answer to this question is unclear. FOSS licenses are subject, inter alia, to the rules on electronic contracts in the Electronic Commerce Act. 856 Although this legal instrument contains a legal fiction for consent based on a need for consent plus a subsequent confirmation by the licensee, this double consent in principle would not be required in B2B or direct (meaning online) B2C (with immediate delivery), as is the case with many FOSS licenses. 857 That notwithstanding, the licensee's confirmation would be required, as would minimum information requirements considering the applicable license. However, these legal provisions must be applied in the context of a FOSS licensing transaction, where the licensee is a user of a copyright protected work, who therefore is required to indicate the grounds on which he/she is able to use the work. Using the software without the author's consent entails copyright infringement. That implies that everyone who wants to use software which they find via the internet has an obligation to actively look for a license. If the user cannot prove he has a license⁸⁵⁸, he must refrain from using it. The mere availability of a software work on the internet does not mean it becomes public domain⁸⁵⁹ and there is no Portuguese case law that sustains the applicability of a doctrine of implied consent (free of FOSS terms and conditions) in these cases.⁸⁶⁰

characterized by the online delivery of electronic files with download, and arguing for the validity of such agreements, even when based in pre-formulated standard terms and conditions. ⁸⁵⁴A typical example is provided in M. BAIN, "Spain", in The International Free and Open Source Software Law Book, http://ifosslawbook.org/spain/ ("in the code file header and with luck, in a COPYING.txt file or a /legal/ folder").

⁸⁵⁵See Criteria 10 of the OSD, annotated, http://opensource.org/osd-annotated. Under the criteria that the "License Must Be Technology-Neutral", the OSD notes that "Provisions mandating so-called *click-wrap* may conflict with important methods of software distribution such as FTP download, CD-ROM anthologies, and web mirroring; such provisions may also hinder code re-use".

⁸⁵⁶See art. 24 of the Electronic Commerce Act, which applies to all contracts concluded via electronic or computerized means, whether or not they are deemed commercial.

⁸⁵⁷See art. 29(2) of the Electronic Commerce Act, clarifying that in cases of immediate online delivery of the good (i.e. software), the consumers' acknowledgement of receipt is not required. See also DIAS PEREIRA 2011, p. 367.

⁸⁵⁸Unless a legal exception applies.

 $^{^{859}}$ See arts 38-39 of the PCA.

 $^{^{860}\}mathrm{See}$ A.L. DIAS PEREIRA, Direitos de Autor e Liberdade de Informação, Almedina, 2008, pp. 582-584, discussing the minimum rights of the legitimate software user and noting that

As such, it is arguable that the unavailability of the applicable terms and conditions may give rise to licensee challenges to the validity of certain clauses or terms of the contract. A licensor could respond by stating that even de minimis indications, coupled with the above arguments would necessarily mean that specific FOSS licensing terms apply to all such software he makes available (thus constituting the required written contract). Accordingly, a disagreement with those terms would mean a failure of the licensee to accept the applicable terms of use, the consequence being that no license had been granted and any use of the FOSS would be an infringement of copyright. Competent Portuguese Courts would in all likelihood afford relevance to business practices in the professional sector as to the conclusion of such contracts. To that point, the Portuguese practice is similar to other European countries, where it is common knowledge and practice of software developers that FOSS licenses are made available to be read in the source code or on the project website.⁸⁶¹ In sum, in this professional context any arguments that the FOSS terms were unknown or that the FOSS license did not validly bind the parties are unlikely to succeed. 862

In any event, it seems doubtful that a user would benefit from disputing the existence of a FOSS license, as that would imply the invalidity of the copyright license and prevent him/her from using the FOSS.

Finally, the obligation to establish the existence of specific licensing terms governing the transaction is also relevant if we consider specific contractual rules in the PCA as directly applicable to FOSS agreements. This is because copyright contracts under PCA are subject to a principle of solemnity, meaning that they must be in written form. The Portuguese Supreme Court and some legal scholarship qualify this requirement as a formality ad probationem, directed at establishing the existence of the agreement and proving it. This position is controversial, as it is possible to instead qualify said requirement as an ad substantiam formality (required for the validity of the agreement itself), by focusing on the general default rule of the Civil Code that any contractual declaration inconsistent with legally prescribed formal requirements is null, unless stated

even the private use of software requires, in principle, a license granted directly or indirectly by the rights holder.

⁸⁶¹The same is true, e.g., for Spain. See M. BAIN, "Spain", in The International Free and Open Source Software Law Book, http://ifosslawbook.org/spain/.

⁸⁶²Some doubts arise in connection with the fact that FOSS licenses are in English. Here, a distinction between professionals and consumers is required. For the first, it is also a use and custom of the sector that vast majority of technical documentation is in English, meaning that courts may accept that use of English language for the license is acceptable. As regards the second, no such argument is valid.

⁸⁶³See art. 41(2) of the PCA. See considerations above in sections "Copyright Contracts" and "Enforcing FOSS Licenses, General Considerations" on the potential application of art. 41 (and rules of formal requirements) to software agreements.

⁸⁶⁴See decisions from the Portuguese Supreme Court of April 21, 1988, December 15, 1998, March 3, 2006, and July 1, 2008. For the legal scholarship, see: REBELLO 2002, pp. 85-86; A.M. VITORINO, A Eficácia dos Contratos de Direito de Autor, Almedina, 1995, pp. 27-28; and BESSA 2012, pp.1184ff.

otherwise. 865 The adoption of this argument would lead to the nullity of FOSS agreements where it is impossible to establish the underlying licensing terms.

Breach of FOSS licenses

Infringement of FOSS licenses may give rise to separate claims, on the basis of copyright infringement and breach of contract. A claim for copyright infringement is justified solely when the violation affects the exclusive rights of the author protected by copyright. This may bring about both civil and criminal measures, with the first being of significant scope post-implementation of the Enforcement Directive. The breach of FOSS contractual clauses not based on the exclusive rights of the author does not imply copyright infringement, translating instead into breach of contract, regulated by the Civil Code. Typical examples thereof are the non-payment of royalties, insufficient exploitation of the work and the violation of non-competition obligations. The rights holder is legally entitled to take action in civil courts under both claims. In fact, from a litigation practice standpoint, he/she would be advised to do so, due to potential challenges on the validity of the FOSS license.

Waiver and liability

Typically, FOSS licenses contain very strong exoneration clauses, which discharge the author from all liability. See One of the traditional justifications of FOSS proponents for this is that FOSS is often made available without a fee, as a result of which the author generates insufficient income to pay for liability insurances and legal costs. See This argument, although uncontested vis-à-vis amateur programmers, does not apply to the same extent in relation to professional programmers who build their business model around FOSS. To cover the eventuality of being held liable for applicable default legal provisions, professional suppliers of FOSS or related services often provide guarantees and technical support, a practice allowed by some FOSS licensing terms. The main legal issue raised in this context relates to the admissibility of such exoneration clauses under Portuguese law.

General rules on exclusion and limitation of liability

⁸⁶⁵See art. 220 of the Civil Code. For an overview of the arguments of this section of the legal scholarship, see BESSA 2012, pp.1184ff.

 $^{^{866}\}mathrm{On}$ the difficulty of distinguishing contractual breaches of copyright license agreements that translate into copyright infringement (because they impact on the core of the exclusive right) from those that merely translate into contractual liability, see ASCENSÃO 2011, pp. 1101-112. $^{867}\mathrm{See}$ arts 195-211-B of the PCA.

⁸⁶⁸See e.g., the BSD license (http://www.opensource.org/licenses/bsd-license) and Clauses 15 (Disclaimer of Warranty) and 16 (Limitation of Liability) of the GPL version 3.

⁸⁶⁹B. PERENS, "The Open Source Definition", Open Sources: Voices from the Open Source Revolution, http://www.virtualblueness.net/os/perens.html.

⁸⁷⁰The GPL expressly allows this (GPL version 2, art. 11; GPL version 3, art. 7).

Most clauses of this type are aimed at eliminating or restricting (e.g., by establishing a monetary ceiling) ex ante the Licensor's obligation to indemnify the licensee for damages caused by the licensed FOSS.

Under Portuguese law and in the context of contractual liability, any clause whereby the creditor (here: the licensor) waives in advance any of his legally established rights for instances of breach of contract or delay by the debtor (here: the licensee), is null and void.⁸⁷¹ This is subject to one exception: such waivers or limitations are deemed acceptable for damages resulting from acts of legal representatives and auxiliary persons, so long as the exemption does not cover acts in violation of duties imposed by norms of public order.⁸⁷²

This general rule is supplemented by specific rules applying to pre-formulated standard contracts, which not only prohibit general clauses contrary to the principle of good faith, but also specific exoneration clauses found in B2B and B2C agreements. These specific rules prohibit clauses in standardized contracts that exclude or limit (directly or indirectly) liability for: Damages to life, moral or physical integrity, or health; Non-contractual economic damages caused to the licensee or a third party; Damages resulting from intentional (with "dolo") or grossly negligent (with "culpa grave") non-performance, delay or defective performance; Damages resulting from intentional or grossly negligent acts of legal representatives and auxiliary persons. 874

In sum, it can be stated that most exemption or limitation clauses present in FOSS licenses should be deemed null and void when they purport to apply to intentional or grossly negligent acts; in addition, specific clauses (e.g. applying to defective performance or acts of legal representatives and auxiliary persons) may be valid only in cases of minor negligence ("culpa leve").⁸⁷⁵

Specific rules for consumers, sellers and producers

In addition to the general regime explained above, stricter rules may apply that completely forbid exoneration or limitation clauses, notably when the licensor qualifies as a producer or professional seller in a relationship with a consumer.⁸⁷⁶

As a preliminary remark, it is important to note that many FOSS projects should not be qualified as producers or professional sellers. Likewise, a good number of licensees are developers and not consumers. Therefore, the following

 $^{^{871}}$ See art. 809 of the Civil Code.

 $^{^{872}}$ See art. 800(2) of the Civil Code.

 $^{^{873}\}mathrm{Such}$ rules are found mostly in arts 15-23 of the STCA. See above section "Copyright Contracts".

⁸⁷⁴See arts 18(a), (b), (c) and (d) of the STCA. These rules apply also to contracts with consumers ex vi art. 20 of the STCA.

⁸⁷⁵ See A. PINTO MONTEIRO, "A responsabilidade civil na negociação informática", pp. 229-239, Direito da Sociedade da Informação I, Coimbra Editora - 1999, p. 238.

 $^{^{876}\}mathrm{See}$ art. 16 of Decree-Law 10/2013, of January 28 (hereinafter, the "Consumer Protection Act").

considerations do not apply to either category of actors in the FOSS licensing chain.

A further distinction must be made between the qualification of the licensor as a "producer" or a "seller". Under the Portuguese Sale of Consumer Goods Act⁸⁷⁷, a "producer" is a manufacturer, EU importer or any other entity that is identified as the producer of a consumer good. It is disputable whether FOSS developers and distributers can also be qualified as producers. Differently, a "seller" is the individual or company that, under a contract, sells (leases or provides related services to) consumer goods within his/her professional activity. The Sale of Consumer Goods Act applies only to consumer goods, defined as immovable goods and "movable tangible goods" ("bem móvel corpóreo").

If nonetheless one considers that licensed software qualifies as a consumer good (and the underlying transaction is a "sale" or "lease"), then the professional seller is deemed to know of any hidden defects in the software that are manifested up until 2 years after its "delivery". As a consequence of such defects, the consumer is entitled to the reparation/substitution of the good or termination of the contract, si in which case he/she is entitled to damages arising from the supply of defective goods. Any exemption or limitation of liability clause that affects consumer rights derived from hidden defects known (or presumed to be known) by the seller at the time of the sale is null and void.

Under such a fact pattern, the professional seller of FOSS would be liable before the consumer under a presumption that the lack of conformity existed as of the good's delivery date, unless he/she could demonstrate the lack of conformity to be incompatible with the nature of the good or with the characteristics of the defect. See Under the general regime on the sale of goods (applicable to software and FOSS only if one considers the analogy admissible), the seller would be liable

 $^{^{877} \}rm Decree-Law~67/2003,$ of April 8 (as amended by Decree-Law 84/2008, of May 21) (hereinafter, the "Sale of Consumer Goods Act").

⁸⁷⁸See art. 1-B(d) of the Sale of Consumer Goods Act.

⁸⁷⁹For a discussion on this topic, see T. ENGELHARDT & T. JAEGER, "Germany", in The International Free and Open Source Software Law Book, http://ifosslawbook.org/germany/. ⁸⁸⁰See arts 1-A(2) and 1-B(c) of the Sale of Consumer Goods Act.

⁸⁸¹See art. 1-B(b) of the Sale of Consumer Goods Act. A similar definition of product (movable good) is found in art. 3 of Law 383/89, of Nov. 6 (last amended by Decree-Law 131/2001, of April 24), implementing Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations and administrative provisions of the Member States concerning liability for defective products (hereinafter, the "Liability for Defective Products Act"). As such, the scope of this law does not extend beyond physical goods, and it would be extremely debatable to consider FOSS licenses covered thereby. Moreover, as noted above, the qualification of a FOSS license as a sale (or even lease) agreement, triggering the application of these provisions, is also arguable.See above section "Copyright Contracts".

⁸⁸²See art. 3(2) of the Sale of Consumer Goods Act.

⁸⁸³See art. 4(1) of the Sale of Consumer Goods Act.

⁸⁸⁴See, in general, arts 798ff. of the Civil Code. See also art. 12(1) of the Consumer Protection Act, which provides an identical mandatory right for defective services.

⁸⁸⁵ See art. 10(1) of the Sale of Consumer Goods Act and the broader art. 16 of the Consumer Protection Act.

⁸⁸⁶See art. 3(2) of the Sale of Consumer Goods Act.

to repair or replace the software unless he/she could establish lack of knowledge (without reasonable grounds for knowing) of the defect.⁸⁸⁷ Failure to establish this "unintentional" lack of knowledge entitles the licensee to termination of the agreement and damages.⁸⁸⁸ In practice, the burden of proof of the seller in either case will be difficult to meet.

Should the developers or distributors of FOSS be qualified as producers, the Sale of Consumer Goods Act's rules on direct liability of the producer may apply. 889 According to these, the consumer is always entitled to claim from the producer the reparation or replacement of the good, unless such claim is impossible or disproportionate taking into consideration the value of the good, the nature of the defect and the inconveniences caused to the consumer by the reparation or replacement. 890 Importantly, claims under this Act cannot be waived or limited in advance; any agreements to the contrary are null and void.

Moreover, the Consumer Protection Act confers upon the consumer a right to damages resulting from the supply of defective goods or services, 891 making the producer strictly liable for all damages arising from defects in the goods he places on the market. 892 Similarly to the Sale of Consumer Goods Act, these consumer rights may not be waived or limited in advance; any agreements to the contrary are null and void. 893

Finally, the producer is also strictly liable under the Liability for Defective Products Act⁸⁹⁴ for damages caused by his or hers unsafe defective products.⁸⁹⁵ Only damages resulting in death and personal injury, or those related to goods of the licensee destined to private use are covered.⁸⁹⁶ The producer can only avoid liability by showing the occurrence of specific circumstances, such as that he did not make the product available.⁸⁹⁷ Importantly for FOSS, the producer is not responsible if he proves that he did not manufacture the product for sale or any type of commercial distribution, nor that he produced or distributed it within the scope of a professional activity.⁸⁹⁸ Again, these rights may not be waived or limited in advance; any agreements to the contrary null and void.⁸⁹⁹

⁸⁸⁷See art. 914 of the Civil Code.

 $^{{}^{888}\}mathrm{See}$ arts 905 and 908-909 of the Civil Code, applicable ex vi art. 913(1) of the same diploma.

⁸⁸⁹See art. 6 of the Sale of Consumer Goods Act.

 $^{^{890}}$ See art. 6(1) of the Sale of Consumer Goods Act.

⁸⁹¹ See art. 12(1) of the Consumer Protection Act.

⁸⁹² See art. 12(2) of the Consumer Protection Act.

⁸⁹³Art. 16 of the Consumer Protection Act.

 $^{^{894}}$ This law has a similar concept of producer to that of the Sale of Consumer Goods Act.

⁸⁹⁵See arts. 1 and 4 of the Liability for Defective Products Act. Art. 3 defines products as movable goods, thus raising the same question vis-à-vis the applicability of this legal regime to FOSS licenses, as discussed above for the definition of consumer goods under the Sale of Consumer Goods Act.

⁸⁹⁶See art. 8(c) of the Liability for Defective Products Act.

⁸⁹⁷See art. 5 of the Liability for Defective Products Act.

⁸⁹⁸See art. 5(c) of the Liability for Defective Products Act.

⁸⁹⁹See art. 10 of the Liability for Defective Products Act.

In sum, disclaimers of liability (either by the producer or the seller) will usually be held invalid with respect to consumer users, to the extent that the cited legal provisions apply to FOSS licenses. 900 As mentioned above, other than arguing that FOSS is not a "consumer good" or a "product" under applicable laws, it can also be defended that there is no commercial relationship between the parties (and thus, the licensor is not a producer or seller) in most instances of a FOSS chain of licensing. That being the case, consumer laws or related provisions would not apply to the full extent. This line of argument is reinforced by the free (gratis) nature of FOSS. However, the countervailing argument could be made that this free nature is not definitive, as also professional sellers provide software for free.

Finally, some FOSS licenses contain interpreting provisions, which limit the contractual effects of these limitations or exclusions of liability "to the extent permitted by mandatory applicable law". ⁹⁰¹ It is arguable that such safeguard provisions might secure the remaining validity of the limitation or exclusion clause in an adapted version by allowing competent courts to operate the reduction or conversion of the invalid portion of such clauses, so as to comply with mandatory legal provisions. ⁹⁰²

The Copyleft Principle

Principle

A characteristic found in different (but not all) FOSS licenses is the so-called "copyleft" principle. FOSS licenses that incorporate the copyleft principle lay down by contract that everyone in the chain of consecutive users, in return for the right of use that is assigned (or licensed), needs to distribute the improvements made to the software and the derivative works created under the same conditions to other users, if he/she chooses to distribute or make available such improvements or derivative works. In other words, software that incorporates copyleft FOSS needs to be distributed or made available subsequently as copyleft FOSS. As such, it is not possible to incorporate copyright protected parts of copyleft software in a proprietary licensed work.

 $^{^{900}\}mathrm{Although}$ it is arguable that the Sale of Consumer Goods Act and the Liability for Defective Products Act do not apply to FOSS licenses, this issue as not been discussed in Portuguese case law and may vary in accordance with the specific context under which a FOSS license is provided.

⁹⁰¹See GPL version 3, art. 17 ("Interpretation of Sections 15 and 16"): If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

⁹⁰²See arts 292 and 293 of the Civil Code on reduction and conversion of invalid provisions.
⁹⁰³Neither the principles (freedoms) of the Free Software movement, nor the OSD mandate the copyleft clause. Several FOSS licenses don't contain a copyleft clause. Examples are the Berkeley Software Distribution (BSD) license and the Apache license.

⁹⁰⁴E.g., GPL version 3, art. 5, and GPL version 2, art. 2(b).

The copyleft principle can restrict the commercial possibilities of the software. 905 Warnings have been issued for the dangers that companies run if a negligent or vindictive employee were to incorporate a piece of copyleft code in the code of proprietary software. In theory this could mean that the company would be obliged to make its proprietary software available under a copyleft FOSS license. Although caution is necessary, the relevant question is whether these worst-case scenarios are realistic under Portuguese law.

The sanction for incorporating copyleft code in proprietary software will usually be restricted to either a prohibition to distribute the software which is in breach or the obligation to remove this piece of code from the program. If the unlawful use has caused damage to the author, this damage will need to be redressed, but usually not beyond an amount correspondent to the damage actually suffered. 906 In any event, it is unlikely that the owner of the proprietary software at stake would be obliged to release all its code under the copyleft FOSS license.

Copyleft Validity

The question relating to the validity of the copyleft clause coincides with the question of whether a rights holder is able to validly lay down the conditions under which composite or derivative works must be distributed or made available. The answer to this question is affirmative: while the rights holder of the original work does not hold any copyright in the derivative work, he/she is entitled to determine the conditions for the creation and redistribution of a derivative work of the original work.⁹⁰⁷ A composite or derivative work can therefore only be exploited subject to the consent of the copyright owner of the original work.⁹⁰⁸

Based on the copyright ownership of his/her specific contribution to the FOSS, a rights holder is thus able to authorize a specific use of the work, or link certain terms and conditions to it. That right to determine the destined use or conditions of use of a work is clearly stated in the PCA, namely in Article 40(b)—establishing the general right to authorize uses of a copyrighted work, Article 41—laying down the general regime for such authorizations, Article 67—establishing a general exclusive right to use and exploit a work—and art. 68—clarifying the broad scope of such right to use, and exemplifying with instances of uses that correspond to acts of adaptation or creation of derivative works. Therefore, the rights holder is entitled to lay down a copyleft condition to the use of his/her works based on these rights. 909

All rights are subject to abuse, including copyright. In particular, contractual terms and conditions must comply with imperative legal provisions—such as

 $^{^{905}\}mathrm{See}$ e.g., M. OLSON, "Dual Licensing", in Open Sources 2.0: The Continuing Evolution (Ed. C., DiBona, D., Cooper and M., Stone), O'Reilly, 2006 (hereinafter, "OLSON 2006").

⁹⁰⁶See infra section "Damages".

⁹⁰⁷See arts 3, 20, 67, 68 (maxime 68(2)(g) and (h)), all of the PCA.

⁹⁰⁸See arts 3, 20, 40(a), 41 67, 68 (maxime art. 68(2)(g) and (h)), all of the PCA.

⁹⁰⁹See, in a similar sense, ASCENSÃO 2011, p. 99.

those regarding consumer protection and data privacy –, as well as with morality and public order.

Under Portuguese civil law, an abuse of right is defined as an exercise of a right in which the rights holder manifestly exceeds the limits imposed by good faith, prevailing costumes of by the social or economic purpose of the underlying right. An author can therefore not exercise his economic and moral rights in a random way that conflicts with the aforementioned principles. Yet, the exercise by a rights holder of his copyrights by determining the terms and conditions of exploitation pursuant to his/her entitlements under the PCA, the Software Act or other related legal instrument cannot be deemed an abuse of rights "per se"; in fact, only in exceptional cases and circumstances will an author who invokes his copyright be liable to a claim of abuse of rights.

Therefore, licensing a work under a copyleft restriction will in principle not constitute an abuse of right, considering that the author, in general, will be able to prove a legitimate moral or tangible interest in selecting that form of "exploitation". An example of such an interest shared by most authors that select this private ordering model is the desire to release and maintain the work under the FOSS "ecosystem" or "commons", also in a derivative or modified format. Significantly, this "personal interest" echoes a similar public interest motivation of such authors. Likewise, companies which have built business models around distributing or making available software under copyleft restrictions will as a rule have no difficulties in establishing a legitimate interest.

However, it should be noted that the scope of copyleft provisions — and by extension an author-licensor's entitlement — covers only the original work, derivative works and any composite works incorporated therein. Independent works are outside the scope of a FOSS work and the copyleft provision. In other words, the expansion of the scope of application of any such provision to works outside the aforementioned scope could be deemed an abuse of (copyright) rights, as it would purport to extend the author-licensor's exclusive right beyond that which is legally permitted. Examples of such abusive copyleft provisions would be those applying to works not covered by copyright (either excluded ab initio from protection or already in the public domain) and independent works stored on a similar carrier device than that of a FOSS license. ⁹¹¹

Conversely, an argument could be made that, being the FOSS license a contract, it would be subject to the general principle of freedom of contract, under which parties are free to stipulate the terms and conditions of their agreement, subject to restrictions in the law. In that sense, if the condition imposed on further distribution is considered legally admissible, the licensee could be deemed bound by such clauses, even if exogenous to copyright. However, it is noteworthy that such restriction clauses might clash with competition law

 $^{^{910}\}mathrm{See}$ art. 334 of the Civil Code.

 $^{^{911}\}mathrm{The}$ GPL version 3 stipulates otherwise. The OSD prohibits this under clause 9.

⁹¹²See art. 405 of the Civil Code.

provisions — e.g. prohibiting certain forms of tying and bundling or restrictions on legitimate commercial uses 913 — or even consumer protection laws that prohibit restrictions or imposition of conditions, as noted above. 914

Finally, it has been argued that copyleft restrictions may run contrary to the exhaustion principle, with regard to the exclusive right of distribution of tangible copies of software. However, the Software Act — in articulation with the PCA — prescribe that any act of distribution of tangible copies by the rights holder or with his consent results in the exhaustion of the right to control the distribution of that copy in the European Union, with the exception of the right to control the further leasing and lending out of the program or a copy thereof. Importantly, this "exhaustion" is designed to apply to controlling the tangible copy lawfully released in the European market. In theory, it does not affect the right of the author to lay down certain conditions regarding the use of the (intangible) work on that copy. As such, the conditions of use established in the license on this work "run" with the tangible copy, as the sole authorization to exploit the intangible work on that copy.

The above conclusions seem unaffected by the most recent CJEU decision in UsedSoft v Oracle, where it was decided that Article 4(2) of the Software Directive is to be interpreted "as meaning that the right of distribution of a copy of a computer program is exhausted if the copyright holder who has authorized, even free of charge, the downloading of that copy from the internet onto a data carrier has also conferred, in return for payment of a fee intended to enable him to obtain a remuneration corresponding to the economic value of the copy of the work of which he is the proprietor, a right to use that copy for an unlimited period." In fact, even in case of direct application of the ruling in UsedSoft v Oracle to the fullest extent to FOSS licenses, such application would likely not affect the validity of the copyleft provisions to subsequent making available of that copy to downstream licensees (or assignees).

Damages

Damages caused by copyright infringement are compensated in accordance with Articles 210 and 211 of the PCA, and generally applicable principles of law relating to unlawful acts (non-contractual infringements) and breaches of contract. Article 210, regarding the unlawful identification of a third party as an author,

⁹¹³See Law 19/2012, of May 8, in particular art. 11(1) and (2)(d), potentially applying to tying and bundling (similar to art. 101(1)(e) of the TFEU). For a brief overview of the relationship of intellectual property contracts with competition law, see FERREIRA DE ALMEIDA 2011, pp. 21-23. For a more detailed overview on the intersection between intellectual property contracts and competition law, see C. TRABUCO & I. F. de OLIVEIRA, "Contratos de Direito da Propriedade Intelectual e Direito da Concorrência", in Contratos de Direito de Autor e de Direito Industrial, Almedina, 2011, pp. 127-156.

⁹¹⁴See above sections "Copyright Contracts" and "Enforcing FOSS Licenses".

⁹¹⁵See arts 8 of the Software Act and 68(5) of the PCA.

 $^{^{916}\}mathrm{CJEU},$ Case C-128/11, UsedSoft GmbH v Oracle International Corp.

 $^{^{917}}$ These can be found, inter alia, in arts 483ff. (non-contractual), 798ff (contractual) and 227 (pre-contractual) of the Civil Code.

restates a general principle in the Civil Code and is therefore redundant. Article 211, on the other hand, is the key provision under the PCA concerning damages, as it constitutes the national implementation of Article 13 of the Enforcement Directive. It has been characterized as a long and unclear provision of difficult articulation with the general regime. 918

As with the general regime, Article 211 of the PCA entitles the injured party in a copyright infringement to request compensation for the losses and damages resulting from the infringement.⁹¹⁹ It basically sets forth two alternative regimes for the calculation of compensation by damages.

The first regime, echoing Article 13(1)(a) of the Enforcement Directive, covers economic and non-economic damages. Economic damages encompass: (i) infringer's profits 920 ; (ii) lost profits of the infringed party; and (iii) emerging damages of the infringed party. 921 / 922 The provision on non-economic damages in Article 211(4) of the PCA is less clear, as it creates some tensions with the general regime for these types of damages. 923 Under the general regime, the calculation of these damages follows the principle of equity, meaning that it takes into account the degree of intentionality of the infringer, the economic situation of both infringer and infringed party and other relevant circumstances. 924 By meshing these factors and introducing a certain degree of deviation therefrom, the text of Article 211(4) of the PCA might lead to an expansive interpretation of the scope of these damages for copyright infringement; however, it is our view that such different textual articulation merely impacts the method of calculation of non-economic damages, leaving their scope unaffected. 925

The application of the second regime, which implements art. 13(1)(b) of the Enforcement Directive, is subject to two conditions: (i) the impossibility to apply the first method of calculation (i.e., it is designed as an alternative to the first; (ii) the express acceptance by the rights holder that the alternative method is used. 926 Under the alternative method, a minimum baseline amount of damages is established; such minimum threshold is to be equal to the hypothetical remuneration of the infringed party should he/she had granted the infringer a license

 $^{^{918}}$ See TRIGO, M. DA GRAÇA, Responsabilidade Civil por Violação de Direito Intelectual, in Direito da Sociedade da Informação X, pp. 151-169, 2012 (hereinafter, "TRIGO 2012"), p. 159.

¹919 See arts. 483 of the Civil Code and 211(1) of the PCA.

 $^{^{920}}$ The nature of infringer's profits as an economic or non-economic damage under Portuguese law is a debated topic among legal scholarship. For a brief summary of that debate, see TRIGO 2012, pp. 160-162.

⁹²¹These include most expenses and costs with protection of copyright, such as those with investigation of the infringement and cease and desist thereof.

⁹²²See art. 211(2) of the PCA. Art. 211(3) contains a narrow concretization of this general principle on economic damages, and is of no consequence in the FOSS context.

⁹²³See TRIGO 2012, pp.162-163.

 $^{^{924}\}mathrm{See}$ art. 496(3), and its articulation with art. 494, both of the Civil Code.

 $^{^{925}\}mathrm{We}$ follow here the same reasoning of TRIGO 2012, p. 163.

⁹²⁶See art. 211(5) of the PCA. This second requirement, which finds no basis in the Enforcement Directive, seems difficult to understand. See TRIGO 2012, p.164.

covering the infringing acts. ⁹²⁷ This presumed license calculation method — an innovation in Portuguese law — provides a less complex alternative to the alternative described above, and should for that reason become popular in judicial practice. ⁹²⁸ Like the first method, it allows rights holders to recover expenses; differently, it makes no mention to non-economic damages. ⁹²⁹ Notwithstanding, it is our opinion, following some legal scholarship, that non-economic damages are also recoverable under this second method. ⁹³⁰

Finally, Article 211(6) of the PCA stipulates that, if the infringer is a repeat offender of the infringed party's rights or the infringing act is deemed particularly serious, the court may calculate damages by cumulating some or all of the criteria in paragraphs (1) to (5). This could be interpreted as an introduction of punitive damages for copyright infringement. However, given that the provision basically allows for the combination of both methods described above, and that the presumed license method only applies if the first method does not, the scope of the provision seems limited, likely resulting in adding density to the calculation of non-economic damages based on equity.⁹³¹

Infringements of software copyrights follow the same regime as infringements of every other copyright for damages purposes. ⁹³² The aforementioned principles, measures and methods of calculation are therefore applicable in case of copyright infringements of software. As such, for software distributed under a FOSS license, infringements will be sanctioned in the same manner; the specific nature of FOSS licenses cannot be construed as a waiver by the author of these rights.

It is possible to argue that in an infringement of FOSS the damage to the copyright owner will be limited, as the author has made his work freely available via the internet. This argument, even if it is prima facie coherent at least vis-à-vis patrimonial damages, does not always apply. Besides establishing a reputation and recognition with the related value creation, an author can have other reasons to make his work *freely* available. ⁹³³ The author may also have a direct monetary advantage from the free making available of his work, such as generating advertising revenue off the FOSS work (where the gratis nature of the work potentiates its user base), providing related services (e.g. management, consulting or development), licensing proprietary add-ons⁹³⁴ or providing

⁹²⁷See art. 211(5) of the PCA.

⁹²⁸See TRIGO 2012, p.164.

 $^{^{929}\}mathrm{This}$ presents a clear parallel to the absence of reference to "moral damages" in art. 13(1)(b) of the Enforcement Directive.

⁹³⁰Arguing this position, see TRIGO 2012, p.165.

⁹³¹See TRIGO 2012, p.165.

⁹³² See art. 15 of the Software Act. See also R. SAAVEDRA, A protecção jurídica do software e a Internet, Lisboa, Sociedade Portuguesa de Autores, Publicações Dom Quixote, 1998, pp. 307-312

⁹³³See e.g. C. DIBONA, D. COOPER & M. STONE, "Introduction", in Open Sources 2.0: The Continuing Evolution (Ed. C., DiBona, D., Cooper and M., Stone), O'Reilly, 2006.

 $^{^{934}}$ Add-ons are additions to the free work to which the author reserves all rights, and which can only be used against payment.

a dual licensing model.⁹³⁵ The latter model encompasses a dual-track licensing scheme, whereby the licensor grants first a copyleft license for a FOSS work, thus ensuring its fast dissemination to a wide user-base; at a later stage, the licensor makes available a second non-copyleft license against consideration, targeted at interested parties wishing to use the work without their own additions being affected by "viral" copyleft effects of the initial FOSS license.

FOSS Cases in Portugal

No cases have been reported yet (December 2013).

South Africa

author:[Rens,Andrew]

Introduction to Software Protection under South African Law

Body of Law

The law affecting rights and control over computer programs is essentially statutory. Rights in software in South Africa arise primarily from the Copyright Act⁹³⁶. Historically South African copyright legislation and judicial interpretation of copyright legislation have been influenced by British law. Software is in theory not patentable in South Africa⁹³⁷, but since South Africa registers patents without substantive examination patents over software have been registered⁹³⁸. Although these patents are in principle void it is necessary to approach a court to declare them void thus they have some effect in practice.

Apart from copyright and patent legislation rights to computer programs are most affected by the common law of contract. South Africa is a Roman Dutch common law jurisdiction⁹³⁹ in which the principles underlying the common law of contract and property are based upon the 'ius civilis'in a way analogous to Scotland. It is worth noting that South Africa has a fully justiciable Bill of Rights which includes socio-economic rights and enables the enforcement of fundamental rights against non-State actors. The Constitutional Court has refused to recognize a right to intellectual property as a fundamental right.⁹⁴⁰

 $^{^{935}\}mathrm{See}$ e.g. OLSON 2006, p.35.

⁹³⁶"(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^{937}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

 $^{^{938}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{^{9\}bar{3}9}15$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

⁹⁴⁰For example, the Uniform Trade Secrets Act as embodied in California state law

Copyright Act: Object of Protection

Computer programs are the subject of copyright protection as a specifically designated category of work. A computer program is defined as a set of instructions which when used directly or indirectly in a computer, directs its operation to bring about a result'⁹⁴¹. Both subject and object code therefore fall within the definition of computer program. A program need not function correctly to be eligible for copyright protection⁹⁴². The definition of literary works explicitly excludes computer programs. However preparatory materials such as flow charts do not fall within the definition of computer program and are therefore protected as literary works. Other categories of works such as cinematographic films are defined so as to exclude computer programs⁹⁴³.

To be eligible for copyright a computer program must be reduced to material form 944 . Recording as 'digital data' meets the requirement. Copyright is regarded as an immovable intangible 945 .

Copyright Holders

The holder of the exclusive rights of copyright is referred to as the owner in the Copyright Act.

The author of a computer program is the person who exercised control over the making of the computer program⁹⁴⁶. Copyright in software vests in the person regarded as the author⁹⁴⁷ except when it vests in the employer of the author because it is regarded as taking place in the course of employment. Co-creators are joint-authors and usually joint-owners. A computer program made in the course of the author's employment vests in the employer⁹⁴⁸. This has been interpreted very broadly. A person who was not employed to write code who nevertheless wrote code using his own time and computer resources but who used the code in his work duties, and modified it to be compatible with software used by his employer and as requested by fellow employees was held by a court to have acted in the course of his employment⁹⁴⁹. The default rule on employee created software may be modified by contract⁹⁵⁰. The statutory provision that

may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{941}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

⁹⁴²World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

⁹⁴³The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

⁹⁴⁴The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of 1976.

 $^{^{945} \}mbox{Public Law 96-517}$ found at http://law.copyrightdata.com/amendments.php.

⁹⁴⁶17 U.S.C. §102(a).

⁹⁴⁷17 U.S.C. §411(a).

⁹⁴⁸17 U.S. Code §102(a).

⁹⁴⁹17 U.S. Code §201(a).

⁹⁵⁰17 U.S. Code §201(b).

copyright in a computer program made by an employee vests in the employer does not apply to contractors. However the definition of author as the person who exercise control over the making of a program has been interpreted so that an independent contractor who planned and wrote code was not regarded as the author, instead the person who contracted him and decided how he wanted the software modified was regarded as the author ⁹⁵¹. One consequence is that an independent contractor might be the author and owner of the preparatory materials of a computer program and of literary, artistic, musical and cinematographic outputs of a computer program while the person who commissioned the contractor might be regarded as author and owner of the computer program.

However when an independent contractor agrees to create a computer program which is clearly specified beforehand and without further instructions albeit periodic review then the independent contractor will likely be the author⁹⁵². There is no statutory provision to enable variation by agreement of the default rule that apart from employment relationships the person deemed to be author is owner, however an agreement to assign copyright in a computer program that hasn't yet been written is valid⁹⁵³.

Copyright in computer programs made under the direction or control of the State or an international organization vests in the State or international organization⁹⁵⁴. Copyright in software that is produced under the direction or control of South African government departments vests in a state held company; the State Information Technology Agency (Pty) Ltd. ⁹⁵⁵. If a literary, musical, artistic work or a computer program is computer generated then the person who made the arrangements for the creation of the work is regarded as the author ⁹⁵⁶. The category of computer generated computer program is confined to machine generated code and doesn't include use of software tools such as editors or compilers.

Exclusive Rights

According to section 11B of the Copyright Act the owner of copyright in a computer program has the exclusive rights (following the sub-paragraph designation in the Act) of: -

"(a) reproducing the computer program in any manner or form; (b) publishing the computer program if it was hitherto unpublished⁹⁵⁷ (c) performing the computer program in public; (d) broadcasting the computer program; (e) causing the computer program to be transmitted in a diffusion service, unless such

⁹⁵¹ *Id.* 952 17 U.S. Code §101. 953 17 U.S. Code §204. 954 17 U.S. Code §201(a).

⁹⁵⁵¹⁷ U.S. Code §201(a) 95517 U.S. Code §101.

 $^{^{956}1\}text{-}6$ Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law. $^{957}Id.$

service transmits a lawful broadcast, including the computer program, and is operated by the original broadcaster; (f) making an adaptation of the computer program; (g) doing, in relation to an adaptation of the computer program, any of the acts specified in relation to the computer program in paragraphs (a) to (e) inclusive; (h) letting, or offering or exposing for hire by way of trade, directly or indirectly, a copy of the computer program."

Reproduction in any manner or form includes digital forms. Reproducing a substantial portion of a computer program is regarded as reproduction and the same approach is taken to all the exclusive rights⁹⁵⁸. An adaptation of a computer program is defined to include a version of the program in a different programming language, code or notation different or fixed in a different medium⁹⁵⁹. Compiling or decompiling a program is regarded as making an adaptation. An adaptation must itself be a computer program, that is subject code or object code. An adaptation is always regarded as also a reproduction. 960 There is considerable overlap between the definitions of reproduction and adaptation. Thus if a user copies a computer program without significant modification he will be regarded as having reproduced the program while if he modifies it but retains a substantial portion then he will be regarded as having both reproduced and adapted the program. Someone who creates an adaptation may, absent use under an exception, require two licenses from the rightsholder in the prior program, a license to reproduce and a license to adapt. If the prior program has not been published then the person creating the adaptation will also require a publication license in order to distribute the program. An adaptation that is sufficiently original will constitute an original computer program, even if it infringes the first computer program 961 .

The output generated by a computer program that is discernible by the public is not a computer program but rather a literary, artistic work, cinematographic film or sound recording. Performance is defined by reference to 'any mode of visual or acoustic presentation' ⁹⁶². It is therefore not clear what amounts to performing a computer program in public, especially if there is no output.

There is no specific right of distribution⁹⁶³.

Exceptions to Exclusive Rights

Lawful possessors of computer programs can use the single exception specific to computer programs to make copies reasonably necessary for back up, exclusively for personal or private purposes. The copies must be destroyed when possession of the computer program ceases to be lawful⁹⁶⁴.

⁹⁵⁸ See, Id. 959 1-6 Nimmer §§6.02, 6.03. 960 Id. 961 1-6 Nimmer §6.03. 962 17 U.S.C. §201(a). 963 1-6 Nimmer §6.06(A).

The Copyright Act lists a number of exceptions for literary and artistic works. For each other category of work, including computer programs a different selection from the list is applied, in so far as they can be applied. For computer programs these include

- fair dealing for purposes of criticism or review,
- fair dealing in a broadcast or cinematographic film,
- use in judicial proceedings,
- quotation compatible with fair practice,
- illustration for teaching compatible with fair practice,
- reproduction in preparation for broadcast,
- use in a broadcast where use in a cinematographic film has been authorized⁹⁶⁵.

Precisely how many of these exceptions apply in practise to computer programs is unclear. The validity of provisions purporting to restrict use of the exceptions has not been ruled on but they are likely to be ruled invalid as 'contra boni mores' and defeating the purpose of copyright legislation.

Moral Rights

Moral rights were introduced into South African copyright law in order to comply with the Berne Convention, and there is no history nor legal theory animating the rights. Computer programs are listed as one of the type of works in which moral rights vest. The author of a computer program has the moral rights, regardless of transfer of the copyright in the program, to claim authorship of the computer program, and to object to any distortion, mutilation or other modification prejudicial to his honour or reputation but may not prevent changes absolutely necessary on technical grounds or for the purpose of commercial exploitation⁹⁶⁶. Even though the inclusion of clauses purporting to transfer or waiver moral rights in copyright agreements is common practice there is no provision enabling the assignment or waiver of moral rights in the authorising legislation.

Term of Protection

The same term applies to computer programs, cinematographic films and photographs; fifty years. The fifty years is calculated from the end of the year in which the computer program is first published or made available to the public, or if neither has taken place then fifty years from the making of the program.

⁹⁶⁵ Id.

⁹⁶⁶¹⁷ U.S.C. §103(a).

Copyright Assignment

Copyright may be transferred by assignment or in a will ⁹⁶⁷. An assignment or an exclusive license must be in writing and signed ⁹⁶⁸. The writing requirement can be met by a digital format ⁹⁶⁹. The signature requirement can only be met by an 'advanced digital signature' facilitated by a registered provider ⁹⁷⁰. Any of the exclusive rights can be assigned or licensed separately, and assignment can be limited to a specific geographic area or to part of the copyright term.

Non exclusive licenses do not require any formalities and may be oral or inferred from conduct but can be revoked at any time unless the non exclusive license is granted by means of a contract which governs revocation. It is not necessary for a license to use the term irrevocable for it to be construed as irrevocable, however for a license to be irrevocable it must be a contract, and whether it is irrevocable will be depend on how the contract as a whole is construed. A contract may specify in what circumstances, if any, a license may be revoked ⁹⁷¹. A contractual license may specify that it is irrevocable except for breach, and allow for automatic termination on breach, termination on notice and reinstatement. Generally a contract is created in South African law when two or more persons with the power to contract engage in conduct that demonstrates an intention to be legally bound. Although usually analyzed as an 'offer' and an 'acceptance' all that is required is an objective 'consensus ad idem'; that is a meeting of the minds apparent from conduct of the parties. Consideration is not required to form a binding contract in the South African common law of contract.

Technical Protection Measures and Anti-Circumvention

There are no provisions defining technical protection measures or prohibiting circumvention of technical protection measures in South African copyright law. However provisions of the Electronic Communications and Transactions Act 2003 may operate as anti-circumvention measures⁹⁷². The Act creates a number of statutory criminal offenses; intentionally accessing, or modifying, deleting or de-activating data without authority or permission are criminal offenses⁹⁷³. A copyright license constitutes permission to access or modify data, while accessing or modifying data that falls within a copyright exception would be authorized. The definition of the offenses is so vague that the provision may be

 $^{^{967}17}$ U.S.C. $\S 101.$

⁹⁶⁸¹⁻³ Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S.
340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp.
2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

⁹⁶⁹Lothar Determan, Dangerous Liaisons — Software Combinations as Derivative Works? Distribution, Installation, and Execution of Linked Programs Under Copyright Law, Commercial Licenses, and the GPL, 21 Berkeley Tech. L. J. 1421, 1430 (2006).

 $^{^{971}1\}text{-}6$ Nimmer, §6.05.

⁹⁷²17 U.S.C. §103(a).

⁹⁷³ Id.

unconstitutional. Production, distribution and possession of a computer program designed primarily to overcome security measures for the protection of data is also a criminal offense.

Enforcement

Copyright in a computer program is infringed by anyone who without permission, and absent an exception, commits one of the acts reserved for the copyright holder. Parallel import of copies of a program legally available in other jurisdictions can also be infringing in certain circumstances. Knowingly importing (other than for private and domestic use), selling, letting, distributing for trade or acquiring a computer program produced outside South Africa without the permission of the rights holder in South Africa is also an infringement⁹⁷⁴. As a result of the requirement of knowledge a rightsholder who had authorized production and distribution of a computer program outside South Africa would thus have to give notice to recipients in South Africa of the copies of the program legitimately produced elsewhere in order to render future dealing with the copies infringing.

In addition to civil infringement of copyright certain commercial activities have been criminalized. It is a criminal offense knowingly and without permission from the copyright owner to:

- make for sale or hire;
- sell or let for hire;
- exhibit in public by way of trade;
- import into the Republic other than for private or domestic use;
- distribute for purposes of trade or to such an extent so as to prejudice the owner:

infringing copies of a computer program. The owner of copyright in South Africa may require the customs authorities to treat imported copyright goods as prohibited goods⁹⁷⁵.

The Counterfeit Goods Act⁹⁷⁶ definition of counterfeiting includes manufacturing, producing or making whether in South Africa or elsewhere copyright infringing copies that are substantially identical to copyright protected goods without the permission of the exclusive rights holder in South Africa. Dealing in counterfeit goods is a criminal offense, and alleged counterfeit goods may be seized by the police or customs authorities.

⁹⁷⁴1-3 Nimmer §3.02.

 $^{975 \,} Id.$

⁹⁷⁶17 U.S.C.§ 101.

Unprotected software and public domain software

Computer programs are treated as a distinct category of work, defined as instructions that direct the operation of a computer. Computer programs are treated in a very similar way to cinematographic films, sound recordings, broadcasts and programme carrying signals in respect of authorship, terms and exclusive rights. Cinematographic films, sound recordings, broadcasts and programme carrying signals are technical works in which only the precise embodiment is protected. Abstract aspects of these works are not protected by these categories although they may be protected as literary, artistic or musical works. This suggests that computer programs are also technical works and that abstract aspects such as the architecture and the *look and feel* of a program fall outside the definition of a computer program.

There is no provision in the copyright legislation that enables an exclusive rights holder to dedicate a computer program to the public domain. This does not mean that it is not possible to do so. South African common law permits both abandonment of property, and waiver of rights. Waiver of rights must take place through an unequivocal act by the holder of the rights showing that he knew his rights and intended to give them up. A written deed dedicating a computer program to the public domain would seem to meet these criteria. Although a signature on the deed would not be a formal requirement it would strongly indicate that a rights holder knew he was giving up rights.

Analysis of FOSS under South African law

A user who made substantial changes to copyleft code would require a license from the rightsholder of the first version of the code since making the changes would be an adaptation and a copy of the first version of the code. Although South African copyright law permits a bare copyright license without requiring a contract, the only way to ensure that a non-exclusive license is not revocable at will is through incorporating the license in a contract that governs revocation⁹⁷⁷. The general rule is that a person accepting an offer to contract must communicate acceptance to the person making the offer. However it is very well established that when the offer to contract itself sets out a means of acceptance which does not require communication with the person making the offer then acting in the manner prescribed constitutes acceptance⁹⁷⁸

FOSS licenses can therefore be construed as contracts; use of a computer program as permitted by the FOSS license, and adherence to the requirements of the license constitute acceptance sufficient to create a binding agreement. Anyone who uses FOSS licensed software in a way which requires copyright permission

⁹⁷⁷¹⁻³ Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).
97817 U.S.C. §201(c).

but does not adhere to the license has thus failed to accept the offer constituted by the license, has no permission and therefore, if an exception does not apply to the use, infringes the copyright in the software. If a license contains a copyleft clause then a user of the software would have to comply with the copyleft clause, including sharing changes under the same or equivalent license in order to properly accept the contract under which he gained permission. Failure to comply with the copyleft clause would vitiate the formation of a contract and thus render a non-compliant user liable for copyright infringement. Alternatively if there were sufficient initial compliance with the terms of the FOSS license to evidence an intention to be bound by the license then the terms of the license would govern a breach.

It is not necessary to construe adherence to the terms of a FOSS license as constituting consideration.

Copyrights

When two or more authors collaborate to produce a computer program in which contributions of each author are not separable from the contribution of others the result is regarded as jointly authored. If the results are separable, for example modules of a program, then each constitutes a computer program for legal purposes even if it cannot function without the other modules. The issue is not whether parts can function separately but whether the contribution of skill, effort and judgement of an author can be distinguished from others. The unique definition of author of a computer program in South African copyright law may make issues of joint authorship in FOSS projects less problematic than in other jurisdictions since the author is regarded as the person who exercises control over the making of the program, as a result only someone with commit authority in a FOSS project can be regarded as an author. If a project is set up so that a few contributors are each responsible for a module or modules then each module may be regarded as a separate program authored by that contributor. Contributers of only a few lines of code will not be regarded as authors. Only those who have authority to decide what is included in a version of a program, or portion of a program will be authors.

The definition of authorship does however pose problems for FOSS in two situations. Computer programmers who customize FOSS which they have created for use in their workplaces run a risk that a court may regard their work as vesting in their employers. The risk can be reduced by contributors who are employees using FOSS without modification in their workplaces or alternatively by stipulating clearly in employment agreements that code shall be open source. Independent contractors who customize FOSS for clients also face a risk that the client will be regarded as having exercised control over the making of the computer program and will be regarded as the author. Independent contractors wishing to avoid that outcome should carefully limit the control exercised by the client and in any case require agreement that whatever code is written shall be distributed under the chosen FOSS license regardless of who owns it.

Later versions of a FOSS program and forked FOSS code are reproductions for as long as they contain substantial portions of the originating program. They are also adaptations of the originating program, but only if they can be regarded as including a substantial portion of the originating program.

Assignment of copyrights

Assignment of copyright in a FOSS contributor's agreement, such as the agreement used by the Free Software Foundation will require a paper copy be made and mailed, not because electronic documents are invalid but because only a paper and ink signature or an advanced electronic signature provided by a provider registered in South Africa will meet the signature requirement for a valid copyright assignment. Use of advanced electronic signatures is not widespread. On the other hand a contributor to a FOSS project can agree to a contributor agreement which grants non exclusive rights or licenses work directly under a FOSS license online where the contributor agreement or license is recorded digitally.

Moral Rights

A contributor to a FOSS project has moral rights to the computer program he has created. The right to object to modification does not extend to changes that are absolutely necessary for functioning. Beyond that the precise ambit of the moral rights as they apply to computer programs and whether they can be waived is not clear. However the nature of the work being created will influence what constitutes appropriate acknowledgement of the right of authorship and what constitutes a modification contrary to the author's honour. FOSS is by its nature a co-operative co-creation in which contributors agree concerning acknowledgement and what changes others may make through either contributor agreements or licences before committing code. It is therefore unlikely that a South African court would find copying and adaptations compliant with those commitments to infringe moral rights.

Enforcing FOSS Licences

Parties to License

The license must be issued by the owner or a licensee authorised to issue a FOSS license. In FOSS projects the owner is usually the author or authors, that is those contributors with authority to decide what is in a release version and their predecessors.

Contract

Rather than claiming breach of contract an author would simply claim copyright infringement, the alleged infringer would have to demonstrate compliance with the terms of the license in order to show acceptance of the basis of permission. Alternatively if the user of the program demonstrated sufficient initial

compliance with the license so that the creation of a contract must be inferred then the provisions of the license as a contract apply. If the license, such as the GNU GPL provides for automatic termination on breach then the license will be terminated by breach and further use will be infringing. If a user has demonstrated acceptance of the terms of a FOSS license which makes no provision for revocation but the user subsequently does not comply with the license the licensor may experience difficulties obtaining a court order requiring compliance with the other terms of the contract because South African courts prefer to award damages for breach of contract, rather than enforce performance of agreements.

Violation of License Terms

Generally failure to adhere to the conditions of the license indicates a refusal of the license construed as a contractual offer and thus no contract is formed, a copier is then liable for copyright infringement.

Waiver and Liability

There is no requirement arising from copyright legislation or common law that a person providing FOSS provide any warranty in respect of the software nor does any warranty arise automatically under copyright legislation or common law. Disclaimers and limitations of liability are valid under general principles of contract. However disclaimers and limitations of liability in favour of third parties cannot take effect unless one of the parties to the agreement accepts the benefit of the limitation on behalf of the third party. This usually takes place through a *stipulatio alteri* a provision in an agreement that a specified third party will enjoy a specified benefit, and that one of the parties will accept the benefit of behalf of the third party. For example a software vendor which holds a sub-license to software may include in an agreement with a customer a disclaimer of liability on part of the software creator which is not party to the agreement; the vendor would accept the benefit of the disclaimer on behalf of the software creator. A limitation of liability which can be construed as a unilateral waiver will not require acceptance of the benefit on behalf of the third party.

FOSS licenses do not fall under consumer protection legislation. However a transaction in which a service provider delivered goods and services to a natural person that included FOSS for consideration in the course of business would be subject to consumer protection legislation.

Cases

There have been no reported cases as yet (June 2014).

Legal Procedures

Only an owner or exclusive licensor can enforce the exclusive rights of copyright⁹⁷⁹. An owner can claim an interdict ⁹⁸⁰, damages, or reasonable royalties and delivery up of infringing copies⁹⁸¹. If a work was joint-authored all the joint-authors must agree to an enforcement action for reasonable royalties or damages⁹⁸² because no rights holder is entitled to all of the damages. A jointauthor may therefore apply for an interdict without the consent of the other joint-authors. Joint-authors can enter into an agreement that specifies what percentage of the profits from the computer program each is entitled to which would enable a joint-author to begin legal proceedings for his share of damages without the agreement of joint authors. A defendant could himself join the other joint-authors to the proceedings.

A rights holder who has grounds to suspect copyright infringement and that the suspected infringer is likely to dispose of the evidence of the infringement may apply to court, without the alleged infringer being given an opportunity to oppose the application, for an order authorizing the seizure and safe keeping of the evidence pending its production in litigation⁹⁸³. Damages will not be awarded against someone who proves that there were no reasonable grounds for suspecting that copyright subsisted in a computer program⁹⁸⁴.

Whether a substantial portion of a computer program has been copied is a qualitative question, a few dozen lines of code out of thousands may constitute a substantial portion if they solve a particularly difficult problem or are crucial in some other way to the functioning of the program⁹⁸⁵.

Literature

Jeremy Speres: 'The Enforceability of Open Source Software Licences: Can Copyright Licences Be Granted Non-Contractually?' South African Mercantile Law Journal (2009) Vol 21, Number 2, 174

Spain

author:[Bain,Malcolm]

⁹⁷⁹1-6 Nimmer §6.05. 980 Id.

⁹⁸¹ Id.

 $^{982 \,} Id.$

⁹⁸³ Id.

⁹⁸⁴ Id.

⁹⁸⁵¹⁷ U.S.C. §106.

Introduction to software protection under Spanish law Body of law

Copyright protection of software is regulated in Spain under Royal Legislative Decree 1/1996 of 12 April, approving the consolidated text of the Copyright Act (hereinafter, the "Copyright Act")⁹⁸⁶. This law transposes the EU Copyright Directives (Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society, Directive 2004/48/EC on the enforcement of intellectual property rights; Directive 96/9/EC on the legal protection of databases; and, in particular, Council Directive 91/250/EEC of 14 May 1991 on the Legal Protection of Computer Programs—hereinafter referred to as the "Software Directive").

Title VII of Book I of the Copyright Act (Articles 95-104) specifically regulates copyright in computer programs. These provisions are considered *lex specialis* with respect to the general provisions of Copyright Act, as *lex generalis*. This means that the general provisons of the Copyright Act will apply to computer programs to the extent that Book I, Title VII does not contain any specific provisions.

Object of protection

Computer programs are specifically included in the non-exhaustive list of literary, artistic and scientific works protected by copyright, in Article 10.1(i). Computer programs are defined in Article 96 as "any sequence of instructions or indications destined to be used directly or indirectly in a computer system to performe a function or task or obtain a determined result, whatsoever its form of expression or fixation", and include their preparatory material. Computer Program copyright protection is also extended to technical documentation and user manuals. Only original computer programs benefit copyright protection⁹⁸⁸. According to Article 96.2 of the Copyright Act, the computer program needs to be the own intellectual creation of the author, which has led authors and judges to hold that the work must be new and bear, in some manner, the print of the author's persona (which, in computer programming, does not have to be a high level at all)⁹⁸⁹. The ideas and principles behind computer programs including those which serve as the basis for its interfaces are explicitly denied copyright protection⁹⁹⁰. Malware such as computer viruses, is also excluded

 $[\]overline{)}$ 986"(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^{987}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

 $^{^{988}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{^{989}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

⁹⁹⁰For example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-

from protection.

Authors/Beneficiaries

The Copyright Act generally provides that copyrights in a work belong to the author, who is the person or group of persons who creates the work⁹⁹¹. In respect of computer programs, Article 97.4 adds, however, that where computer programs are created by one or more employees in the execution of their duties or following the instructions given by their employer, the employer will be deemed to be the exclusive rightsholder of the economic rights in the computer programs so created, unless expressly provided otherwise⁹⁹². In these circumstances, employee authors will maintain their moral rights over the work (see below), while the economic rights belong — by legislated automatic transmission of rights — to the employer⁹⁹³.

The law also provides for works with multiple authors. Joint works (works that are the unique result of the collaborative efforts of a variety of persons) are the property of all the authors and the rights correspond to them as they may agree. In default, the rights are held equally. Each author may exploit his/her contribution to the work, provided this exploitation does not prejudice exploitation of the work as a whole⁹⁹⁴.

The rights over a "collective work"—a program created by initiative and under the coordination of a person that edits and disseminates it (an "editor", basically), and consisting in the composition of several contributions (made for this purpose by different authors) which merge into a single and unique work—without being able to attribute ownership rights to one author in particular—belong to the editor, unless contractually provided otherwise⁹⁹⁵.

Finally, the Copyright Act also establises the concept of a "composed" or "composite" work, being a work which incorporates one or more previously existing works without the colaboration of the prior author. Rights in the composed work belong to the person who performs such composition, without prejudice to the rights of (and the need for authorisation from) the prior author⁹⁹⁶.

⁰⁴⁰⁰⁰&file=3426-3426.11.

⁹⁹¹The Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

 $^{^{992}}$ World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

⁹⁹³The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

⁹⁹⁴The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of 1976.

⁹⁹⁵Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

 $^{^{996}17}$ U.S.C. \$102(a).

Economic rights

According to Article 99 of the Copyright Act, the economic rights in computer programs comprise the exclusive rights to perform or authorise the performance of:

- (a) permanent or temporary reproduction of a computer program by any means and in any form, in part or in whole (including when the acts of loading, executing, displaying, transmission and storage of the program require a reproduction);
- (b) translation, adaptation, arrangement or alteration of a computer program, and the reproduction of any such transformed work; and
- (c) any form of distribution to the public, including the rental, of the original computer program or copies thereof.

Article 99 does not mention the right of public communication (e.g. transmission of a program in intangible form via Internet), however as the other provisions of the Copyright Act apply in the absence of specific provision, it is understood that Article 20 of the Copyright Act grants the rightsholders the exclusive right to publicly communicate the computer program.

Exceptions to exclusive rights

Article 99, last paragraph, expressly provides that the first sale in the European Union of a copy of a program by the rightholder or with his consent shall exhaust the distribution right of that copy within the Community, with the exception of the right to control further rental of the program or a copy thereof. This is understood to apply only to tangible copies (i.e. programs on a CD or DVD, flashcard, etc.), as the distribution right is limited to the computer programs in tangible media. 997 And it does not exhaust the reprodution and transformation rights.

The other exceptions are set out in Article 100 of the Copyright Act:

- (1) In the absence of specific contractual provisions, no authorisation by the rightholder is required for reproduction or transformation of a computer program that are necessary for its use by the lawful user in accordance with its intended purpose, including error correction.
- (2) Reproduction by way of a back-up copy of a computer program by a person having a right to use it may not be prevented, insofar as that copy is necessary to use the program.
- (3) A person having a right to use a copy of a computer program is entitled, without the authorisation of the rightholder, to observe, study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program, provided he/she does so while lawfully performing any of the acts of loading, displaying, running, transmitting or storing the program.

⁹⁹⁷17 U.S.C. §411(a).

This article basically restates the three exceptions of Article 5 of the Software Directive.

Articles 100.5-100.7 of the Copyright Act explain in detail the circumstances in which a legitimate user of a computer program may reproduce and/or translate a computer program without the prior authorisation of the rightsholder, in order to obtain the information necessary to achieve the interoperability of an independently created computer program with other programs⁹⁹⁸.

The Act expressly provides that these exceptions, except that set out in Article 100.1 (reproduction and transformation necessary for use) are compulsory law. Hence, contractual provisions to the contrary are deemed not to be valid. However, the exercise of these statutory rights is often difficult in practice because the licensee generally has no access to the source code of the application and it is not obvious to enforce this access legally.

Moral rights

The Copyright Act makes no mention of moral rights in relation to computer programs. These are regulated by Article 14 of the Act, which is understood to apply to computer programs like any other protected work⁹⁹⁹. These rights include the paternity right and the right to oppose modifications and applications which might affect the honor or reputation of the author¹⁰⁰⁰. These rights are inaliable and unwaivable¹⁰⁰¹, and remain in force following the death of the author.

Term of protection

Article 98 of the Copyright Act provides that the same term of copyright applies to computer programs as for general protected works: 70 years following the 1st January after the death of the author. For juridical persons holding rights (employers or rightsholder in a collective work), the term is 70 years from the 1st January of the year after first legitimate public dissemination of the program (or its creation, if it is not published)¹⁰⁰².

Rights in a co-authored (joint) work last until 70 years after the death of the last co-author. As regards collective works, having a unique rightsholder (the editor), the copyrights last for 70 years after first legal publication of the work. However, if the natural authors are mentioned in the published versions, rights in the work have the same general term: life (or dissemination) plus 70 years.

⁹⁹⁸¹⁷ U.S. Code §102(a). 99917 U.S. Code §201(a). 100017 U.S. Code §201(b). 1001 Id. 100217 U.S. Code §101.

Copyright assignment

Economic rights in computer programs may be transferred to third parties, $mortis\ causa$ or $inter\ vivos^{1003}$. This is done by operation of law in the case of employee created works, as we have seen above. Otherwise, all $inter\ vivos$ transfers must be formalised in writing (paper or electronic)¹⁰⁰⁴. The transfer of rights is limited to the specific rights, use, term and geographic scope stated in the contract/license. If the contract does not state these terms, transfers are deemed non-exclusive, for 5 years, for the country where the transfer is made, and only for the purposes that are necessarily deduced from the contract and necessary for fulfilling its purpose.

If there is no contract for the transfer of rights, no rights are transfered. 1005 However, in the case of commissioned works (e.g. from consultant programmers), the commissioner will have a limited use right, limited in the same manner as above: having only such rights as are necessarily deduced from the circumstances of the engagement, and necessary for fulfilling its purpose 1006 . In addition, depending on the degree of participation of the commissioning party (client) (e.g. providing the program design and detailed specifications), one could consider the resulting work to be either a collective work, for which the client is rights holder *ab initio* as editor of the work, or even a collaborative work in which the client is co-author.

Transfers of rights can be exclusive or non-exclusive. There is no such concept as "assignment" or "sale" of all the rights or copyright property to a third party (this is contradictory to the concept of moral rights)¹⁰⁰⁷. The closest transfer to an "assignment" is an irrevocable, exclusive transfer or license of all the rights, for all purposes, for all the duration of the rights and all the countries of the world.

Exclusive transfers must be expressly stated as such, and may be for one, several or all the copyright rights. The exclusive licensee may grant non-exclusive licenses to third parties, and also has legal standing to defend the rights in court, independently from the original rightsholder. The exclusive licensee must also exploit the work, or lose its license.

The Copyright Act establishes specifically that, unless proof is provided to the contrary, the granting of any use license will be considered non-exclusive and non-transferable, only for the purpose of satisfying the needs of the user¹⁰⁰⁸. Non-exclusive rights may not be onwards-transfered, nor sub-licensed.

¹⁰⁰³17 U.S. Code §204.

¹⁰⁰⁴¹⁷ U.S. Code §201(a).

¹⁰⁰⁵17 U.S. Code §101.

 $^{^{1006}1\}text{-}6$ Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law. $^{1007}Id.$

¹⁰⁰⁸ See, Id.

Copyright transfers may be royalty bearing or for free. This issue is independent of the rights that are granted. Payments may be one-off, or a proportional participation in the profits of exploitation of the work (royalties)¹⁰⁰⁹.

Copyright enforcement

Article 102 of the Copyright Act establishes the terms of breach of copyright: the unauthorised performance of any exclusive rights (reproduction, transformation, distribution, public communication), and in particular:

- (a) the commercialisation (putting into circulation) of any copies of a program which the marketer knows or could be deemed to know are illegal
- (b) the possession for commercial purposes of any such copies
- (c) the commercialisation or possession for commercial purposes of tools which are exclusively aimed at facilitating the unlawful removal or avoidance of technical means which protect the computer program (TPMs)¹⁰¹⁰.

This latter provision (Article 102(c)) is specifically aimed at protecting DRM and technical protection measures, and it was not considered necessary to change these provision in 2004 or 2006 to implement the EU Copyright Directives. Criminal law also penalises any copyright infringement for commercial purposes ("for profit" motive), with specific emphasis on removing TPMs¹⁰¹¹.

Unprotected software and public domain software

As set forth above, only software that is original in the sense that it is an intellectual creation of the author benefits copyright protection. Non-original software does not come into consideration for copyright protection and can, in principle, be used freely. Due to the functional nature of many programs, the degree of originality for software is not considered to have to be particularly high, and basically a subjective criteria: of being the result of personal effort that is not copied from another work, is sufficient¹⁰¹².

Under Spanish law, public domain is limited to works for which the copyrights have expired ¹⁰¹³. This software—if there is any today!—can be used, reproduced or executed freely, without permission or the payment of a fee. It can in certain cases even be presented by third parties as their own work, and by modifying the original work, third parties can take certain versions of the public domain software out of the public domain again.

 $^{^{1009}}$ 1-6 Nimmer §§6.02, 6.03. 1010 Id. 1011 1-6 Nimmer §6.03.

 $^{^{1012}}$ 17 U.S.C. §201(a). 1013 1-6 Nimmer §6.06(A).

FOSS under Spanish law

From a conceptual and legal point of view, FOSS is like any other computer program, and benefits from the protection granted by copyright law. Spanish copyright law fully supports the rights of the copyright holder (usually the author) to establish determined conditions in the software license, having the exclusive right to exercise or authorise the exercise of the rights of reproduction, transformation and distribution (and public communication). So, save for public policy prohibitions, a rightsholder is free to choose the conditions under which he or she licenses a computer program to third parties.

Under Spanish law, FOSS would be considered as software to which users generally have more rights, via the FOSS license agreement, than they would have with a proprietary or "non-free" software license¹⁰¹⁴. And, like any other software license, the FOSS license conditions must be respected by the licensee (user), or the license permissions may be revoked.

Copyright issues

Multiple authorship

Although FOSS can be written by one person or be owned by one legal entity¹⁰¹⁵, generally speaking, after some time it is extended, improved, corrected and generally transformed, becoming the result of the work of several authors who can make claims to it. The question is whether later additions create a collaborative work (a work created by collaborating authors), or whether the original software is the work and every contribution created during the further development of the software, a derivative or composed work. The legal consequences are different.

Qualification of FOSS

For FOSS to be a work created by means of a collaborative process, i.e. to be considered a "collaborative work" of co-authors, it is not necessary for every co-author to have contributed equally 1016 (rarely the case), nor are co-authors required to work on it at the same time (in most cases, not the case) although to be considered an author the contributor must intervene during the creative process (i.e not a tester or non-substantial bug-fixer). However, to be a co-author, the contribution needs to be worthy of protection by copyright. The provider of an idea is not a co-author, nor is the person who corrects a technical error or merely follows instructions 1017.

Whereas the first version of a software program, if written by several people, can in many cases be qualified as a collaborative work (co-authorship), this

¹⁰¹⁴ *Id.* 1015 *Id.* 1016 17 U.S.C. §103(a). 1017 17 U.S.C. §101.

seems much less the case for the later versions, which are based on the original work without, however, there being any "consultation" or direct collaboration between the authors. These later versions would be qualified as "derivative works", or possibly collective works (if the author/editor of the new version collated a series of different programs to form a distinct new software based on the original). Therefore, in terms of the legal consequences, a distinction needs to be made between the rights of the original co-authors and the rights of subsequent authors who carry out work based on the original.

Rights of the original co-authors

Co-authorship usually concerns the creation of a single "unique" work that is more than the collection of its component parts¹⁰¹⁸. The contributions may be indivisible, i.e. each individual contribution is not clearly identifiable, e.g. when two authors write a text together. But it is not necessarily the case: under Spanish law there may be co-authorship even when the several components are distinguishable, but brought together in a single work in which all the authors are involved — what one may call "horizontal" collaboration¹⁰¹⁹.

As we have seen above, in the case of collaborative works, the authors are free to regulate the exercise of the copyrights by agreement. Co-authors can agree how the program is made public (e.g. under a FOSS license) and how decisions regarding the copyrights are made, e.g. by normal or special majorities, or give one of them the right to make all decisions regarding this work. They can also reach an agreement as to the economic rights, such as royalty payments, and moral rights e.g. under whose name the work will be published ¹⁰²⁰.

If the co-authors have not reached an agreement, neither of the authors is allowed to exercise the copyright separately, however each may exploit his/her own contribution separately if this exploitation does not prejudice exploitation of the work as a whole. So if a programmer wishes to use his or her contribution in another manner, this will be possible, provided this does not create, for example, a competing product. In the absence of agreement, unanimity is required for decisions, and in the absence of unanimity the court decides, and the court will decide according to the provisions of the Civil Code in relation joint properties¹⁰²¹ (which usually means a majority rule, and by default contributions are deemed equal unless proof to the contrary is provided). The court will also weigh different factors to be taken into account, including good faith, the

^{1018 1-3} Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

¹⁰¹⁹Lothar Determan, Dangerous Liaisons — Software Combinations as Derivative Works? Distribution, Installation, and Execution of Linked Programs Under Copyright Law, Commercial Licenses, and the GPL, 21 Berkeley Tech. L. J. 1421, 1430 (2006).

 $^{^{1021}1-6}$ Nimmer, §6.05.

degree of collaboration, the degree of substitution of the different contributions, etc. $^{1022}\,$

As each author has the right to exploit his/her contribution, it is clear that he/she may, in his/her name and without intervention of the other authors, institute legal proceedings for an infringement of copyright in the work, and in her contribution. This is clear in so far as such proceedings are for an injunction to end the infringement¹⁰²³. What is not so clear is the right to individual compensation and it is thought that for these cases, the consent of the coauthors is required (see above). However, in some cases the lack of unanimity may result in the inadmissibility of this claim, e.g. if heirs of a programmer are unable to agree as to whether to institute a claim¹⁰²⁴.

Authors of derivative / composed FOSS works

After some time FOSS will, in most cases, be a derivative work of the original or a composed work which includes it. Derivative works and composed works are works which reproduce parts or characteristics of the original work, and in which the new authors bring an original contribution (thus creating a new work) by way of transformation or composition of the original. The author(s) of the derivative or composed work hold independent and full copyright rights in the new work. They are, however, restricted because the derivative or composed work cannot be exploited without the consent of the holder of the copyright on the original work. Under FOSS licenses this consent is not a problem, subject to respecting the terms and conditions (e.g. regarding further distribution of the derivative work)¹⁰²⁵. This issue gives rise to certain difficulties as it is not always clear if the use of the previous work is by way of mere reproduction (or compilation into a new work), or by transformation of the previous work—depending on the FOSS licenses, different conditions may apply. This may be key to understanding the impact of copyleft obligations in the GPL (v2 or v3).

The management of copyrights in FOSS—transfers?

In order to manage copyrights in FOSS better, it may be useful to collect all copyrights concerning a FOSS project within one person or organisation. The existence of this organisation will simplify the management and enforcement of the (eventually joint) copyrights ¹⁰²⁶. The collective management of copyrights is perfectly possible under Spanish law, and is usually, but not necessarily, regulated by an exclusive license or transfer of copyrights to the person or organisation in question. As an alternative, the rightsholders may authorise an organisation to take legal action in respect of their work — as a fiduciary, the

^{1022 17} U.S.C. §103(a). 1023 *Id*.

¹⁰²⁴1-3 Nimmer §3.02.

 $^{^{1025}}Id.$

¹⁰²⁶17 U.S.C.§ 101.

party to whom the legitimation is granted shall not act for himself but on account of others who have so authorised him/her (being the current rightsholders)¹⁰²⁷.

Moral copyrights

Generally speaking, FOSS originated in the United States, and FOSS licensing tends to attach less importance to the question of moral rights of the author 1028. however it must be noted that one common factor among all FOSS licenses is the obligation to maintain attribution to the original authors, and indicate any modifications—a contractual form of guaranteeing certain moral rights (paternity and integrity).

The Open Source Definition specifies that the author of software distributed under a FOSS license cannot oppose the use of the software by certain people and groups¹⁰²⁹ or for certain areas of application¹⁰³⁰. This runs contrary to the moral rights of an author with respect to the uses to be made of his/her work. It is clear under Spanish law that an author is not able to give up his/her moral rights in his/her work¹⁰³¹: any waiver to exercise in the future one's moral rights is void, including moral rights on software 1032. The author of a work distributed under the FOSS license should theoretically therefore be able to oppose any use of his/her work by people or groups or for certain purposes which affect his honour or reputation, based on his/her moral rights.

Moral rights are also carried through to derivative works: the author of the original work will therefore, based on his/her moral rights, not only be able to oppose the use by third parties of his work, but also the use of derivative works which affect his/her honour or reputation.

Enforcing FOSS licenses

The question whether a FOSS license can be enforced under the Spanish legal system depends on whether a valid license has been granted. The essential questions are: (i) between whom is a license reached, (ii) has the license been validly reached and (iii) what are its terms?

Another dimension to this debate is whether a FOSS license can only be considered a contract (requiring formalisation as such: an offer and its acceptance, being a manifestation of consent to be bound by the terms, often absent in FOSS practice), or seen as merely conditions to an authorisation or form of donation

 $^{^{1027}}$ l-3 Nimmer $\$ 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)). $^{1028}17$ U.S.C. §201(c).

¹⁰²⁹1-6 Nimmer §6.05.

 $^{^{1030}}Id.$

 $^{^{1031}} Id.$

 $^{^{1032}}Id.$

(donation not of the software, but of the non-exclusive rights to use them). Doctrine in Spain generally holds that copyright licenses are contracts¹⁰³³, although there may be scope in Spanish law for arguing against the need to prove the requisites of a contract, and merely defend the instrument as establishing the conditions to be applied to the authorisation to use the software (breach of which gives rise to a mere breach of copyrights).

Note however that it will not be in the interest of the licensee to prove that a license has not been granted (whether by contract or otherwise), as by default the law provides that third parties may not exercise any exploitation rights without due authorisation (or eventually, if a license can be deemed, the licensee's use rights are de minimis use rights provided by law: those necessary for fulfilling the purpose of a contract). So from a licensee's point of view, there is no point in attacking the existence of the license, but, should there be any conflict, rather the validity and scope/interpretation of the terms.

License parties

If a rightsholder makes his/her work available under a FOSS license, the answer as to parties is usually clear: the license is reached between the rightsholder and the licensee. In case of several co-authors, the situation may be more complicated, and the question as to with whom the licensee reaches a contract depends on the mutual agreement between the co-authors¹⁰³⁴.

Often, a FOSS program will be the work of several authors who did not work in joint collaboration. After all, FOSS is usually created via a chain of authors who all contribute to the creation of the program that is, in the end, licensed to the user/licensee. In so far as each new author makes an original contribution to the work, a derivative work is produced¹⁰³⁵. The licensee of the eventual work will need to have the consent of every author in the chain who made an original contribution to the final work, starting with the author of the first work or version. This consent can be direct, or indirect by giving consent in the FOSS license to the next author to modify and distribute the work (verbatim or as modified).

Insofar as an "editor" (such as Red Hat or Novell) collates different FOSS works into a new package, a collective work may be created, and the licensee will have a license from, and need the consent of, the editor — who in turn will have to manage the upstream licenses.

Most FOSS licenses solve this by creating binding conditions between the licensee and all authors in the chain. GPL version 3, for instance, contains the following clause: "Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate

 $[\]overline{1033}Id.$

 $^{^{1034}}Id.$

¹⁰³⁵17 U.S.C. §106.

that work, subject to this License"¹⁰³⁶ and GPL version 2: "each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor"¹⁰³⁷.

In this way the user of the software obtains a license of all authors in the chain. This chain of licenses is valid under Spanish law, and it is argued that it must be this way, as non-exclusive licensees (the intermediate creators, in the chain) are not entitled to relicense or sublicense the original work.

Validity of the license—as a contract or otherwise

Contracts in Spanish law require an offer and acceptance of the offer by way of a manifestation of a consent to be bound by the terms of the offer ¹⁰³⁸. Conventional IT agreements are reached by the explicit acceptance of the terms and conditions by the licensee through signing the terms and conditions, by opening the packaging, by clicking or selecting an "I agree" button, or indeed by any other action from which acceptance can be deduced. These methods to reach a licensing agreement have been sufficiently tried and tested and, at least between commercial parties, are generally considered to be valid ¹⁰³⁹.

Typically, in a FOSS environment, however, software is made available with the simple specification on a website ("licensed under the GPLv2 license") or in the source code of the software itself (in the code file header and with luck, in a "COPYING.txt" file or a /legal/ folder). The license is not usually required to be explicitly accepted, nor are the terms presented to the licensee/user. Having to click and confirm every time could in some cases interfere with the use of the software 1040. In addition, the Open Source Definition opposes demanding explicit agreement to the license conditions with the aim of confirming the agreement between licensor and licensee 1041.

The question is double: whether in these cases a valid license has been entered into, and what are the applicable terms. The answer to the first question must be affirmative. The reason is that the user of a copyright protected work needs to be able to indicate the grounds on which he/she is authorised to use the work. As we have seen, using software without the rightsholder's consent implies a copyright infringement. This implies that everyone who wants to use software which they find via the internet, needs to actively look for a license. If the user cannot prove he/she has a license ¹⁰⁴², he/she must refrain from using it.

The trouble is that, without having had an opportunity to review the terms and thus consent to them (and, sometimes in the case of FOSS, the rightsholder not properly indicating the applicable terms, if any, other than stating that

¹⁰³⁶ Id. 1037 17 U.S.C. §109(a). 1038 2-8 Nimmer §8.12. 1039 Computer Assoc., 982 F.2d at 714. 1040 See, 4-13 Nimmer §13.02(B). 1041 See, Computer Assoc., 982 F.2d at 715. 1042 Id.

the software is "free software"), the licensee may be in a position to argue that certain terms are not applicable or part of the agreement. Against this, the licensor would generally argue that, in the absence of proof to the contrary, the FOSS license conditions are the only terms under which he or she licenses the FOSS, and thus if the user now disagrees to any of the terms, then the licensor has granted no license to the licensee and any use of the software is thus a breach of copyright. Furthermore, Spanish courts would look, in the professional sector, at the uses and customs in the sector, to determine if sufficient opportunity was granted to read and accept the terms, and it is now fairly well established that free software licensing terms are available to be read in the source code or on the project website, and most software developers know and apply this custom. Accordingly, as regards professional developers who are FOSS licensees, it would be very difficult to argue that there was no binding license between the parties, or that the terms are unknown and unknown 1043.

As we have noted above, it is doubtful whether any user would benefit from disputing the existence of a FOSS license (except with regard to disclaimers, for which see below). If the user disputes the conclusion or validity of the FOSS license, this implies that no legally valid copyright license was granted and the user therefore is not allowed to use the software at all.

Violation of license conditions

Breach of a FOSS license by a user/licensee could constitute a double infringement in Spain: contractual breach of binding license obligations, and breach of copyrights of the rightsholder. The rightsholder may take action in civil courts under both claims (and due to the possibility of arguing against the existence or need for a contract, it would be recommended to sue on both grounds). In addition, breach of copyright provides several interesting remedies 1044.

Disclaimers and liability

Typically, FOSS licenses contain very strong disclaimer clauses, which attempt to discharge the author from all liability 1045 . The argument given for this is that FOSS is often made available without a fee, as a result of which the author/rightsholder generates insufficient income to pay for liability insurance and legal costs 1046 .

Although this reasoning is certainly valid for the amateur programmer, it applies much less for professional programmers who build their business model around FOSS¹⁰⁴⁷. To cover the eventuality of being held liable for a warranty of

 $^{^{1043}}$ Apple Computer, Inc v. Microsoft Corp., 35 F.3d 1435, 1445 (9th Cir. 1994).

¹⁰⁴⁴ See, Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 819 (1st Cir. 1995).

 $^{^{1045}}See,\ Id.$ at 815.

¹⁰⁴⁶4-13 Nimmer §13.03(F).

¹⁰⁴⁷See, Order Re Copyrightability Of Certain Replicated Elements Of The Java Application Programming Interface (hereinafter *Order*) found at http://www.groklaw.net/pdf3/OraGoogle-1202.pdf.

title or quality, professional suppliers of FOSS or related services often provide guarantees and technical support 1048 .

Article 1902 of the Spanish Civil Code provides for strict liability and indemnities for wilful misconduct ("culpa") or negligence ("negligencia") in an extracontractaul context (i.e. tort, including breach of copyrights), as does Article 1101 for contractual liability. Damages for wilful misconduct may not be excluded at all, and those caused by negligence are subject to review by the courts. Liability under these provisions would apply both in the context of any problem with relation to title (copyright in the code) or quality of the software. In addition, with respect to quality, suppliers in a commercial relationship are liable to repair damages caused by hidden defects (Articles 1461 and 1484 Civil Code).

More specifically as regards title, although in Spanish law there is no such concept as a "warranty of title", it is implicit that a licensor must have sufficient rights to be able to grant a FOSS license—in absence of which, the supplier will not only be in breach of the third party's copyright (and thus, in breach of the obligation to ensure the licensee's right of quite enjoyment¹⁰⁴⁹) but also liable under the aforementioned provisions relating to fraud or negligence.

However, between professionals, the law allows parties to regulate liability (except for fraud, and even negligence may not be wholely excluded), for example limiting damages to the price paid for software or establishing a process for maintenance and bug correction. In all circumstances, the courts will look at the balance of rights and obligations between the parties, in which case for FOSS significant weight may be given to the free (gratis) nature of FOSS, as well as the wide scope of rights granted to the licensee, as a balance against the wide disclaimers.

It is doubtful whether the exoneration clauses or disclaimers contained in FOSS licenses comply in full with the general validity requirements under Spanish law, especially in relation to a consumer licensee. These requirements include that the clauses are not against the principle of good faith, do not upset the balance of obligations and rights between the parties, and are not subject to the unilateral discretion of one party (the licensor). Thus it will depend on each circumstance whether the disclaimer clauses will be seen as valid or not: the drafting of the clause, the balance of the parties, the knowledge and experience of the licensee, etc. When the disclaimer does not include the now-standard expression "to the extent permitted by mandatory applicable law" (as in the BSD or MIT License), the clause may be struck out as invalid, in part or in whole, as contradictory to the aforementioned provisions of the Civil Code (if not also consumer protection laws, see below). It is also important to look at how the licensor presents the product (differentiating, for example, system libraries or components, such as MySQL, and end-user products such as Firefox or the GIMP). For a product that is presented as finished and ready for use, the exoneration clause will be

¹⁰⁴⁸¹⁷ U.S.C. §102(b).

 $^{^{1049}1-2}$ Nimmer $\S 2.02$.

considered invalid much more easily, than for a product for which the licensor clearly formulated a reservation 1050 .

In so far as the aforementioned conditions have been complied with, exoneration provisions will be enforceable in principle, unless the stipulating party could be considered as a professional seller in a relationship with a consumer purchaser¹⁰⁵¹. As mentioned above, professional sellers are required to repair hidden defects in the products they sell, except if the purchaser is a specialist in the sector, under Article 1484 of the Spanish Civil Code. Contractual provisions may modify this, if they are validly incorporated in the contract and not invalidated for other reasons (see above, and in particular by consumer protection laws). If the hidden defects are known, and this state is not declared to the purchaser, then the supplier will be liable not only to repair the defect but also for damages and interest¹⁰⁵². The professional seller of FOSS may therefore be liable in principle, unless he can provide proof of his ignorance of the bugs/mistakes. In practice while this proof will be hard to provide (through due diligence in testing, programming process and methodology, etc), take into account that it is generally accepted that software is buggy and virtually impossible to make perfectly.

Finally, these disclaimers will usually be held invalid with respect to consumer users, both due to the scope of the disclaimers (being deemed abusive¹⁰⁵³) and due to the fact that a consumer in Spain would not be expected to be able to understand a disclaimer in English (the language of most FOSS licenses) and thus held not to be incorporated in the consumer contract. On the other hand, it could be argued that as there is no commercial relationship between the parties (and thus, the licensor is not a "seller" of a product), then consumer protection law may not apply to the full extent¹⁰⁵⁴. This argument is reinforced by the free (gratis) nature of most FOSS.

The copyleft principle

Principle

A characteristic found in several (but not all¹⁰⁵⁵) FOSS licenses is the so-called "copyleft" principle. Copyleft FOSS licenses, in return for the use rights that are granted, require anyone who redistributes the copylefted software or any derivative works of it to third parties, to do so under the same license conditions¹⁰⁵⁶. Thus, usually it would not be legally possible to incorporate and redistribute copyright protected parts of copylefted software in a proprietary licensed work.

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\begin{array}{c} \hline 10504-13 \text{ Nimmer } \S 13.03(B)(2)(a). \\ \hline 1051 \text{Computer Assoc., } 982 \text{ F.2d at } 708. \\ \hline 1052 \text{ See, BUC Int'l Corp. v. Int'l Yacht Council Ltd., } 489 \text{ F.3d } 1129, 1143 (11th Cir. 2007). \\ \hline 1053 \text{ See, } 4-13 \text{ Nimmer } \S 13.03(B)(3). \\ \hline 1054 \text{ See, } 4-13 \text{ Nimmer } \S 13.03(F)(2). \\ \hline 1055 \text{ 4-13 Nimmer } \S 13.03(F)(2). \\ \hline 1056 \text{ See, Computer Assoc., } 982 \text{ F.2d at } 715. \\ \hline \end{array}
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It has been argued that this copyleft principle can restrict the commercial use possibilities of the software 1057. Warnings have also been issued regarding the dangers that companies may run if a negligent or vindictive employee were to incorporate a piece of copyleft code in a proprietary software program. In theory this could mean that the company would be obliged to make its proprietary software available under a copyleft FOSS license or remove it from the market. Although caution is necessary, one can ask whether these "worst-case scenarios" are realistic under Spanish law. The sanction for incorporating copyleft code in proprietary software and distributing this under a closed or proprietary license will usually be restricted to (a) a prohibition to distribute the software whose license has been breached or (b) the obligation to remove this piece of code from the program. In addition, if the unlawful use has caused damage to the author, this damage will need to be reimbursed, but not more than the damage actually suffered (e.g. indemnities to the original copyright holder)¹⁰⁵⁸. But in all events it is unlikely the owner of the proprietary software would be obliged to release all its code under the copyleft FOSS license.

Validity of copyleft obligations

The question relating to the validity of the copyleft clause coincides with the question whether a rightsholder is able to validly establish the conditions under which derivative or composite works must be distributed. The answer to this question is affirmative: while the righsholder of the original work does not hold any copyright in the derivative work, he or she is entitled to determine the conditions for the creation and redistribution of a derivative work of his/her original work¹⁰⁵⁹. A derivative work can therefore only be exploited subject to the consent of the copyright owner of the original work¹⁰⁶⁰.

As copyright holder, an author is thus able to authorise the use of his/her work for a particular use, and link certain conditions to this. This right to determine the destined use or conditions of use of a work is clearly stated in the Copyright Act, in Article 43^{1061} . The rightsholder can therefore impose the copyleft condition based on these rights.

All rights are subject to control against abuse, including copyright: contractual conditions must comply with mandatorily applicable laws (such as consumer protection, data privacy, etc.) morality and public order. An author cannot therefore randomly exercise his/her economic and moral rights. However, exercising his/her copyrights (by determining the conditions of exploitation) cannot be considered as an abuse of rights "as such": only in exceptional cases will an author who invokes his/her copyrights be guilty of an abuse of rights 1062.

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1057 See, Computer Assoc., 982 F.2d at 715.
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 $^{^{1058}\}mathrm{Order}\ supra$ Note XXX

¹⁰⁵⁹See, Id. at 710.

¹⁰⁶⁰4-13 Nimmer §13.03(B)(4).

 $^{^{1061}}Id$

¹⁰⁶² See, John William See v. Christopher Durang and LA. Stage Co., 711 F.2d 141, 143 (9th

We consider that licensing a work under a copyleft restriction will in principle not constitute an abuse of right, because the author, in general, will be able to prove a legitimate moral or tangible interest (and indeed a public interest to maintain the code in the "commons"). A legitimate moral interest could be that of wanting to keep the work within the FOSS community, including in modified form.

It is argued that the copyleft provisions may only affect works to which the rightsholder is granted rights to control: the original work, derivative works, and composite works incorporating the original work. Copyright rights are not granted with respect of independent works not included in this list, and it may be considered an abuse of (copyright) rights trying to extend those conditions or provisions beyond that which the Copyright Law has permitted the author to control. Including for example, works in the public domain, works not protected by copyright, and independent works e.g. stored on the same carrier as the licensed work¹⁰⁶³.

However there is also an argument that, the license being considered a contract, the licensee may be bound by whatever (legally valid) conditions are imposed in the license, even outside the scope of copyright law and including as to "non-derivative/composite/collective" works. This is subject to limitations, of course. Competition law, for example, would prohibit certain forms of product bundling or restrictions on legitimate uses¹⁰⁶⁴, and consumer protection law would prohibit restrictions imposing conditions on certain forms of claims for redress or indemnities.

In addition, it has been argued that copyleft restrictions may run contrary to the exhaustion principle (with regard to the distribution right). However, the Copyright Act specifies: "The first sale in the European Union of a copy of a program by the copyright owner or with his consent results in the exhaustion of the right to control the distribution of that copy in the European Union, with the exception of the right to control the further leasing and lending out of the program or a copy thereof." Note that his "exhaustion" only applies to controlling the tangible copy which has been lawfully released in the European market. This does not affect the right of the author to lay down certain conditions regarding the use of the (intangible) work on that copy. The conditions of use established in the license on this work "run" with the tangible copy, as the sole authorisation to exploit the intangible work on that copy.

FOSS cases in Spain

While there have been several cases regarding the use of free content (specifically within the context of paying collecting societies' levies, or not, and the burden of

Cir. 1983).

 $^{^{1063}} Id.$

¹⁰⁶⁴ Id

 $^{^{1065}}$ Mist-On Sys. v. Gilley's European Tan Spa, 303 F. Supp. 2d 974, 978 (W.D. Wis. 2002).

proof¹⁰⁶⁶), there have been no cases regarding free and/or open source software. The judicial consideration of "copyleft" as a concept within the aforementioned free content cases is interesting, showing an increasing awareness of judges with respect to FOSS licensing models.

Legal procedures

Legal action

With regard to the enforcement of copyrights in Spain, Articles 138-140 of the Copyright Act provide for a broad range of actions, in line with the EC IPR Enforcement Directive 2004/48/EC. These actions include:

- a) Preliminary measures including (i) seizure of both infringing software/goods and devices, (ii) embargo of bank accounts where profits may have been deposited, and (iii) suspension of non-authorised activities
- b) Injunctions to (i) cease and desist from the illicit activity, (ii) remove from the market any infringing articles, (iii) destroy any illict software and devices, and (iv) suspend ISP services used infringing IPR rights.
- c) Damages and interest (see below)

Legitimation for taking action is vested in the copyright holder or an exclusive licensee of the infringed copyright (i.e. either or both may take action). Non-exclusive licensees may not, however a third party (e.g. a fiduciary) may be authorised by a copyright holder to take action on his/her behalf. Only authors may claim for breach of moral rights.

Proceedings are taken before the Civil Courts, in accordance with the standard procedures of the Civil Procedure¹⁰⁶⁷. While the principles of international private law applicable to software (applicable in Spain as in any other EU jurisdiction) may complicate the question as to where a case may be brought, Spanish courts follow EU Regulations in the matter (Brussels and Rome I and II Regulations¹⁰⁶⁸). Depending on the cause of action taken (IPR breach, contractual breach) and the nature and domiciles of the parties, the courts and applicable law may vary.

Criminal law also sanctions copyright breaches for commercial (profit) purposes ¹⁰⁶⁹, providing jail sentences up to two years and/or equivalent fines (12-24 months) for those who, for profit and in prejudice to a third party, reproduce, distribute or publically communicate a work or its derivative, in any media, without the corresponding authorisation from the rightsholder. The same sanction is given to those who would import, export or stock copies of works without

¹⁰⁶⁶⁴⁻¹³ Nimmer §13.03(B)(4).

¹⁰⁶⁷Mist-On Sys., 303 F. Supp. 2d at 976 (W.D. Wis. 2002)

 $^{^{1068}\}mathrm{Computer}$ Assocs., 982 F.2d at 709-10.

¹⁰⁶⁹BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

authorisation, and those who manufacture, import or deal in any device specifically aimed to supress or neutralise technological protection measures applied to protect software or other protected works.

Damages

Damage caused by copyright violations are compensated under Spanish law in accordance with the Articles 138 and 140 Copyright Act, and generally applicable principles of law relating to unlawful acts (extracontractual infringements) and breaches of contract¹⁰⁷⁰. According to the specific provisions of Article 140 of the Copyright Act, an injured party of a copyright breach may request compensation for the loss actually suffered and profits that were not gained. This can be calculated as either a) the negative economic consequences (including loss of profit / profits made by the infringer) or b) the amount the licensor would have received had the infringer asked for consent to use the protected work in the infringing manner¹⁰⁷¹. Dual damages, triple damages or other forms of punitive or special damages are not awarded under Spanish law. Costs spent on tracing and prosecuting infringements may also be compensated¹⁰⁷² and authors, when involved may also claim for breach of moral rights, giving rise to further damages.

Infringements of software copyrights follow the same regime as infringements of every other copyright ¹⁰⁷³. The aforementioned principle is therefore applicable in the case of copyright infringements of software. Infringements of copyright protected software distributed under a FOSS license would be sanctioned in the same manner (including provisional and precautionary measures such as seizure of infringing works, interlocutory injunctions, etc.). In no way whatsoever has the author given up his/her rights.

It is yet to be seen whether the argument that, having given up rights to royalties in the FOSS license, the licensor's right to damages would be limited, is correct. We would differ. Besides establishing his/her reputation and recognition, an author can have other reasons to make a work "freely" available ¹⁰⁷⁴. The author may also have a direct monetary advantage from the free distribution of his work. The simplest way is circulating the free works with advertising. Another way is providing specific services relating to the work. The free circulation of the work ensures the work has many users. The author generates his/her income from the provision of support and consulting services, licensing "proprietary" add-ons ¹⁰⁷⁵, or so-called "dual licensing" the code. This model uses — as the name indicates — two different licenses for distribution of the software. The first license is often a FOSS copyleft license and ensures the work is circulated

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1070 See v. Durang, 711 F.2d at 143.

1071 Computer Assoc., 982 F.2d at 715.

1072 See, 1-2 Nimmer §2.03(G).

1073 17 U.S.C §105.

1074 http://copyright.gov/help/faq/faq-definitions.html.
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¹⁰⁷⁵See, Id.

quickly and has a wide range of users. A second license (without the copyleft obligations) can then be obtained against payment by interested parties who want to use the work without their own additions or modifications being affected by copyleft ¹⁰⁷⁶.

Recommended literature

General literature on copyright law

- Rodrigo Bercovitz Rodríguez-Cano (Ed): "Comentarios a la Ley de Propiedad Intelectual", (3rd Edition, 2007), Tecnos, Madrid.
- Rodrigo Bercovitz Rodríguez-Cano et al., "Manual de Propiedad Intelectual", Tirant lo Blanch, Valencia.
- José Manuel Rodríguez Tapia et al., "Comentarios a la Ley de Propiedad Intelectual", Aranzadi, Navarra 2007.
- Alejandra Castro Bonilla, AUTORÍA Y TITULARIDAD EN EL DERE-CHO DE AUTOR, http://www.informatica-juridica.com, last visited 10.08.2010.

Switzerland

author:[Jaccard,Michel] author:[Ancelle,Juliette]

Introduction to software protection under Swiss Law

Applicable Law

Under Swiss law, the protection of software is principally regulated by the Federal Copyright Act of October 9, 1992¹⁰⁷⁷, last revised on July 1st, 2008 ("SCA").

Object of Protection

Definition of software

Pursuant to Section 2, paragraph 3 SCA, computer programs are considered to be works under Swiss law, and as such, can be protected by copyright¹⁰⁷⁸. Computer programs are purposely protected in a separate category of works from literary works¹⁰⁷⁹. The notion of computer programs as used in the Copyright

 $^{^{1076}}See,$ Computer Assocs., 982 F.2d at 710.

¹⁰⁷⁷"(Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^{1078}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

 $^{^{10\}bar{7}9}35$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

Act includes any completed process written in a programming language with the purpose of performing a designated task¹⁰⁸⁰. The protection of computer programs comprises the protection of the source code and of the object code of the computer program, but it does not cover the ideas or principles on which the software is based (algorithm, formula, etc.)¹⁰⁸¹. It is also generally understood that the copyright protection of computer programs does not extend to the development nor the user's documentation, which can however be copyrighted separately to the extent that it meets the requirement of protection for literary works as stated in Section 2 paragraph 1 SCA¹⁰⁸².

For the purpose of this Swiss chapter, the terms of "software" or "computer software" will be deemed equivalent to "computer program", as defined above. We are aware of the distinction drawn between a software and a computer program in relation with Open Source and within numerous Open Source licenses¹⁰⁸³. A debate exists among Swiss scholars regarding this differentiation, the main issue being related to the inclusion of the documentation in the notion of software and therefore in the definition of protected work, with the consequence that the documentation should be covered by the exclusive rental right (see I.4 (b) below). The terms of "software" and "computer program" are however being used interchangeably in the French version of the Copyright Act as well as in the Message of the Federal Council which preceded the adoption of the revised Act, and we will therefore consider both terms to fall under the same definition in relation to Swiss copyright law.

Protected software

In order to be protected under Swiss copyright law, computer software needs to meet the requirement of individual character, which is the basic requirement for each protected work¹⁰⁸⁴. Such individual character should only be found in the structure of the program, and not in the ideas or the software's algorithms or logic, which are not protected by copyright. This requirement for computer programs must however be understood as a requirement of novelty or an absence of triviality¹⁰⁸⁵. Thus, computer software will be deemed to possess sufficient individual character if experts find it original and different from other existing software by the comparison of their source and object codes¹⁰⁸⁶ and to the

 $[\]overline{^{1080}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

 $^{^{1081}\}mbox{For}$ example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{1082}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

¹⁰⁸³World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

¹⁰⁸⁴The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contul.html.

¹⁰⁸⁵The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of 1976.

 $^{^{10\}overline{86}} \text{Public Law 96-517}$ found at http://law.copyrightdata.com/amendments.php.

extent that the author had sufficient leeway at his/her disposal in the writing of the $codes^{1087}$.

Unprotected and public domain software

As a consequence of the requirements set forth in Section 2 of the Copyright Act, Swiss law shall not protect software that does not possess an individual character. Thus, a computer program that professionals will find trivial in relation to preexisting ones, when comparing their codes, and for which the author has not showed any creativity in the writing of the code, shall not be considered as a protected work under copyright law, and can therefore be freely used, to the extent that it is not limited by existing covenants governing it or by the general rules of unfair competition¹⁰⁸⁸. Furthermore, the protection of software developed by a computer is discussed under Swiss law, as some specialized authors consider that the human intervention is too remote to trigger the legal protection of the work¹⁰⁸⁹.

Under Swiss law, two categories of software will be considered as public domain: (i) software for which the protection has expired through lapse of time (50 years after the death of the author; see I.6 below for more details), and (ii) software for which the author has voluntarily given up his/her rights and which he/she has offered for the use of the public. This type of public domain software is characterized by the absence of exclusive enforceable rights on the software and the free availability of the computer program, but not necessarily of the source code. Due to the absence of a registration requirement for copyrighted works in Swiss copyright law however, the author of the software who wishes to make it a public domain software must express it clearly, for instance through a notice attached to each copy of the software 1090. The public domain software must be distinguished from the Free and Open Source Software (FOSS)¹⁰⁹¹: in the case of FOSS, the author or co-authors license their rights to the users by giving access to the source code but remain the valid holders of the copyright on the software, whereas public domain software can be validly used, modified, or published without the need for the issuance of a license.

Owner of rights

Author as a natural person

Pursuant to Section 6 SCA, an author is the natural person who created the protected work¹⁰⁹². Thus, in the case of computer software, the programmer who created the software will be considered to be its author in the sense of

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108717 U.S.C. §102(a).

108817 U.S.C. §411(a).

108917 U.S. Code §102(a).

109017 U.S. Code §201(a).

109117 U.S. Code §201(b).

1092 Id.
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copyright law, and therefore will own the copyright to the protected work¹⁰⁹³. As a result and contrary to what is the case in the USA for example¹⁰⁹⁴, a corporate entity or a legal person cannot be the "original" author of a computer program, even when it has for instance financed the development of the program. In such a case however, the corporate entity may benefit from the mechanism of legal assignment of certain exclusive rights in favor of the employer regarding software created by an employee (see section I.3 below).

Joint work: coauthors

In the development of a computer program, there is often more than one person involved, and therefore more than one author in the sense of copyright law. Most of the time, the developed software will be considered as a joint work, created by several coauthors. Pursuant to Section 7 SCA, a coauthor is a natural person who contributed to the creation of a work by bringing in his/her creative input ¹⁰⁹⁵. The two main criteria are thus (i) the objective creative collaboration but also (ii) the intent of the authors to create a work together. The coauthor of a protected work must be distinguished from an auxiliary, who simply performs a task he/she has been entrusted with, with no provision for any creative input, and who therefore does not own any rights to the protected work ¹⁰⁹⁶. In addition, the determining factor that will allow a work to be deemed a joint work and not a derivative work is the accepted and voluntary joint creative collaboration on a common and unique creation within an agreed period of time.

In the case of a joint work, the coauthors are the joint holders of the copyright, with the consequence that they can only use the joint work in common or with each coauthor's agreement and that one coauthor cannot dispose of his/her share without the consent of the others¹⁰⁹⁷. The coauthors have however a duty to make the use of the work possible and they cannot withhold their authorization of use without cause¹⁰⁹⁸. Each coauthor has the standing to represent the joint tenancy of coauthors in case of infringement, but this does not affect the joint ownership of the copyright by all coauthors¹⁰⁹⁹.

The legal regime of the Copyright Act applicable to coauthors has been construed by the Swiss Supreme Court as establishing a "sui generis joint ownership", with the consequence that it does not correspond to any regime of co-ownership already existing under Swiss law¹¹⁰⁰. Aside from the mandatory rules on co-authorship and in particular on the joint ownership of the joint work

^{1093 17} U.S. Code §101.

¹⁰⁹⁴17 U.S. Code §204.

¹⁰⁹⁵17 U.S. Code §201(a).

¹⁰⁹⁶17 U.S. Code §101.

 $^{^{1097}}$ l-6 Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law. $^{1098}\,_{Id}$

¹⁰⁹⁹ See, Id.

¹¹⁰⁰1-6 Nimmer §§6.02, 6.03.

set out in Section 7 SCA, the coauthors may choose to regulate their relationship via an express agreement, regulating for instance the decision making process or the liability of the coauthors. In the absence of a specific agreement, the coauthors shall form an *unregistered partnership*, regulated by Sections 530 to 551 of the Swiss Code of Obligations (SCO)¹¹⁰¹, the main consequence being that all decisions are to be made unanimously (Section 534 SCO).

Copyright assignment

Another specificity of computer programs in comparison to other protected works relates to the context of their creation. Most of the time, software is developed within a company by programmers who are employees and have in fact been hired for the purpose of developing software. Thus, taking into consideration the tension between the general principle of designating a natural person only as an author and the economic need of companies investing in the software development, the Swiss legislator has established an automatic legal assignment of rights — absent an agreement to the contrary between the parties — according to which only the employer is entitled to benefit from the rights of use on a software created by the employee as part of his/her work obligations ¹¹⁰². The two criteria for the application of this provision are therefore that the programmer developed the software (i) when he/she was at the employer's service and (ii) while performing his/her employment obligations. This rule thus only applies when an employment relationship in the sense of Swiss labor law exists, and, as already mentioned, can be modified by an agreement between the parties ¹¹⁰³.

Where no employment relationship exists and the software is developed by a selfemployed programmer upon a client's request, the determination of the original ownership of the rights will depend on the interpretation of the intent of the parties. Under Swiss law, to determine whether the copyright on the created work has been assigned or whether the author has only granted a license, one must interpret the intent of the parties according to the theory of purpose 1104. although in case of doubt on the purpose, a court will favor the granting of a license instead of a full assignment of copyright. Swiss copyright law indeed does not incorporate the concept of "work for hire" as it exists in the USA¹¹⁰⁵. and the ownership over the rights will therefore be determined on a case-by-case basis, interpreting the intent of the parties. In the case where it is established that only a license has been granted, the most problematic question remains the question of exclusivity, and whether the parties intended any license of rights to be exclusive. It is generally admitted that exclusivity has been granted in cases where the software incorporates trade secrets, when its development has only been possible thanks to the client's knowledge or when the source code has

 $[\]overline{^{1101}Id}$.

¹¹⁰²1-6 Nimmer §6.03.

 $^{^{1103}17}$ U.S.C. $\S 201(a)$.

¹¹⁰⁴1-6 Nimmer §6.06(A).

 $^{^{1105}}Id.$

been handed over 1106 .

Best practices: In light of the above, we would recommend to always specify in writing in case of outsourced development work: (1) who will be the author of the created software, (2) whether a license will be granted for the created software, and (3) in such a case, whether the license will be exclusive or not.

Scope of protection

Exclusive rights

As is the case for any protected work, the author of computer software benefits from exclusive rights over his/her work. Thus, as provided for in Section 10 SCA, the author of computer software has the exclusive right to decide how, when and whether his/her work shall be used¹¹⁰⁷. Section 10 SCA contains an illustrative list of what is covered by this exclusive right of use of the work¹¹⁰⁸. These exclusive rights are the patrimonial rights of the author, as opposed to his/her moral rights, and can be freely assigned or granted to others by the author, usually in exchange for financial compensation. The patrimonial exclusive rights are, however, not limited to lucrative use and also cover not-for-profit use of the work¹¹⁰⁹. As regards computer programs, the most relevant right is the right to make copies and to distribute them, which includes online distribution according to the prevailing opinion among Swiss authors¹¹¹⁰.

Specific rights for computer software under Swiss law

In addition to the general patrimonial exclusive rights to which every author is entitled under the Swiss Copyright Act, authors of computer software benefit from two additional exclusive rights: (i) an exclusive rental right¹¹¹¹ and (ii) a utilization right¹¹¹².

Under Swiss law, the right of distribution does not include the exclusive right to rent out the protected work. Thus, only authors of computer software may own an exclusive rental right on their created work¹¹¹³. This provision means that the sale of a copy of the software does not deprive its author of the right to rent it out, i.e. to allow a third party to use it in exchange for financial

¹¹⁰⁶ *Id.* 1107 17 U.S.C. §103(a). 1108 17 U.S.C. §101.

^{1109 1-3} Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

¹¹¹⁰Lothar Determan, Dangerous Liaisons — Software Combinations as Derivative Works? Distribution, Installation, and Execution of Linked Programs Under Copyright Law, Commercial Licenses, and the GPL, 21 Berkeley Tech. L. J. 1421, 1430 (2006).

¹¹¹²1-6 Nimmer, §6.05.

¹¹¹³17 U.S.C. §103(a).

compensation. Consequently, and contrary to what is the case for other works protected by copyright¹¹¹⁴, the user who acquired the software is not entitled to rent it out without infringing upon the author's exclusive right, unless an express license has been granted¹¹¹⁵.

The second exclusive right specific to computer software is a utilization right. Pursuant to Section 12, paragraph 2 SCA, computer software that has been lawfully sold can be used or sold again. Swiss copyright law therefore expressly protects the right of the lawful owner of the protected software to use it 1116. This use is however limited by the definition of what a lawful utilization of the software is: pursuant to Section 17 of the Ordinance on Copyright and Neighboring Rights 1117, lawful utilization of computer software is utilization by the legitimate buyer in compliance with the contractual conditions of the sale. This specific right of utilization for computer software compensates for the fact that the private use exception for copyrighted work does not apply to software 1118.

Moral Rights

The author of a computer program, like any author in the sense of the Swiss Copyright Act, owns moral rights to his/her creation. This notion covers two main exclusive rights: (i) the right to be credited as the author of the work¹¹¹⁹ and (ii) the right to the respect of the integrity of the work¹¹²⁰. The moral rights are strictly attached to the personality of the author or of his/her heirs and therefore cannot be alienated nor transferred to a third party by any means¹¹²¹. The transfer of the patrimonial rights does not entail the transfer of the moral rights.

Thus, regarding the right to paternity of the work, the author of the work will always be entitled to be credited as the author but will also have the right to choose to remain anonymous. The author can however waive this right, which is often the case for employees, renouncing in their employment contract to exercise their right to be credited for their creation, although they remain the sole author(s) of the work¹¹²².

As regards the right to the integrity of the work, the author can always authorize

 $[\]overline{1114}$ Id.

¹¹¹⁵1-3 Nimmer §3.02.

 $^{^{1116}}Id.$

¹¹¹⁷17 U.S.C.§ 101.

¹¹¹⁸¹⁻³ Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

¹¹¹⁹17 U.S.C. §201(c).

 $^{^{1120}1\}mbox{-}6$ Nimmer $\S 6.05.$

 $^{^{1121}}Id.$

 $^{^{1122}} Id.$

third parties to modify his/her work by contract but pursuant to Section 11, paragraph 2 SCA, the author retains the right to oppose any modification that would harm his/her personality. This right can be waived by the author, but will in any case have very limited impact in relation to computer software, since any modification of the code or of the programming language will hardly be found to be harmful to the author's personality 1123.

Exceptions to the exclusive rights

Two provisions of the Copyright Act are to be mentioned as exceptions to the exclusive rights.

Firstly, Section 21 SCA authorizes the lawful owner of the software to obtain information on the software's interfaces through the reverse engineering of the program's code. The reverse engineering, which can be operated by the owner of the software or by an authorized third party, is however limited by law to the case of obtaining necessary information for the development or use of interoperable software and this information cannot be disclosed to unauthorized third parties¹¹²⁴. Thus, the reverse engineering of software is only valid under Swiss law when the two following conditions are met: (i) the information on the interface must be necessary for the development of interoperability, and (ii) the reverse engineering must be operated by an authorized person, i.e. the lawful owner of the software or a third party mandated by him/her.

The second relevant exception to the exclusive rights of the author resides in the right of the person authorized to use the software to make a backup copy¹¹²⁵. This right cannot be limited by contract, but is limited to *one copy only*, and only belongs to the lawful user of the software as described above¹¹²⁶. Any copy made for any other purpose, even by the lawful user, will be deemed an infringement on the author's exclusive right. The rightful user is also authorized to make temporary copies, insofar as they are technically necessary for the transmission of the work to a third party or for any other lawful utilization of the work, and that they do not have any independent economic significance¹¹²⁷.

Term of protection

Under Swiss law, the general term for protection of copyright for computer software is fifty (50) years after the death of the author¹¹²⁸. This differs from the longer term of protection for other copyrighted works that lasts for seventy (70) years after the death of the author.

In the case of co-authorship, the protection of the software ends fifty (50) years

¹¹²³ *Id.* 1124 *Id.* 1125 *Id.* 1126 17 U.S.C. §106. 1127 *Id.* 1128 17 U.S.C. §109(a).

after the death of the last living coauthor¹¹²⁹. If each coauthor's input, however, can be separated from the rest of the work, the protection for each separate input will end fifty (50) years after the death of its author¹¹³⁰.

As regards to derivative work, the term of protection will differ for the original work and for the additional creation, each part being protected by copyright for fifty (50) years after the death of its respective author¹¹³¹.

Special measures

As a signatory of the WIPO Copyright Treaty (WCT)¹¹³² and the WIPO Performances and Phonograms Treaty (WPPT)¹¹³³, Switzerland has adopted a provision in the Copyright Act for the protection of effective technological measures¹¹³⁴. Pursuant to Section 39a SCA, the removal or circumvention of effective technological measures used for the protection of copyrighted works or other protected objects is prohibited. Swiss law however provides for an exception to this rule: circumventing protective technological measures will not be punished by law if it is performed for the sole purpose of allowing an authorized use of the protected work¹¹³⁵.

The Swiss Copyright Act makes it a criminal offence to violate the provision on the protection of technological measures by circumventing or removing the said effective measures for the purpose of unlawfully using the protected work, but also by selling or offering products allowing such actions (Section 69a SCA). The infringer, who must have acted intentionally to be held criminally liable, will be punished by a fine, or by imprisonment in the case that he/she is a professional infringer. In addition, it must be noted that once an infringement to the rules concerning the protection of technological measures occurs, a presumption exists that it has created a threat to copyright and the author will therefore be entitled to damages without being required to establish any actual infringement to copyright ¹¹³⁶.

Analysis of FOSS under Swiss law

For the purpose of this chapter, the terms below will have the following meanings:

Free and Open Source Software (FOSS) software subject to an Open Source 1137 license granting the right to use, analyze,

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\begin{array}{c} \hline 11292\text{--}8 \text{ Nimmer } \S 8.12. \\ \hline 1130 \text{Computer Assoc., } 982 \text{ F.2d at } 714. \\ \hline 1131 \text{See, } 4\text{--}13 \text{ Nimmer } \S 13.02 \text{(B)}. \\ \hline 1132 \text{See, Computer Assoc., } 982 \text{ F.2d at } 715. \\ \hline 1133 \text{Id.} \\ \hline 1134 \text{Apple Computer, Inc v. Microsoft Corp., } 35 \text{ F.3d } 1435, 1445 \text{ (9th Cir. 1994)}. \\ \hline 1135 \text{See, Lotus Dev. Corp. v. Borland Int'l, } 49 \text{ F.3d } 807, 819 \text{ (1st Cir. 1995)}. \\ \hline 1136 \text{See, } \text{Id. at } 815. \\ \hline 1137 \text{4-}13 \text{ Nimmer } \S 13.03 \text{(F)}. \\ \hline \end{array}
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modify and improve the said software by making its source code freely available to users.

Proprietary software

computer software that is the exclusive property of its developers/publishers and which can only be copied or used in compliance with the owner's licensing agreements, their source code being rarely made available.

Common legal issues in relation with FOSS

We shall analyze in this section the legal issues regularly discussed in relation to Open Source Software, starting with the question of copyright protection of FOSS and then addressing the questions of enforcement of FOSS licenses and of the consequences of a breach of such licenses under applicable Swiss law.

FOSS under Swiss copyright law

Characterization of FOSS

One major issue in relation with copyright law that takes on an important dimension with respect to Open Source Software is the question of characterization. Indeed, one of the legal difficulties in FOSS consists of determining who is entitled to issue a license or to bring a lawsuit in case of infringement, or in determining the duration of the protection of the software. These issues can be solved by the characterization of the Open Source Software either as a *joint work* or as a *derivative work* as defined in the Copyright Act.

FOSS shall be considered a joint work under Swiss law when two or more persons have worked in common on the development of original and unique software for a determined period of time¹¹³⁸. Thus, when several developers have worked together for the purpose of creating original software, the result will usually be considered a joint work in the sense of copyright law, each developer being a coauthor.

The question becomes more complicated when unfinished software is created and then made available under an Open Source license for the purpose of being further developed by its users. In such cases, it will be hard to establish that the original developer and the user worked in collaboration with a common purpose, i.e. the creation of original software. Thus, a common creation will rarely be found, and the software which has been modified or improved by the user will most of the time be considered a derivative work in the sense of Section 3 SCA. The creator(s) of this new version of the software will therefore be a new author (or new authors) of a new work, this characterization giving rise to different rights.

¹¹³⁸ See, Order Re Copyrightability Of Certain Replicated Elements Of The Java Application Programming Interface (hereinafter *Order*) found at http://www.groklaw.net/pdf3/OraGoogle-1202.pdf.

Rights and obligations of the original coauthors

The coauthors of a protected work are the joint holders of the copyright pursuant to Section 7 SCA and as such form a sui generis legal tenancy. The co-authorship and its legal consequences will have an impact on two main questions in relation with Open Source: (i) who is entitled to give a license and (ii) who has the power to act in case of infringement?

As regards to the first issue, the legal regime that applies to coauthors, which is a regime of joint tenancy imposed by law but not defined by the legislator, implies that no assignment can be awarded nor license granted on the software without the common consent of all coauthors¹¹³⁹. This system can be highly burdensome, especially in relation with Open Source, where the main purpose is to make software freely available to everyone and to allow users to benefit from further developments. Although the strictness of this rule is partially lessened by the obligation for all coauthors not to withhold their consent without motive¹¹⁴⁰, the regime of joint ownership can be extremely limiting, especially in the context of Open Source where it is essential to identify the person entitled to grant the Open Source license, and where the requirement of obtaining all the coauthors' consents would be considered a hurdle to free distribution. The coauthors can, however, derogate to the legal regime with a convention entitling one or several of the coauthors to represent them all for the exercise of rights of use.

Best practices: In order to escape from the burdensome legal regime of coauthorship, we would advise authors of Open Source software to join the Free Software Foundation (FSF) which provides a system of assignment of the author's copyright to the FSF, which will then be in charge of the management of the rights¹¹⁴¹.

Regarding the second issue relating to the ability to bring a claim in case of infringement, Swiss law authorizes any coauthor to act but it will always be on behalf of all the coauthors¹¹⁴². This system facilitates the protection of the software by allowing any coauthor to act independently on his/her own and by automatically ensuring that all coauthors will benefit from the claim in case of a positive result. The legal regime however does not create a similar system of solidarity in case of a claim for infringement by a third party against the coauthors: under Swiss law, a claim can only be brought against one coauthor and still be valid, but the coauthor shall only be liable for his/her share of the work — the work being divided in equal shares by the number of coauthors without regard to the actual input of each co-author. Such a system allows a third party to enforce its rights without having to identify all coauthors, but it also protects each coauthor from full liability.

Authors of a derivative work

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113917 U.S.C. §102(b).
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 $^{^{1140}1-2}$ Nimmer §2.02.

¹¹⁴¹4-13 Nimmer §13.03(B)(2)(a).

¹¹⁴²Computer Assoc., 982 F.2d at 708.

The characterization of portions of Open Source software as a derivative work will also have an impact on the rights of the author, the main legal issue relating to his/her ability to further distribute FOSS. In the majority of cases, the user who further develops Open Source software, either by modifying or improving it, will be considered the author of a derivative work and as such own a copyright on what has been modified—inasmuch as this improvement or modification can be protected by copyright, i.e. is original, which will usually be the case¹¹⁴³. But if the author wants to distribute the modified software to other users, it is necessary to have the consent of the original author (or coauthors) since the original work is incorporated in the derivative one. For most FOSS licenses, the original author already consents to a further distribution of FOSS by its users, and therefore the consent of the original author will not be an issue (See GPL, Mozilla, etc.). However, it may be the case that the Open Source software has been freely distributed under a certain license that does not allow any further distribution by the end user or any distribution of the modified software 1144. in which case the author of the new derivative work will need to obtain the consent of the original developer(s) to license his/her modified software under a new FOSS license.

Assignement of copyright

As we have seen in section I.3 above, the SCA provides for a special rule regarding computer programs that are created by an employee as part of his/her employment obligations. In such cases, although the programmer remains the author of the protected program, the employer will automatically own all of the exclusive rights of use on such programs. Thus, the employer will be the entity with the authority to validly license the software under an Open Source license, with no need to obtain the employee's consent 1145. The benefit of this rule can be that several developers may create a company together, for which they work and which would automatically hold the right to license the created software, without requiring the conclusion of a convention for the management of the rights of all coauthors for each newly created piece of software, in this way escaping from the burdensome system of co-authorship.

Moral copyrights

FOSS being protected by copyright, the developer is thus an author as we have clearly established, and as such, he/she still owns a moral copyright on the licensed software. Therefore, the modifications or improvements of the software, although authorized by the license, cannot infringe upon his/her moral copyright, and more specifically cannot harm the author's personality ¹¹⁴⁶. The question of whether a modification of the software will infringe upon the au-

¹¹⁴³ See, BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

¹¹⁴⁴See, 4-13 Nimmer §13.03(B)(3).

¹¹⁴⁵See, 4-13 Nimmer §13.03(F)(2).

 $^{^{1146}4-13}$ Nimmer $\S13.03(F)(2)$.

thor's personality rights will be established on a case by case basis, and it will very rarely be found under Swiss law in the context of computer programs¹¹⁴⁷. This is even truer in the case of FOSS, where the source code has been disclosed, and therefore the programming language made available to all users for the purpose of being modified. In such a context, it will be extremely difficult to establish any harm to the developer's personality, the only case being when his/her reputation as a programmer would be damaged by the subsequent modifications. Such harm will however be highly difficult to establish in the case of FOSS, and more particularly if the software is made available under a GPL, since this license creates an obligation for subsequent users/modifiers to give explicit notice of their modifications¹¹⁴⁸, with the consequence that the changes will not be attributed to the original author and therefore not harm his/her reputation. It is however important to bear in mind that the broad right to modify the original software granted by a FOSS general license can still be limited by the original author's enforcement of his/her moral right¹¹⁴⁹.

Enforcement of FOSS licences

General contract law issues

Based on the above definition, the specificity of FOSS is that the source code of a computer program is made freely available to users through the delivery of a FOSS license. Yet, in order to enforce such a license, the latter needs to have been validly concluded between the concerned parties and its content needs to comply with the local applicable law — which also raises questions as regards to the law applicable to the contract and more general issues of conflict of laws (see IV.1 below).

Assuming that the FOSS license is subject to Swiss law, the main contract law issues in relation with FOSS would therefore relate to the valid conclusion of the said license, the identification of the parties to that license, as well as the validity of its content.

As a preliminary remark, it should be noted that Swiss authors generally agree that a FOSS license should be analyzed in the context of contract law and should not be considered to be a unilateral legal act¹¹⁵⁰. Under Swiss law, a contract is defined as a bilateral or multilateral legal act by which the parties exchange the expression of their matching intents (meeting of the minds)¹¹⁵¹. Pursuant to that definition, a first issue to consider is how the FOSS license is validly concluded, i.e. how does the meeting of the minds occur?

Conclusion of a binding contract

¹¹⁴⁷See, Computer Assoc., 982 F.2d at 715.

 $^{^{1148}}See,$ Computer Assoc., 982 F.2d at 715.

 $^{^{1149}\}mathrm{Order}\ supra$ Note XXX

¹¹⁵⁰See, Id. at 710.

¹¹⁵¹4-13 Nimmer §13.03(B)(4).

Under Swiss law, it is generally admitted that a contract can be validly concluded on the Internet, simply by clicking on a "Download" or "I agree" button¹¹⁵². Therefore, a FOSS license can be validly concluded between the author and the user when he/she downloads the Open Source software after reading the license to which the use of the software is subject and clicking on the "I agree" button. The FOSS license is thus concluded between the right holder and the user by the delivery of the software to the user or his/her access to it. The question of the conclusion of the license is however more complicated when the software is transferred without the user having knowledge of the FOSS license governing it. It is indeed common that a user acquires Open Source software without coming across the FOSS license under which the rights are granted ¹¹⁵³.

In such a case, Swiss scholars consider that the original author of FOSS and the end user are not bound by a license or any other agreement 1154. The consequence of such a situation is that the user will not benefit from the rights of the FOSS license as long as he/she is not aware of its existence: in other words, the user will not be entitled to modify or improve the software until he/she is bound by the conditions of the FOSS license, with the risk arising that any unauthorized modification of the source code will be considered to constitute copyright infringement. Thus, should no copy of the FOSS license be communicated to the user together with the software, then no valid license can be concluded and therefore no modification of the software will be considered valid and covered by the FOSS license. The content of the FOSS license will be considered as the expression of an offer by the licensor (i.e. the author of the software or the holder of the copyright) to conclude an agreement governing the use of the software. Indeed, under Swiss law, an offer in the sense of contract law does not need to be addressed to a specific person and it can be expressly or tacitly accepted by any recipient 1155. Thus, the user who complies with the provisions and conditions contained in the FOSS license will be considered as having validly accepted the offer and the license will be validly concluded and binding upon the parties¹¹⁵⁶. This raises however the question of the duration of the validity of the offer and the possibility for the licensor to withdraw such an offer. According to Swiss scholars, the offer will remain binding upon the licensor as long as the user has in good faith the possibility of validly concluding the contract by the simple exercise of the conditions of use, and it will therefore be extremely difficult for the licensor to withdraw his/her offer and avoid the conclusion of a license agreement on the Open Source Software 1157.

If no license agreement has been concluded between the user and the licensor, the modification of the software by the user could constitute a copyright infringe-

 $[\]overline{^{1152}Id}$.

 $^{^{1153}\,}See,$ John William See v. Christopher Durang and LA. Stage Co., 711 F.2d 141, 143 (9th Cir. 1983).

 $^{^{1154}}Id.$

 $^{^{1155}}Id.$

 $^{^{1156} \}rm Mist-On~Sys.~v.~Gilley's~European~Tan~Spa,~303~F.~Supp.~2d~974,~978~(W.D.~Wis.~2002).$ $^{1157} \rm 4-13~Nimmer~\S13.03(B)(4).$

ment, which may trigger civil as well as criminal liability. The user's liability, however, will most probably be reduced or at least strongly limited in such circumstances, a Court being likely to take into consideration the concomitant liability of the author who did not properly attach the Open Source license to the distributed software, therefore giving rise to legal uncertainty.

Best Practices: It is always recommended to accompany the software with the FOSS general license under which it is offered to be granted, including licenses that do not require so, in order to avoid unclear situations where it is unsure whether a binding contract exists between the parties, because it will otherwise depend on the interpretation of the user's actions to determine whether he/she intended to be bound or not.

Determination of the parties to the FOSS license

Along with the question of whether a valid FOSS license has been concluded with the transfer of the software, the other issue to be considered in relation to Open Source is to determine who is a party to that license agreement.

The situation is particularly complicated when the user himself/herself starts licensing the modified software and so on. As already mentioned, a FOSS license is always concluded between the *author* of the Open Source software, who is the licensor, and the *user* of the software who is the licensee. When there are several authors of the work however (either coauthors or several authors of a derivative work), the license must be granted by all authors and the conditions of use of the FOSS license towards all of them will be binding upon the user. This situation is generally solved by the license itself which will contain a clause according to which the user, by accepting the conditions of the license, will automatically be bound to all previous authors of the software¹¹⁵⁸. This mechanism is authorized under Swiss law and therefore creates a valid contractual relationship between all parties.

Violation of the FOSS license — Breach of contract or Copyright infringement?

The question of determining whether a violation of the FOSS license constitutes a breach of contract or a copyright infringement may have a certain impact in Switzerland as regards procedural issues as well as potential remedies to which the authors may be entitled. The protection for Open Source software can be based on both legal grounds, and the claim will depend on the type of violation that has occurred.

Thus, the copyright holder will be entitled to invoke a copyright infringement for the cases in which the user does not give proper credit notice or modifies the software when he has only been given the right to use it, whereas the claim of a user brought in order to obtain the disclosure of the source code will only be based on contract law since it only constitutes a breach of the license agreement and not a copyright infringement. It is however conceivable that an action consists of both a breach of contract and an infringement to copyright, in which

¹¹⁵⁸Mist-On Sys., 303 F. Supp. 2d at 976 (W.D. Wis. 2002)

case the claimant will be able to invoke both violations and the Court will usually have proper jurisdiction on both.

Some differences however exist between a claim based on copyright law and a claim based on contract law, in particular from a procedural point of view. The Swiss legal system being a federal system, a claim is usually brought in front of a local cantonal court before ending up in front of the Swiss Supreme Court; for copyright claims however, there is only one unique competent jurisdiction at the cantonal level before an appeal can be brought in front of the Swiss Supreme Court, whereas a claim based on contract law may go through several cantonal appeals before ending up in front of the Swiss Supreme Court¹¹⁵⁹.

In addition to this procedural difference, the remedies in contract law and copyright law that would be applicable to a violation of a FOSS license can differ in some respects, reason why the claimant will often use both grounds in front of the court¹¹⁶⁰. Indeed, although damages can be asked both in case of copyright infringement and breach of contract, contract law's sole alternative remedy will be limited to injunction for specific performance, whereas the SCA provides for more specific remedies, such as the prohibition of further distribution of the infringing copy and/or its destruction¹¹⁶¹. In case of copyright infringement, the author will also be entitled to ask for a declarative judgment of his/her quality of author¹¹⁶², or to ask for an injunction to prevent the infringement from happening or to make it stop in cases where the infringement is still producing effects¹¹⁶³. It should also be noted that Swiss copyright law additionally makes it a criminal offence to perform most acts of copyright infringement¹¹⁶⁴.

Warranty and Liability

As regards FOSS, there are two main aspects to be analyzed in this section: one relates to the warranty granted or more generally excluded by the licensor, and the second relates to the validity of a waiver of the licensor's liability.

Exclusion of warranty

Under Swiss law, the regime applicable to the exclusion of warranty will depend on the characterization of the license that will determine the applicable contract law rules. Swiss contract law sets out general rules applicable to all types of contracts and specific rules regulating specific types of contracts ("contrats nommés")¹¹⁶⁵. License agreements are not specifically regulated under Swiss contract law but are considered as "sui generis contracts"¹¹⁶⁶ and are therefore subject to the general rules on contracts. In some instances however, a court

¹¹⁵⁹ Computer Assocs., 982 F.2d at 709-10.

¹¹⁶⁰BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

 $^{^{1161}}See$ v. Durang, 711 F.2d at 143.

¹¹⁶²Computer Assoc., 982 F.2d at 715.

¹¹⁶³See, 1-2 Nimmer §2.03(G).

 $^{^{1164}17~{\}rm U.S.C}$ §105.

 $^{^{1165} \}rm http://copyright.gov/help/faq/faq-definitions.html.$

 $^{^{1166}}See,\ Id.$

may apply some rules of specifically regulated agreements by analogy to a license agreement when it is deemed appropriate¹¹⁶⁷, and Swiss legal scholars have therefore identified specific rules that may be applicable to FOSS licenses.

Although the Open Source Definition provides in the Section 1 that no royalties or fees should be perceived by the licensor under a FOSS license for the selling or giving away of the Open Source software¹¹⁶⁸, the distribution of such software can be included in the sale of an aggregate software which can be done against payment or a fee may be charged for the physical act of the transfer. In such cases, Swiss scholars have found that the rules of sales contract could be applicable to the FOSS license, which would be subject to the limitations of the exclusion of warranty¹¹⁶⁹. Pursuant to Section 199 SCO, a clause excluding all warranties in a sales contract is void in the case of fraud. Thus, a clause such as Section 15 of the GNU GPL v3 or Section 11 of the GNU GPL v2 excluding all kinds of warranty could be found non-valid under Swiss law if the transfer of the Open Source Software incorporates elements that can be assimilated to a sales contract and would therefore not be enforceable in cases of fraud. The invalidity of the clause excluding all warranties will however not affect the validity and enforceability of the rest of the license pursuant to the principle of severability.

On the other hand, should the Open Source software be transferred entirely free of charge, such a transfer could fall under the rules of donation, applicable by analogy as regards to the rules on the exclusion of warranty¹¹⁷⁰. Yet, in case of a donation, Section 248, paragraph 2 SCO makes the exclusion of all warranties valid. In that context, the provisions from the GPL mentioned above, excluding all types of warranties would be deemed valid under Swiss law¹¹⁷¹.

Waiver of liability

In addition to the exclusion of warranties, most FOSS licenses contain a provision waiving all liability of the author/licensor for damages (e.g. article 16 GNU GPLv3 & article 11 GNU GPL v2). Some of these provisions reserve however the mandatory provisions of the applicable law¹¹⁷². Assuming that Swiss law is applicable to a FOSS license, the waiver of liability would not be valid in case of fraud or gross negligence¹¹⁷³. Any other exclusion of liability for damages resulting from the use of the Open Source software, which is not covered by the cases of gross negligence and fraud, shall therefore be considered valid¹¹⁷⁴.

The copyleft principle

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\frac{1167\,See, \text{ Computer Assocs.}, 982\,\,F.2d\,\,\text{at }710.}{1168\,\text{http://www.copyright.gov/help/faq/faq-general.html.}}{1169\,4-13\,\,\text{Nimmer }\S13.03(F)(4).} \frac{1170\,\text{http://creativecommons.org/licenses/publicdomain/.}}{1171\,17\,\,\text{U.S.C.}\,\,\S102(b).} \frac{1172\,\text{Feist, }499\,\,\text{U.S. at }350\,\,(1991).}{1173\,\text{Assessment Techs. of WI, LLC v. WIREdata, Inc., }350\,\,\text{F.3d }640\,\,(7\text{th Cir. }2003).} \frac{1174\,1-3\,\,\text{Nimmer }\S3.04(B)(3)(a).}
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A "copyleft" license is a license by which the licensor grants the right to use, distribute and modify the computer program to a licensee, under the condition that all further distributions of the modified software make the work available in a form that facilitates further modification and use the same license. Not all FOSS licenses are "copyleft" licenses (for instance the BSD and the Apache licenses are not "copyleft", whereas the GPL and the LGPL are). In the absence of a "copyleft" clause, a user that has modified the Open Source software is entitled to integrate his/her new work in another program and sell it as proprietary software, or simply to refuse access to the source code in further distributions of the work¹¹⁷⁵.

One issue related to the "copyleft" principle is the question of the compatibility of various FOSS licenses with each other. A license that does not incorporate a "copyleft" clause can indeed be considered incompatible with other FOSS licenses, which can lead to limitations for the re-distribution of the software by the user¹¹⁷⁶. The issue can however be solved conventionally by a clause integrated in the Open Source License that will determine which other Open Source licenses are compatible and can therefore be used by the users to license their modified version of the software¹¹⁷⁷.

This principle raises also other legal issues, in particular as regards the integration of a part of Open Source software into proprietary software: is the user under the obligation to make the full new software available under a FOSS license or is it limited to the part of the code developed under an Open Source license? Swiss scholars agree to say that in such cases, the new software constitutes a derivative work in the sense of copyright law, and therefore, the part of the code originating from Open Source software remains subject to the conditions of the Open Source license that has been granted by the original author.

Remedies — Calculation of damages in case of infringement

One of the remedies in case of breach of the FOSS license being the possibility to claim for damages, the delicate question consists in determining the amount of these damages.

A claim for damages, in cases of copyright infringement as well as in cases of breach of contract, is regulated by the general rules of the Swiss Code of Obligations (SCO). Pursuant to Section 42 SCO, the claimant has the burden to prove the existence of a damage. The amount of the damages corresponds to the difference between the current capital of the claimant and the capital he/she would own if the breach had not occurred 1178. In case of infringement to intellectual property rights however, it is not always easy for the claimant to compute the claimed damages, and Swiss law does not require him/her to

 $[\]overline{^{1175}17}$ U.S.C. § 107.

 $^{^{1176}} Id.$

 $^{^{1177}} Id.$

¹¹⁷⁸17 U.S. Code §117(a).

file a claim stating a precise amount ¹¹⁷⁹. The claimant must however provide the Court with sufficient elements to calculate the amount of damages to award, based on the full instruction of the case and the review of the evidence.

In cases of copyright infringement, the most common basis for a court in computing damages is the amount of failed opportunities of the claimant due to the copyright infringement ¹¹⁸⁰. It may, however, be extremely difficult to establish that the infringement resulted in the loss of opportunities for the copyright holder, and the amount of damages can also be computed on the basis of the royalties that the right holder would have received, should the protected work have been used under a validly granted license¹¹⁸¹. In the absence of any case in relation to Open Source software in Switzerland, it is difficult to determine in advance which method a court would use to compute damages for the case of a breach of a FOSS license. It would however most likely include the judicial costs of the prevailing party, as it is common in Switzerland for the losing party to bear the judicial costs of the adverse party¹¹⁸².

FOSS case law in Switzerland

As of today, we are not aware of the reporting of any case law on FOSS in Switzerland. A decision was rendered by the Swiss Federal Administrative Tribunal on July 2, 2009, and later by the Swiss Federal Tribunal on March 11, 2011¹¹⁸³ and involved, among others, Red Hat Limited as a plaintiff in this case against the Federal Bureau for Buildings and Logistic. This case however did not relate to any legal issue in relation with Open Source Software but was in fact about Swiss public procurement issues.

Legal procedures

We will start by analyzing briefly the applicable principles of conflict of laws that would give jurisdiction to a Swiss court and lead to the application of Swiss law. We will then provide the reader with a short overview of possible judicial proceedings in Switzerland in case of infringement or breach of the FOSS license.

Application of Swiss law pursuant to private international law (PIL)

In most cases, infringement and breach of a FOSS license will involve foreign players located in different countries. It is therefore important to determine (i) which court should have jurisdiction over this case and (ii) which substantive law the court will have to apply to the case.

Regarding the competent jurisdiction to hear the case, unless the parties have incorporated a valid choice of court clause in the license agreement, Section

¹¹⁷⁹¹⁷ U.S. Code §117(c).

 $^{^{1180}\}mathrm{Visual}$ Artists Rights Act of 1990, 17 U.S. Code §106A.

¹¹⁸¹17 U.S. Code §302(a).

¹¹⁸²17 U.S. Code §302(b).

¹¹⁸³17 U.S. Code §302(c).

109, paragraph 1 of the Swiss Private International Law Act (PILA) provides that the competent court which should hear intellectual property claims is the Swiss court at the defendant's domicile, or, in the absence of domicile, the court at the place where the protection is sought. This provision designates the competent court to hear cases of *infringement* of intellectual property right and sets as a general rule that the Swiss courts of the domicile of the defendant will have jurisdiction over all cases of infringement, whether there has been an infringement on a Swiss or a foreign right¹¹⁸⁴. This rule differs in some respect with the conflict rule of the Lugano Convention of September 16, 1988 that sets as the competent jurisdiction to hear infringement cases, the courts of the defendant's domicile or the court of the place where the harmful event occurred¹¹⁸⁵.

In cases of a contractual breach only of the FOSS license, which does not constitute a copyright infringement, Sections 112 and 113 PILA provide that the court of the domicile or the habitual residence of the defendant, or, if the defendant has no domicile or does not reside in Switzerland, the court of the place of performance of the contract has jurisdiction over the case.

As regards applicable law, the general principle of Swiss rules on conflict of laws is the freedom of the parties to a binding contract to agree upon a choice of law clause¹¹⁸⁶. This general principle also applies to contracts pertaining to intellectual property, in which a choice of law clause is allowed 1187, but in the absence of which the law of the place where the grantor of the intellectual property right has his/her habitual residence is applicable. In specific cases of contracts pertaining to copyrights, in the absence of a choice of law clause, the applicable law will be the law of the place where the person having control over the server containing information has his/her residence, and not of the place where the actual server is located 1188. This rule however only applies to the contractual obligations of the parties and a different conflict rule exists for the questions of infringement of an intellectual property right. Pursuant to Section 110 PILA, the law applicable to infringement cases is the law of the State in respect of which intellectual property protection is sought. The parties can however agree upon the application of the law of the forum (lex fori) to damages claims after the harm has occurred 1189. This ability for the parties to choose the lex fori is however limited to the question of the computation of damages and does not cover the preliminary question of infringement 1190.

¹¹⁸⁴¹⁷ U.S. Code §201(d)(1).

 $^{^{1185}17}$ U.S. Code $\S 201(d)(2)$.

¹¹⁸⁶17 U.S. Code §204(a).

¹¹⁸⁷17 U.S. Code §205(d).

¹¹⁸⁸17 U.S. Code §205(e).

¹¹⁸⁹17 U.S. Code §203(a)(1-2).

¹¹⁹⁰17 U.S. Code §203(a)(3).

Overview of the possible proceedings in Switzerland in case of infringement

Civil proceedings

On January 1st, 2011, a new unified civil procedure act came into force in Switzerland, and all cantons are therefore subject to the same procedural rules. The obligation for cantons to have a unique trial court as regards to copyright claims remains in force and has be confirmed by the new unified procedure¹¹⁹¹. This rule applies to cases on issues of copyright infringement but also on issues of transfer of rights or on licenses to use copyrighted work, and therefore covers claims that could be filed in Switzerland in relation to a FOSS license. Following a decision from the unique cantonal trial court, an appeal will always be possible to the Swiss Supreme Court¹¹⁹².

The filing of provisional measures in relation to copyright claims is possible for the party that shows that a copyright infringement is likely to have occurred or is likely to occur in the near future ¹¹⁹³. The provisional measures will usually be used for the preservation of evidence, for discovering the origin of counterfeiting goods, but it can also consist in the prohibition to use the contentious work, which will probably be the most useful in software cases ¹¹⁹⁴.

Criminal proceedings

Along with civil proceedings that can be initiated in case of breach of a FOSS license, the claimant may also press criminal charges against the potential infringer in front of a criminal court. There will be criminal proceedings only if initiated by the right holder, unless the infringer acted professionally in which case the judicial authorities can charge him/her automatically, and a crime will be found only if the infringer acted *intentionally*¹¹⁹⁵. A new unified criminal procedure code also came into force on January 1st, 2011, and is now applied by all cantons in all criminal cases.

Recommended literature or websites

For more information about Open Source software and applicable Swiss law, we recommend the following specialized literature:

- Mike J. Widmer, Open Source Software Urheberrechtliche Aspekte freier Software, Stämpfli, Bern 2003.
- Gianni Fröhlich-Bleuler, Urheber und vertragsrechtliche Aspekte der Open Source Software, in: Jörg/Arter, IT-Verträge, Bern 2007.

 $[\]overline{^{1191}}$ 17 U.S. Code §203(a)(4).

¹¹⁹²17 U.S. Code §203(b)(1).

¹¹⁹³17 U.S. Code §501(a).

 $^{^{1194}17}$ U.S. Code §411.

¹¹⁹⁵17 U.S. Code §412.

- Gianni Fröhlich-Bleuler, Die neue Version des GNU Public License, in Jusletter 21. Juli 2008.
- Ursula Widmer, Gutachten betreffend Rechtsfragen bei Beschaffung und Einsatz offener Software in des Schweizerisches Bundesverwaltung (Projekt OPUS).

Taiwan

author:[Lin,Lucien Cheng-Hsia]

Introduction to software protection under Taiwan law Body of law

Copyright protection of software in Taiwan is regulated under the general Copyright Act of 10 Feb. 2010. Instead of drafting specialized regulations for computer programs, the legislature in Taiwan made all related norms and standards merge into the established provisions in Copyright Act^{1196} .

The civil and commercial legislative system in Taiwan is designed as one integrated infrastructure. This means when it comes to copyright protection and infringement issues, treatments and procedures should be taken under the principles of the Civil Code¹¹⁹⁷. However, some articles of Copyright Act are also deemed as special provisions to the general Criminal Code, that is to say, when a criminal prosecution of unlawful copyright infringement has been impleaded by prosecutor, Criminal Code as well as the Copyright Act should be put into reference. Moreover, when the computer programs are involved in the commercial use, the Consumer Protection Law¹¹⁹⁸ is the principal supplementary regulations to general laws. Besides, when a copyright issue occurs in Taiwan, there is also an optional dispute mediation procedure could be chosen in the adjective law area, the details of this mediation mechanism are defined in the Regulations of Copyright Dispute Mediation¹¹⁹⁹, in brief, considering that the formal lawsuit abiding by the Intellectual Property Case Adjudication Act¹²⁰⁰, Taiwan Code

^{1196&}quot; (Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^{1197}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

 $^{^{1198}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{^{1199}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

 $^{^{12\}bar{0}0}$ For example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

of Civil Procedure¹²⁰¹, and The Code of Criminal Procedure¹²⁰² might take litigants too much time and expense, both parties in a copyright dispute event could choose this mediation procedure in consensus as an alternative solution. After a settlement of the mediation has been reached and ratified¹²⁰³ by the Intellectual Property Court, the written mediation settlement statement shall have the same force as a final and unappeasable court judgment and constitute a writ of execution by itself as well.

Copyright Act: Object of protection

Computer programs are protected by copyrights as one special work in the intellectual domain similar to literary and artistic creation, this is declared in article 5, paragraph 1, subparagraph 10 of the Copyright Act as "Works means a creation within an intellectual domain and shall include Computer programs." However, there aren't many details being told in the Copyright Act about scales of creativities for copyright qualified computer programs. The only specific clause can be referred is article 3, "Work protected by Copyright Act means a creation that is within a literary, scientific, artistic, or other intellectual domain." Deduced from article 3, legal doctrine established that the originality is still needed to be seen for a computer program pursuing copyright protection, because the originality is the very essence of creation in intellectual domain. However, how intensive the originality should be and by which method it could be measured is yet to be extensive interpreted. By now, analyzed on most rulings by the courts and most comments from the jurists, there is only one clear line has been drawn on this topic, that is sweat of the brow doctrine should not be applied directly without proper elaboration in copyright area¹²⁰⁴, which means, pure labour service output without originalities should not be deemed as intellectual creation, although the threshold of originality for copyright protection is fairly low by the courts, it is still obliged to be found nevertheless.

Moreover, as it says in article 10-1 of the Copyright Act: "Protection for copyrights that has been obtained in accordance with this Act shall only extend to the expression of the work in question, and shall not extend to the work's underlying ideas, procedures, production processes, systems, methods of operation, concepts, principles, or discoveries." This principle applies to computer programs like other copyright works. Generally speaking, two fundamental points should be sustained on computer programs for copyright protection, which are:

(i) Producing process of the computer program doesn't only consist of merely registering or copying the reality or executing a functional routine. (ii) The

 $^{^{1201}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

¹²⁰²World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

¹²⁰³The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contul.html.

¹²⁰⁴The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of 1976.

originality involved in the computer program is required to make it qualified as an own intellectual creation of the author, no matter how minor the originality is.

Authors/Beneficiaries

Article 11 and 12 of the Copyright Act provide that the author of a computer program should be the one who actually does the design and writing of the program, whether the author is completing the work as an employee within the scope of a persistent employment or as a contractor under a task-based commission. In most cases the author refers to the software engineer of a computer program, if it does have freedom of development when creating the work. As for the economic rights to the work, they belong to the employer in an employment relation, and to the contractor in a task-based commission. However, either in the employment relation or in the commission cooperation, all the assignments of authorship attribution and economic right allocation could be prearranged by a contractual agreement between both parties. Namely, in order to find out and make confirmation about which party is the one that authorship should be attributed to or economic rights should be adhered to, details of the contract of employment or commission need to be fully revealed to that purpose. Additionally, according to article 12, paragraph 3 of the Copyright Act: "Where the economic rights are enjoyed by the commissioned person pursuant to the provisions of the preceding paragraph, the commissioning party may exploit the work." That is to say, if there isn't any prearrangement in contract for authorship and economic rights between the opposite commissioning parties, then authorship and economic rights of the computer program would be appointed to the contractor as a default arrangement. However, the commissioning party does pay remuneration to the contractor for the work to compensate its offering, this clause makes a supplementary explanation for its lawful exploitation status on the work, whether this privilege is recorded in writing or not, it applies to the commissioning party as well at law.

Exclusive rights

The exclusive economic rights defined by the Copyright Act are listed from article 22 to 29, the whole package included (a) reproduce the work, (b) publicly recite the work, (c) publicly broadcast the work, (d) publicly present the work, (e) publicly perform the work, (f) transmit the work to the public, (g) publicly display the work, (h) adapt the work into derivative ones or (i) compile the work into compilation ones, (j) distribute the works through transfer of ownership, and (k) rent the work. Although all these rights are not fit in computer programs in theory and in essence, on account of computer programs are treated equal to other copyright works under the Copyright Act without specific differences, all the exclusive rights listed above could be covered in the software area, as long as it is applied in a realizable way.

Exceptions to exclusive rights

Besides making a legal plea and excuse by asserting the fair use doctrine based on article 44 to 66 as limitations to exclusive rights, there is only one general exception applied in the Taiwan Copyright Act, which is the first sale doctrine under the jurisdiction of Taiwan. It is expressly provided by article 59-1 of the Copyright Act: "A person who has obtained ownership of the original of a work or a lawful copy thereof within the territory under the jurisdiction of the Republic of China may distribute it by means of transfer of ownership." All the copyright works apply to this provision, as well as computer programs. Hence, when a computer program was attached to a storage medium, or physical product, machine, and similar equipment, then be lawfully transferred to others with rightholder's consent, this transaction shall exhaust the distribution right of that copy of computer program under the jurisdiction of Taiwan, with the exception of the right to control further rental of the program if it is incorporated to a physical product, machine, and equipment rather than a simple storage medium, according to article 60, paragraph 2 in the same Act.

Other exceptions specific for computer programs are set forth in article 59 of the Copyright Act, "(i) The owner of a legal copy of a computer program may alter the program where necessary for utilization on a machine used by such owner, or may reproduce the program as necessary for backup; provided, this is limited to the owner's personal use. (ii) If the owner referred to in the preceding paragraph loses ownership of the original copy for any reason other than the destruction or loss of the copy, all altered and backup copies shall be destroyed unless the economic rights holder grants its consent otherwise." article 59 cited above is deemed as compulsory law. Therefore, contractual agreements in conflict with that are held to be nonexistence.

Moral rights

Moral rights are highly valued by the Copyright Act in Taiwan and applied to computer programs if realizable in essence like other copyright works as well. As expressed in article 21 and 18 of the Copyright Act, moral rights belong exclusively to the author and shall not be transferred or succeeded. Moreover, the protection of moral rights of an author who has died or been extinguished shall be treated the same as the author was alive or in existence and shall not be infringed upon by any person.

In other words, moral rights are deemed as the "specific exclusive rights without transferability" in Taiwan. That is to say, when the authorship attribution of a copyright work has been made, moral rights adhered to that authorship shall not be changed or transferred to other person or legal entity by any means, and it remains in force after the transfer of the proprietary rights and following the death of the author for evermore.

According to article 16 of the Civil Code, moral rights are generally considered to be an essential legal capacity, and declared to be not permitted to waive in

Taiwan. Although they are treated as inalienable rights, this does not mean that it is impossible for rightholder to renounce under certain circumstances. From the standpoints explained in official documents issued by the Ministry of the Interior in Taiwan¹²⁰⁵, global renouncement of the future exercise of moral rights should be void. However, if the renouncement of the scope could be stipulated with well-defined boundaries, such as subject, duration, and applied area being prearranged for the renouncement, the renouncement of moral rights could be validly sustained. In other words, the "Principle of Freedom of Contract" shall be honored.

Moral rights protected by the Copyright Act in Taiwan consist of three parts:

Right of publicly release

The author of a work shall enjoy the right to publicly release the work provided by article 15 of the Copyright Act;

Right of paternity

The author of a work shall have the right to indicate its name, a pseudonym, or no name on the original or copies of the work, or when the work is publicly released. The author has the same right to a derivative work based on its work provided by article 16 of the Copyright Act;'

Right of integrity

The author has the right to prohibit others from distorting, mutilating, modifying, or otherwise changing the content, form, or name of the work, thereby damaging the author's reputation provided by article 17 of the Copyright Act.

Term of protection

For economic rights of computer programs, the same terms to works of literature, science, and art apply: 50 years as of December 31 following the death of the author, and if the economic rights in work are appointed to a legal entity, the 50 years duration should be counting from the day that work is publicly released. In case of co-authors, economic rights in a joint work subsist for 50 years after the death of the last surviving author. More details about the duration of economic rights could be provided in article 30, 31, 33, and 35 of the Copyright Act. However, there is no limited term of protection for moral rights of copyright works including computer programs. This is clearly declared in article 18 of the Copyright Act. However, in the latter part of the same article also emphasizes that "After the death of the author, an act shall not constitute an infringement where it can be considered that the author's intent has not been contravened given the nature and degree of the act of exploitation, social changes, or other circumstances." Hence, moral rights of copyrights shall not perish after the death of the author, but it would, to some extent, be applied in a more moderated and compromised way.

 $^{^{1205}\}mathrm{Public}$ Law 96-517 found at http://law.copyrightdata.com/amendments.php.

Copyright assignment

As mentioned previously about the default setting by article 11 and 12 of the Copyright Act, the authorship of a computer program is attributed to whom actually does the design and writing of it, and the economic rights are allocated to the employer in a persistent employment relation and to the contractor in a task-based commission. Nevertheless, all the assignments above could be transposed on a preconcerted contractual agreement. When the authorship and economic rights have been attributed and allocated at law or by a contractual agreement, moral rights are adhered to the authorship and can not be succeeded or transferred thereafter. However, there are no such restrictions imposed on economic rights, according to article 36 of the Copyright Act "Economic rights may be transferred in whole or in part to another person and may be jointly owned with other persons."

Generally speaking, economic rights of copyrights assignment procedure in Taiwan were made in a very flexible and customized way. Some people might even regard it as under a loose legal control. Because there are actually no any legal formalities required for an economic right assignment in Taiwan, none of them are asked by the Copyright Act and Civil Code. Although, according to article 116 of the Civil Code and article 4 of the Electronic Signatures Act, both parties in a economic right assignment agreement can still stipulate certain formalities by themselves, even the formalities are provided in an electronic record way could be served properly. However, if the parties did not arrange any definite form for the economic right assignment, the agreement will still be valid, even if it is agreed between the parties as a consensual contract. Even so, article 36, paragraph 3 of the Copyright Act expresses that "The scope of the transfer of the economic rights shall be as stipulated by the parties; rights not clearly covered by such stipulations shall be presumed to have not been transferred." In terms of that, although the economic right assignment could be made valid on the condition of a consensual contract, people still tend to make the agreement on a written document or through a similar method like that to preserve the related information as many as possible in order to clearly record the details of the stipulations.

Special measures

Some articles of Copyright Act are deemed as special provisions to the general Criminal Code, those provisions applied to computer programs like other copyright works. In that case, when a legal complaint about copyright infringements has been submitted by the rightholder to the authority, and has been evaluated as an intentional offence by prosecutor, the prosecutor who undertakes this issue can therefore initiate the prosecution based on article 91 to 100 of the Copyright Act to place the proper criminal responsibilities on the infringer involved. The criminal punishment for copyright infringements varies with different accusations being charged. For a overall but not precise description, the most serious punishment could be imposed would be imprisonment for no more than

5 years, detention, or in lieu thereof or in addition thereto a fine not more than 5 million New Taiwan Dollars. However, if the benefit obtained by the infringer exceeds the maximum fine, article 96-2 of the Copyright Act hereon could be applied by court to increase the fine limitation to the whole obtained benefit. Besides that, according to article 103 of the Copyright Act: Upon complaint or information of an infringement of a person's copyrights, judicial police officials or judicial police may seize the infringing works to cease the ongoing unlawful infringements.

Except for the substantive law, when it comes to disputes concerning copyrights or plate rights, there is also one special measure could be taken in the adjective law area, which is the optional conciliation process regulated by the Regulations of Copyright Dispute Mediation in Taiwan. Both parties in a copyright dispute could choose this mediation procedure in consensus as an alternative solution to the normal litigation procedure. After a settlement of the mediation has been reached and ratified as not contrary to act, regulation, public order, good morals, and compulsory executabilities by the Intellectual Property Court, the written mediation settlement statement shall have the same force as a final and unappealable court judgment and constitute a writ of execution by itself as well.

Unprotected software and public domain software

As set forth above, two fundamental criteria should be met on computer programs for the copyright protection, which are: (i) Producing process of the computer program doesn't only consist of merely registering or copying the reality or executing a functional routine. (ii) The originality involved in the computer program is required to make it qualified as an own intellectual creation of the author, no matter how minor the originality is. As a matter of fact, the threshold of originality for copyright protection is fairly low, therefore most of the computer programs shall be protected by copyrights, no matter whether it is made in a proprietary software mode or under a Free and Open Source Software (hereinafter abbreviated as the "FOSS") license.

Opposite to the computer programs with copyright protection, there are also softwares which are not protected under certain circumstances described in article 42 and 43 of the Copyright Act. Briefly speaking, economic rights of computer programs are extinguished upon expiration of the term of protection, this kind of extinguishment applies to the situation that economic rights holder has died or been extinguished without any inheritors other than the nation or a local government. After the extinguishment, any person may freely exploit the computer programs without any legal restrictions. In fact, the common used word "Public Domain" or its synonyms are not declared in the Taiwan Copyright Act, however, most legal critics agree that the sentence used in article 43 as "Any person may freely exploit a work for which the economic rights have been extinguished" is a very much equivalent expression to the same thing.

Even so, there is still one thing needed further discussion and confirmation:

whether the economic rights of copyrights can be abandoned by their rightholders in advance to make the work into the area of Public Domain earlier. This question has not been fully answered by the Copyright Act directly. However, in legal theory, the property rights are always not be categorized as the "specifically exclusive rights without transferability" defined in article 16 of Civil Code. Moreover, according to article 40, paragraph 2 of the Copyright Act, an author of a joint work is expressly allowed at law to abandon its share of the ownership to other co-authors of the work. Therefore, if we apply this clause mutatis mutandis to article 42 of the Copyright Act, the deduction we shall find is that when all the authors have abandoned their economic rights in a joint work, the work shall hence be allocated into the Public Domain. Based on this very standpoint, an author who makes a work by its own can theoretically abandon the economic rights of that in the same way. Namely, economic rights of computer programs shall be allowed to be abandoned by the rightholders before expiration of the term of protection. In other words, the abandoning statements made by the rightholders will render computer programs as unprotected softwares, and therefore into the Public Domain area.

Analysis of FOSS under Taiwan law

Provided by article 10 of the Copyright Act, author of a work shall enjoy copyrights upon completion of the work. That means when a creation is completed, the author doesn't have to apply for extra registration or to go through any process, because with the essential originality the work will be subjected to copyright protection automatically. This is so-called "self-executing protection principle on copyrights". From this standpoint, computer programs with certain originalities should be protected by copyrights automatically, whether they are accomplished by a single author or by multiple authors cooperating under the FOSS licensing architecture.

When it comes to FOSS license analysis in the common law system, discussion upon differences between "bare license" to "bilateral contract" usually occurs. This analysis template might be one thing of importance in the applicable common law system. However, it doesn't seem to bring out much practical influence on the legal system in Taiwan. As a matter of fact, there are still some legal theory discussions about the differences between unilateral act, bilateral act, unilateral contract, and bilateral contract for the juridical acts, but most of those discussions remain as academic subjects. Judging from the fact that in Taiwan "bare license" is lacking of corresponding mechanisms either in substantive law or in adjective law, and in reality most courts always treat the computer program utilization agreement as a copyright contract, hereunder when it comes to analysis of FOSS, the FOSS licenses themselves will be treated as contracts and the licensing modes based on that will be reviewed from the fundamental copyright regulations to supplementary contract stipulations. In a nutshell, the FOSS licenses deviate a lot from conventional license agreements that under the law in Taiwan, they should be considered as the sui generis license agreements

based on the same fundamental copyright mechanisms but adjusted to some extent by contractual agreements for matching a new collaborative development methodology.

Copyrights

One very essential problem to the FOSS project is that it is made with accumulated multiple authors with or without coordination. On account of that, to well apply the current copyright regulations onto it could be a very challenging task because the cooperation methodologies operated in FOSS project might not be foreseeing and taking into consideration when the copyright regulations was enacted by the legislators. Generally speaking, a FOSS project could be deemed as a joint work in article 8 of Copyright Act in Taiwan or a derivative work in article 6 depending on which one fits the real situation most for the FOSS project. However, neither the joint work type nor the derivative work type could one hundred percent match the reality of a FOSS project.

Take the joint work for example, the feature for cooperation between multiple authors is equally found in a conventional joint computer program and FOSS project. However, most people think it is necessary that a joint work should be made by co-authors in consultation. In other words, there must be certain interactions and communications among the co-authors for the composition of a joint creation. Judging from that, quite a number of FOSS projects actually do not have anything to do with this prerequisite. In fact, many participants of a FOSS project might just take part in the code committing merely under the same coding style and licensing rules without knowing each other. This is so-called "Cooperation without Coordination" mechanism of the FOSS projects. From this point of view, the type of joint work defined by the current Copyright Act can't not cover all the well-known features of a FOSS project.

If we take the derivative work into consideration, the feature for continuing modifications to the original work is identically proved in a conventional derivative computer program and a FOSS project. However, most people think it is fundamentally required that a derivative work should be made with certain originalities to some extent, that is, there must be quite a bit creativities comparing to the original work for a ratification. Rethinking on this, quite a number of FOSS projects actually do not make modifications by that standard. As a matter of fact, many contributions committed to a FOSS project might just be taken as a bug fix or merely a patch being made of scripts without copyright protection on it. However, accumulated by all these little by little and piece by piece, many small contributions might eventually make a copyrights-meaningful derivative improvement. From this point of view, the type of derivative work defined by the current Copyright Act can't not explain all the details well about when is the proper counting point that a derivative work to an original FOSS project has been made.

¹²⁰⁶17 U.S.C. §102(a).

Roughly speaking, take the FOSS project into application, depending on its development process and phase, as a joint work or a derivative work under the Copyright Act in Taiwan could be doable without conflicts with legal regulations in essence. In fact, some FOSS projects are collaboratively or derivatively accomplished exactly in this way. Yet, either the copyright type of the joint work or the derivative work can not sufficiently express the features of a FOSS project in operation. Be on a eclectically thinking about this, for a FOSS project copyright application in Taiwan, it can be deemed as a joint work or a derivative work of the Copyright Act in the first place based on its development situation. Secondly, it shall follow up in accordance with its supplementary stipulations under the respective FOSS licenses. This might be a much more rational and workable way for an overall copyright protection on FOSS projects for the time being.

Qualification of FOSS

As mentioned above, with the essential originality the computer programs will be subjected to copyright protection automatically, this is clearly stated in the article 5, paragraph 1, subparagraph 10 and article 10 of the Copyright Act in Taiwan. Referring to current copyright types of the Copyright Act, an indivisible computer program made by multiple participants concurringly in the same period of time could be categorized as a joint work, and a modified computer program qualified for originalities made by multiple participants separately in different period of time could be categorized as a derivative work. However, most people think it is necessary that a joint work should be made by co-authors in consultation, and a derivative work should be made with certain originalities to some extent. With regard to these two criteria, some FOSS projects might not be able to pass the evaluation in full.

In that case, according to article 1 of the Civil Code¹²⁰⁷, one can always apply the related provisions mutatis mutandis for a better resolution in the civil law area. That is to say, if a FOSS project fulfills the whole legal requirements as to the joint work or to the derivative work of the Copyright Act, then it shall be protected as its respectively proper copyright type. However, there might be some features of the FOSS project can not well expressed and put into practice only by the statutory provisions. This is where the contractual stipulations should be stepping in. Because only with the complementary circulation between the Copyright Act and specific FOSS licensing agreement should the FOSS licensing mode be able to operate smoothly as it sets to be.

Rights of the original co-authors

Provided in article 8 of the Copyright Act "A joint work is a work that has been completed by two or more persons where the creation of each person cannot be separately exploited." According to that, a computer program can be estimated

¹²⁰⁷17 U.S.C. §411(a).

as a joint work when it is made by multiple authors with certain interactions and communications for the cooperation among them, and can therefore apply all the related provisions about the joint work of the Copyright Act for its utilization. By and large, when a computer program is deemed to be a joint work, the moral rights and economic rights upon it shall be owned and utilized in a sharing status. The details of moral rights utilization is provided in article 19 of the Copyright Act. And the explanation of economic rights exploitation is regulated in article 40 and 40-1 of the same Act. To be brief, in a sharing status of jointly moral rights and jointly economic rights on copyrights, all the rights in a computer program shall not be exercised except with the consent of all the joint rights holders. However, any one of the joint rights holders shall not be allowed to refuse this very consent without a legitimate reason. In addition, the joint rights holders of a computer program may select a representative among themselves to exercise their joint rights, either in the moral rights or in the economic rights aspect. However, there is still one crucial difference can be told between the jointly moral rights and the jointly economic rights. That is in article 40, paragraph 1 of the Copyright Act which expressly stated that there is certain sharing proportion mechanism defined for the jointly economic rights. These definitions include "In the case of a joint work, each author's share of the ownership of such a work shall be as stipulated by the joint authors; where no stipulation has been made, ownership shares shall be determined according to the degree of each author's creative contribution. Where the degree of each author's creative contribution is not clear, it shall be presumed that each author owns an equal share." However, this kind of sharing proportion mechanism is generally believed to be nonexistence in the jointly moral rights area. Because the moral rights are consisted of right of publicly release, right of paternity, and right of integrity, none of these three rights can be transferred from the owner to others, or be splitted in part as well. On account of that, most people agree that the sharing proportion mechanism only works for the jointly economic rights. As for the jointly moral rights, every co-author should be treated equally and equitably in pari causa.

Although the joint rights of copyrights can only be exercised with the consent of all joint rights holders, there is still one exception provided in article 90 of the Copyright Act, that is, each holder of copyrights in a joint work may separately institute legal proceedings for an infringement of copyrights and demand remedies from the infringer, either acting as a moral rights holder or based on its share of economic rights ownership.

Authors of derivative works

Regulated in article 6 of the Copyright Act "A creation adapted from one or more pre-existing works is a derivative work and shall be protected as an independent work." According to that, a computer program can be judged as a derivative work when it is made by the modifier with certain creativities comparing to the pre-existing one, and can hence apply all the related provisions about

the derivative work of the Copyright Act for its exploitation. According to article 28 of the Copyright Act, the authors of the pre-existing/original computer programs have the exclusive right to adapt their works into derivative works or to compile their works into compilation works, this prerequisite is fairly fulfilled by the FOSS licensing agreements. Because all the FOSS licenses clearly stated that the rights to modify, copy, and distribute copies of the FOSS projects will be granted to the recipients. Moreover, the derivative work will be protected as an independent one as article 6 of the Copyright Act provides, that is to say, when the derivative work has been made lawfully, the only right the original authors can perform is to indicate its name, a pseudonym, or no name on the derivative copies when they are publicly released. However, sometimes the later version of a FOSS project is just taking an unmodified adoption from the preexisting project such as library components, and adding some new independent functionalities to interact with the adoption part through a predefined application program interface. Such an adoption should be deemed as a derivative work, a compound work, or even a compilation work arises some discussions in Taiwan, but no solid conclusion has been reached so far. Judging from the fact that in Taiwan there is actually no copyright type defined as compound work like German law does, the adoption mentioned above can therefore be deemed as a derivative work under conventional explanation, or a compilation work while the adoption is quite separative so as not to be treated as an adaption. And if it does have been categorized as a compilation one, it will still be protected as an independent work according to article 7, paragraph 1 of the Copyright Act. Even so, there is still certain difference between a derivative FOSS project and a compilation FOSS project, which is the copyrights included are basically commingled into a derivative work, yet not to a compilation one. In that case, if the recipients want to do modification directly to a specific FOSS component inside the compilation, it should still be proceeded under the rules stipulated by the respective license agreement of the component in question.

Except for the name indicating right has been expressly reserved for the original authors at law, sometimes the original authors will also impose some other contractual obligations by the FOSS license agreements. The related information about the validity and enforcement of those impositions will be presented later in the "Copyright principle" section of this chapter.

The assignment of copyrights

In order to gather all related copyrights in a FOSS project to make an efficient management or timely disposal of the FOSS project, sometimes the copyright holders will transfer or set up a trust on their rights to a sustained legal entity such as a foundation. On account of that, all the rights of the FOSS project could be governed by the hands of full-time specialists employed by the legal entity. The collective management of copyrights is perfectly possible and doable under Taiwan law. According to article 21 and 36 of the Copyright Act, economic rights of copyrights can be transferred in whole or in part to another natural

person or legal entity, only if the details of the transferring have been clearly recorded between the both parties. Besides that, according to article 1 and 2 of the Trust Law¹²⁰⁸, a right of property can be transferred to the trustee for administration or disposal purposes by a contract. Furthermore, none of the legal formalities are required at law for an economic right transfer or fiduciary contract in Taiwan. And if both parties agree, according to the Electronic Signatures Act¹²⁰⁹, the contract can also be made in an electronic record way without losing its validities. In a nutshell, the assignment of economic rights of copyrights for a FOSS project could be successfully sustained at law in Taiwan, there isn't any known legal conflicts with the assignments.

In fact, provided by article 81 of the Copyright Act, economic rights holders may, with the approval of the Intellectual Property Office, establish copyright collective management organizations for the purpose of exercising rights or for collecting and distributing compensation for use. Details about this copyright collective management organization can be found in the Copyright Collective Management Organization Act¹²¹⁰. Although this Act is currently put into practice mainly for organizations dabbling in pop music or motion pictures, the computer program is nevertheless not excluding from the applicable list. Therefore, building a copyright collective management organization devoted to one or multiple FOSS projects, to initiate management actions and other civil, criminal, and administrative suits and complaints, is actually quite feasible and practicable at law in Taiwan.

Moral copyrights

As aforementioned, moral rights of copyrights are highly valued by the Copyright Act in Taiwan and they applied to computer programs as well as other copyright works. Moral rights here consists of three parts, right of publicly release, right of paternity, and right of integrity on a copyright work. They belong exclusively to the author and shall not be transferred or succeeded. And the protection of moral rights of an author who has died or been extinguished shall be treated as remaining. In general legal theories and official explanation letters by the authorities, global renouncement of the future exercise of moral rights should be deemed as void, yet the renouncement can still be sustained at law if its scope could be stipulated with details such as subject, duration, or applied area information. After the brief review of moral rights protection in Taiwan, one might wonder if we put the FOSS licensing principles in perspective, will the FOSS licensing principles and the moral rights protection rules be in conflict with each other in a way? It seems that the protection duration won't expire for the moral rights. Yet according to Open Source Definition specified by Open Source Initiative article 5 and 6, the author of software distributed under a FOSS license can not oppose the use of the software by certain people and groups or for

¹²⁰⁸¹⁷ U.S. Code §102(a).

¹²⁰⁹17 U.S. Code §201(a).

 $^{^{1210}17}$ U.S. Code $\S 201(b).$

certain areas of application. So if the author of a FOSS project does declare his everlasting moral rights to lift a ban on certain use of that computer program, will it cause a compromising solution between the moral rights protection and the FOSS licensing principles?

As a matter of fact, such a conflict shall not happen under most circumstances according to the restrictive interpretation of article 17 of the Copyright Act. In this very article, it regulates that "The author has the right to prohibit others from distorting, mutilating, modifying, or otherwise changing the content, form, or name of the work, thereby damaging the author's reputation." This provision mainly applies onto literature works for the most part. Although it can also be covered on computer program, with regard to technical neutralities embodied in the computer programs, a purely functional adaption or modification should not be deemed as distorting, mutilating, modifying works in reputation damaging way to the original author. Moreover, when the original author participates voluntarily in a FOSS project, it is evidently well understood to it that utilization purpose later on to the FOSS project will not be limited. This understanding could be fairly deemed as one acknowledged renouncement of its moral rights with scope revelation and explanation.

Enforcing FOSS licenses licenses

As mentioned previously, due to the lack of corresponding mechanisms either in substantive law or in adjective law for the unilateral act, most courts in Taiwan tend to treat the computer programs utilization agreement directly as a copyright contract dealing with right and duty allocation. Therefore, when it comes to analysis on FOSS licenses validity and enforcement, the licenses themselves will be judged as contracts in most cases. In view of that, as long as the FOSS contractual agreement can be lawfully sustained and can be put into operation, the license carried on that will also be deemed as valid and enforceable. So there are two essential questions needed to be heeded: (i) between whom is a contract reached and when it is reached, and (ii) has the contract been validly reached with all the legal formalities required? Based on these two points, we shall further the analysis on the FOSS licenses validity and enforceability hereunder.

Contracting parties

According to article 153, paragraph 1 of the Civil Code "When the parties have reciprocally declared their concordant intent, either expressly or impliedly, a contract shall be constituted." So, for a contractually based analysis on the FOSS project, two fundamental questions should be answered, which are: (i) between whom is a contract reached, and (ii) upon when is the intent mutually declared and accepted?

About the first question, if the FOSS project in question is made by a single author, then the answer will be much easier to clarify: the contract has been constituted between the original author and the respective recipients to the FOSS

project. And when it comes to multiple authors, the answer will become a little bit indirect to perceive. But if the multiple authors did contribute to the FOSS project in an intensive consultation way, then the project itself will be deemed as a joint work at law. Therefore, the contract has been constituted between all the co-authors in accordance and the respective recipients to the FOSS project. And if the project has been modified by the successive participant with notable originalities, it can be treated as a derivative work at law. Hence, the contract has been constituted between the successive author and the respective recipients to the derivative FOSS project. However, if there is actually no any tangibly consultative relation between the multiple participants, or the very FOSS project has been modified repeatedly with slight contribution without certain originalities, or even the whole project was made in combination with the other FOSS component as a simple adoption without much modification between the two parts, all these described above will lead to a much more complicated situation. Briefly speaking, all the three hypotheses can not easily be explained in full according to the current Copyright Act, either in its copyright type categorization or in copyright management and disposal aspect. Even so, most of the FOSS licenses have been proved to be of assistance to deal with those puzzles, with the help of its complementary contractual stipulations. Take MIT license and Apache License 2.0 of BSD-like FOSS licenses for example, in these two licenses sublicense mechanism on copyright 1211 is expressly provided, therefore no matter how far the modification to an original MIT License or Apache-2.0 project has been reached, the modifier will always be entitled to license a derivative work or merely a modification one in its own name. Moreover, although there is no such a sublicense mechanism provided on copyrights in GPL-like FOSS licenses like GNU General Public License v2.0, v3.0, GNU Lesser General Public License v2.1, v3.0, and GNU Affero General Public License v3.0, a license relay mechanism has been well explained in similar way of these license agreements. Take GPL-3.0 for example, "Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License." To be brief, the aforementioned sublicense mechanism and this kind of automatic licensing to downstream recipients have made up a deficiency to the Copyright Act regulations for FOSS projects, on account of those complementary stipulations: the contracting parties of a FOSS project under a complicated circumstance shall therefore be able to be defined on a case by case basis.

As for the second question, according to article 161, paragraph 1 and 2 of the Civil Code, "In cases where according to customs or owing to the nature of the affair, a notice of acceptance is not necessary, the contract shall be constituted when, within a reasonable time, there is a fact, which may be considered as an acceptance of the offer. The provision of the preceding paragraph shall be mutatis mutandis applied when at the time of offer the offerer has waived notice of acceptance." Judging from the provisions above, a contract in Taiwan could be deemed as concurring reached and constituted, if the notice of acceptance is

¹²¹¹ Id.

pre-declared to be fulfilled by action similar to a tangible reply. This is exactly what is happening among the FOSS contractually licensing relations. Most of the FOSS licenses do consist of this kind of waivers of acceptance notice, take GPL-3.0 for example, "by modifying or propagating a covered work, you indicate your acceptance of this License to do so." In this way both parties of the FOSS licensing contract have made their intent mutually reached and concordant. Therefore when a FOSS project has been received and exploited by the recipients, upon that time the contract between the rightholders and the respective recipients shall be validly sustained at law.

Validity of the FOSS licenses

For the full validity of a contract, not only the intent should be reached concordantly between both parties, but also the contents and formalities must be deemed as not contradicted to the regulations at law. In Taiwan, the legal principles of validities of a juridical act are basically provided in article 71, 72, and 73 of the Civil Code. And all the principles mentioned hereunder are equally applied to the contract as well as a type of the juridical act, such as:

Article 71

A juridical act which violates an imperative or prohibitive provision of the act is void except voidance is not implied in the provision.

Article 72

A juridical act which is against public policy or morals is void.

Article 73

A juridical act which does not follow the formality required by the act is void unless otherwise provided by the act.

Moreover, because of the "All Rights Reserved" principle set forth by the Copyright Act, exploiting computer programs without the author's expressly consent could be a copyright violation. That means without a legal license, the utilization of softwares downloaded from the internet could jeopardize oneself in the danger of a copyright infringement. And even the user claims that the softwares in question were received as they have already been put into Public Domain, when the legal issues arouse this will still need to be proved by the user. As a result, most people will not try to dispute the very existence and validity for a FOSS contract if they just receive this FOSS project without other legal stands. Because if they do assert that the FOSS contract between the authors to them don't exist, then this implies no legally valid copyright license has been granted to them, and the users hence might not be able to use those softwares at all. Judging from the legal deductions and case analyses above, the contractual FOSS license agreements should be sustained at law and therefore be able to be enforced without disputes in Taiwan.

Contractual stipulations contrary to these three articles are deemed not to exist. On the other hand, if none of the regulations above have been violated, then according to article 153 of the Civil Code, both parties in a contract relation can therefore constitute an agreement to exchange and distribute their duties and rights freely on their own. The doctrine is treated as the "Principle of Freedom of Contract" in Taiwan. Judging from the fact that the composition of a FOSS contract has nothing in conflict with any compulsory regulations as being mentioned in article 71 and take the public policies and good morals into consideration as being asked in article 72, such an uncertain legal concept can only be further explained on a case by case basis. On account of that, a FOSS contract won't violate this provision directly only because the utilization based on that contract is unlimited in purposes. Finally, none of the legal formalities are required at law for an economic right transfer or disposal contract in Taiwan. So neither being made in writing, notarization, nor other formalities is demanded in a FOSS contract. That is to say, the contract made in FOSS licensing way also doesn't have any inconsistency to article 73 of the Civil Code. Briefly speaking, a FOSS license contract is evaluated to be sustained according to the "Principle of Freedom of Contract" and the reviewing based on the three criteria listed above.

Waiver and liability

Typically, there will be certain exoneration clauses declared as a disclaimer of warranty and limitation of liability in the FOSS licenses. Those clauses relieve the authors and contributors of the FOSS project from as many liabilities as possible. Judging from the fact that most of the FOSS projects are distributed on a royalty-free basis, and put the "Right and Duty Equity Principle" into consideration, this kind of liability prerelease mechanism will be reasonably sustained at law to some extent in Taiwan. However, it is explicitly demanded in article 222 of the Civil Code, that the "Responsibility for intentional or gross negligent acts shall not be released in advance." Abide by that, if respective one FOSS license does mean to relieve the authors and contributors from all kinds of liabilities including the one that is caused by an intentional or gross negligent act, the exceeding part according to article 222 and 111 of the Civil Code will be deemed as void at law. However, for this FOSS license, the other part within the scope permitted at law shall remain valid. This "partly void yet partly valid" mechanism presented in article 111 happens to echo article 7, paragraph 2 of the GPL-2.0¹²¹². All in all, if the FOSS project is distributed as noncommercial purpose and free of charge, then the disclaimer of warranty and limitation of liability clauses will be respected to a maximum extent. However, the responsibility for intentional or gross negligent acts will not be relieved in advance, any waivers come to this degree will be treated as void at law.

Even so, when it comes to commercial distribution with fees charged, the question about whether the disclaimer of warranty and limitation of liability can stand at law shall be examined and evaluated on a case by case basis. Moreover, because of the preconcerted and fixed characteristic of a FOSS license, the FOSS

^{1212 17} U.S. Code §101.

license itself could be easily recognized as the "Standard Contract" defined in article 247-1 of the Civil Code and article 12 of the Consumer Protection Law in Taiwan. One of the legal effects of being treated as a standard contract is that if the court finds that certain stipulations in the contract are turning to be obviously unfair, such as releasing or reducing the responsibility of one party and increasing the responsibility of the other party which is contrary to the principle of the equality and reciprocity, it can be declared as void directly by court at law. In view of article 354 and 355 of the Civil Code, it also tells that "The seller of a thing shall warrant that the thing sold is free from any defect in quality which may destroy or impair its value, or its fitness for ordinary efficacy, or its fitness for the efficacy of the contract of sale." According to this clause, when a FOSS project has been put to use as a selling product, the prearranged disclaimer of warranty and limitation of liability clauses would be regulated and modulated to a certain degree. Unless the seller has already expressly revealed the defect to the buyer, otherwise he will still be held responsible for the quality of it offering. That a FOSS project being part of the offering or not does not affect this legal demand on a compulsory basis.

The copyleft principle

Copyleft is not necessarily an ideological term though it is indeed created to make a contrast to the notion of copyright. Its discourse, however, still works within the scope of the copyright basis. In other words, the notion of copyleft can be summarized as "A way of sharing that computer programs within the framework of the copyright system, albeit in ways different from the common practices." Based on that, authors of FOSS projects can therefore still claim the rights given to them by the copyright law and at the same time set the rules by stipulations on how other people can use their works. Furthermore, authors can only allow other people to perform applications, modifications, and adaptations to the original computer programs on condition that the distribution of the original and derivative works would be in exactly the same way by a FOSS license agreement. So it is assured that these works can continue their free circulation. This is the central idea of the notion copyleft "Authors requiring their original and derivative works to be continuously available under the same rules to the public."

Principle

The classic model of such a licensing mechanism is the respective versions of GNU licenses¹²¹³ drafted by Free Software Foundation. Some critics even give the characteristic supported by copyleft principle in the GNU licenses a new term, such as "License Capture" or "License Inheritance". Take GPL for example, License Inheritance means an adopter's entire project might be considered as a derivative work of a GPL-licensed component if one of the following conditions is fulfilled when the adopter copies the codes either in source form way or

^{1213 17} U.S. Code §204.

in binary form way from a GPL-licensed component into its ongoing software project. First, the portion copied comprises a substantial part of the software project; or second, the GPL-licensed component provides core function for the software project and inseparably interacts with the other components of such software project. If any of the conditions above has been positively reached, then the software project in question will be deemed as a creation adapted from the pre-existing GPL-licensed component, therefore renders it as a derivative work of the GPL-licensed component. As a result, the adopter can only distribute its accomplished software project under the same GPL if it chooses to.

Frankly speaking, in the area of computer programs, defining the scope of a "work based on the original work" has been recognized as relatively challenging. This is because components in a mid or large size software project often call or access each other to cooperate. In addition, when different components are developed, each author may develop its own components independently without consulting others for accessibility and license compatibility. Unless the correlating and co-pending relationships of different components are determined on a case by case basis, it would be difficult to directly determine whether there is actually such tight connection of inheritance and reliance so as to determine whether the entire software project is derived from one specific component.

Nevertheless, simply putting a GPL-licensed component into a software project does not necessarily trigger its License Inheritance based on the GPL. In fact, many users somehow misunderstood and thus wrongfully interpreted the License Inheritance and used the "all-inclusive" terminology as a simplified but not specified metaphor to describe the License Inheritance effect. As a matter of fact, lots of the core members and opinion leaders of the respective GPL projects have now and then stated something similar: If a GPL-licensed component is not strongly related to the other components in the entire software project, it renders the License Inheritance of the GPL component as unable to be expanded to the other components of the software project. Such standpoints might include that the GPL-licensed component communicating with the other components through a dynamic link or the developer of the software project in question might be able to find similar components in function yet under the other licenses to easily replace the GPL-licensed one. However, if the GPL-licensed component communicates with the other components through a static link, or it represents a core function of the whole software project, such GPL-licensed component hence becomes highly correlated with the entire software project and can not be easily replaced in any case. Accordingly, separating such GPL-licensed component would cause a chain reaction and affect the entire software project. In other words, the other components of such software project will be considered as derivative works of the GPL-licensed component, and the entire software project will fall within the expansive scope of the License Inheritance of the GPL.

Validity

To find the answer about how the copyleft principle can be sustained and held

valid under Taiwan's legal system, three questions should be fundamentally guided. The first question is, whether author of the original work can validly make an arrangement for how the derivative works need to be distributed. Second, if affirmative, how to explain the copyleft principle on a copyright analysis, namely, can the interpretation of copyleft be sustained in form at law? Third, can the enforcement of copyleft be validated at law without falling into the dispute of right abusing, and therefore be held valid substantively?

About the first question, it could be well explained according to article 28 of the Copyright Act, which is, an author of the original work has the exclusive right to create a derivative work, or compile into a compilation of the original one. Therefore, if a software component is not developed from scratch but rewritten from or derived from other person's preexisting work, the original author's consent needs to be acquired before such later developer may perform certain modifications or adaptations on the preexisting work. Similar clauses can be found in section 101 of title 17 of the United States Code "A derivative work is a work based upon one or more preexisting works." So, the original author does have the right to determine which person can and which person can not perform the modifications and adaptations onto its original computer program. Moreover, take the "Principle of Freedom of Contract" into consideration, the original author hereby is entitled to lay down the utilization of the derivative work for a particular use, or link certain conditions onto it.

It turns out the author does have the right to make certain arrangements to the derivative works based on its exclusive right on modifications and adaptations of the original work as a trade off between it and the recipients. Such copyleft content in a FOSS license agreement seems to be sort of terms of interchange, but how we define that in the legal system of Taiwan? Can it be determined in nature and found the right place at law to fit in? Here comes the second question and its answer, according to article 99, paragraph 2 of the Civil Code the copyleft principle could be deemed as a resolutory condition adhered to the contract because when the violation of it has been reached, the license granting contract between the original author and the recipients shall cease to be in existence. Take GPL-3.0 for example, it declares such a statement in the termination section as "You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License." Therefore, copyleft principle could be treated and sustained as a resolutory condition at law in form, it will not be activated by the time when the recipients just receive the FOSS project, however if the recipients do make modifications or perform certain adaptations on the FOSS project and distribute the derivative works in a wrong way which is forbidden by the FOSS license. In that case, this disobedience to the copyleft principle will fulfilled this resolutory condition and hence terminated the contract between both parties. After that, the legitimate status for the recipients to continuously perform the modifications, adaptations, or distributions on the original work and derivative works has been breached or revoked. In view of that, the author of the original

work can therefore initiate the complaint or litigation to the recipients for the copyright infringements.

Based on the above legal deduction, copyleft principle stipulated in the FOSS licenses could be supported at law as a resolutory condition provided by the Civil Code in Taiwan. To be precisely specified, a FOSS license agreement can be deemed to be a "bilateral contract with resolutory conditions" 1214 . However, according to the legal principles, there is no rights entitled at law can be abused by the holders in any extreme ways, this is also fairly elaborated in article 148 of the Civil Code in Taiwan as "A right can not be exercised for the main purpose of violating public interests or damaging the others, and it shall be exercised and a duty shall be performed in accordance with the means of good faith as well." Judging from these criteria upon copyleft principle in the FOSS licenses, could it be likely to be deemed as rights abusing in a way or not? As a matter of fact, there is no any solid legal inference has been concluded on that. Even so, most critics in Taiwan think that except for the worst situation might be found on a case by case basis, the copyleft principle is basically having nothing to do with the right abusing. Take the currently most applied FOSS licenses with copyleft principle for example, such as GPL-2.0, GPL-3.0, LGPL-2.1, LGPL-3.0, MPL-2.0, EPL-1.0, and AGPL-3.0, the extensive scope regulated by copyleft principle in them is still fundamentally limited to the typical area of the derivative work defined by the copyright law or other related software acts. In the MPL-2.0 and EPL-1.0, the regulated scope has even been restrained to the file-based or module-based boundaries. Although in the GPL-3.0 and AGPL-3.0, the drafters take the term "work based on" to replace "derivative work" in the previous license versions, it still shows that the extensive scope based on copyleft principle is limited to some extent. On account of that, the third question about whether the enforcement of copyleft principle can be validated at law or not in the substantive point of view, the answer should be positive. Moreover, sometimes authors do choose a FOSS license with copyleft principle for certain reasons, one might hence be able to set forth its dual-licensing business model with a copyleft FOSS license and a proprietary software license on the same software project at the same time, or one might therefore make a confirmation that the software released can continue its free circulation and be brought back to its own utilization one day in exactly the same way as it was given away at the beginning. As a whole, judging from the fact that the copyleft principle might be chosen by an author with discretion for its own lawful copyright management, and under most circumstances it will also not be deemed as exceeding beyond the protection of public interests. Therefore it should be sustained and held valid at law in Taiwan, either in form or in substantive evaluation aspect.

Damages

As set forth previously, some articles of Copyright Act in Taiwan are deemed as special provisions to the general Criminal Code. Therefore, when a copyright

¹²¹⁴17 U.S. Code §201(a).

infringement has been made on purpose, it is the prosecutor who can initiate the prosecution upon complaint and suggests the imposition of fine, detention, or imprisonment onto the intentional violator. Considering that an intentional or malicious copyright infringement could already be punished by criminal measures, there is actually no punitive damages to double or triple amount could be claimed under the Copyright Act. And this rule is applied to computer programs as well as other copyright works. According to article 88 of the copyright Act, a person who unlawfully infringes other person's economic rights out of intention or negligence shall be liable for damages. With regard to the damages, the injured party may make claim in any of the two manners provided in article 88, paragraph 3 of the Copyright Act at its choice. The first option is to request the submission from the infringer about the amount of benefit obtained on account of this infringing activity. Basically the damages will be equal or close to the obtained benefit, which is the revenue derived from the infringement deducting the costs and other necessary expenses. However, if the infringer is unable to establish the details for the costs and related expenses, then the obtained benefit in question should be deemed as the total revenue derived from the infringement.

The second option to calculate the damages is in accordance with the general applicable principles of the unlawful act, provided in article 216 of the Civil Code. Abiding by that, the damages shall be the injury suffered and the interests lost to the injured party owing to the infringement. However, if the injured party is unable to prove damages in detail, an analogy calculating alternative can hereby intervene. According to article 88, paragraph 3, subparagraph 1 of the Copyright Act, the injured party may base the damages on the differences between the amount of expected benefit from the exercise of such rights under normal circumstances and the amount of benefit from the exercise of the same rights after the infringement. This analogy license claim is quite useful and practical for an author in need of claiming its compensation on the infringement of a FOSS project. Although there are certain doable and flexible business models could be performed for benefit earning on the FOSS projects such as service providing, product value-adding, dual-licensing way and so on, quite a number of the FOSS projects are still basically provided on a copyright royaltyfree or even patent royalty-free basis. By making the analogy license claim, the injured party can therefore save the situation if the calculation to the injury suffered and interests lost are proven to be too complicated or time-consuming in reality. Or, if it is still difficult for the injured party to prove actual damages in accordance with the two solutions provided above, the injured party may request the court directly set compensation at an amount of not less than ten thousand and not more than one million New Taiwan Dollars based on the seriousness of the matter. If the damaging activity was intentional and / or serious, the compensation set by the court may be increased to five million New Taiwan Dollars maximum.

FOSS cases in Taiwan

By the time the Taiwan chapter finished, there is still no FOSS cases have been reported (July 2013). However, if it comes to the "Freeware" project lawsuits, as in similar general public licensing way, "Chinese Chess v.1.0 Software" case might be a fine reference. This verdict has been ruled by the Taipei District Court of criminal case number 2055 in 1998 as its first instance of court, and by the Taiwan High Court of criminal case number 5401 in the same year as its second instance of court. The author of Chinese Chess v.1.0 is Shenium Wu. Mr. Wu once uploaded the Chinese Chess v.1.0 developed by him to the educational TANet of National Tsing Hua University in Taiwan. He distributed it under a simple license condition as "being free for everyone to redistribute the program with limitation of no more than the physical cost of the redistribution can be charged." After a period of time, the program has been included into a CD medium by the computer program vendors, and hence been sold together with the CD copies for commercial profits. When Mr. Wu realized the situation, he submitted a legal complaint to the authority, and therefore this case has been brought to court by prosecutor. Due to the software in question is fundamentally a Freeware, none of the copyright assignment and the copyleft principle topics have been discussed by courts at all. However, either the court of first instance or the court of second instance ruled the contract binding and relation between the software author and the software recipients are perfectly established by the general public licensing way, and should be held valid according to article 161 of the Civil Code when the notice of acceptance in a contract is predeclared to be fulfilled by action similar to a tangible reply. This standpoint by courts should be sustained thereafter in FOSS cases as well, because the "taking/downloading without additional notice of acceptance" mechanism is fairly applied to them without a difference to Freewares.

United Kingdom

author: [Katz, Andrew] author: [Mitchell QC, Iain G.]

Introduction to software protection under United Kingdom law

Body of law

Unlike the other countries covered in this book, the United Kingdom comprises not one but three separate jurisdictions: England & Wales, Northern Ireland and Scotland. Each jurisdiction has its own legal system, with its own *corpus* of laws, both common law and statutory. This is particularly true of the Law of Scotland ¹²¹⁵. In some areas, the laws of Scotland and of England can be

 $[\]overline{1215}$ " (Congress shall have the power...) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

substantially different. By contrast the laws of England and of Northern Ireland share a common heritage, and are substantially similar, though some minor differences can occur. 1216

The modern law of Intellectual Property in each of these jurisdictions has developed since the Act of Union in 1707 and is almost entirely based upon statutes of the United Kingdom Parliament commencing with the foundation of the concept of copyright, the post-Union Statute of Anne 1709¹²¹⁷. The legislation has tended to cover the whole of the United Kingdom with only minor differences to accommodate the different Court structures, and has been interpreted uniformly by judges in all jurisdictions. Thus, it becomes possible to treat this area from a United Kingdom perspective. In this chapter, the phrase "United Kingdom Law" is used to mean English Law, Northern Irish Law and Scots Law taken together, and differences amongst English Law, Scots Law and Northern Irish Law are noted where appropriate.

In the United Kingdom, then, copyright protection of software (as with all forms of copyright protection) is regulated under the Copyright, Designs and Patents Act 1988¹²¹⁸ (referred to as the "Copyright Act"), as updated and amended from time to time. In particular, the Copyright (Computer Programs) Regulations 1992¹²¹⁹ implemented the Council Directive of 14 May 1991 on the Legal Protection of computer programs (91/250/EEC)¹²²⁰ into United Kingdom law (referred to as the "Software Directive").

Copyright Act: Object of protection

Computer programs (including the preparatory material) are protected by copyright and are equivalent to literary works within the meaning of the Berne Convention for the Protection of Literary and Artistic Works. This protection is transposed into the law of the United Kingdom by virtue of section 3(1)(b) of the Copyright Act. The same criteria apply to the copyright protection of computer software as applied to literary works. Thus, only original computer programs benefit from copyright protection. This means that the computer program needs to be an intellectual creation of its author, or, if the program is a computer-generated work itself¹²²¹, the person who made the arrangements

 $[\]overline{}^{1216}17$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

 $^{^{12\}bar{1}7}35$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{^{1218}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

 $^{^{12\}bar{1}9}$ For example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{1220}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

¹²²¹World Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

necessary for the creation of the $work^{1222}$.

In terms of section 1 of the Act, copyright is a right of property. It is incorporeal in nature and therefore copyright falls to be regarded as (according to the terminology of Scots Law and most European systems) incorporeal moveable property, and, (according to the terminology of English law and Northern Irish Law) incorporeal personal property.

Authors/Copyright owners

The Copyright Act provides that the copyrights in a work belong to the author, unless the author is an employee who created the work "in the course of his employment" in which case it belongs to the employer, unless there is an agreement to the contrary 1223. There is a significant body of case law determining the meaning of "in the course of his employment" and "employer" in the context of employment and tax law cases, and it is assumed that these cases would be followed in a copyright law context. An important effect of this is that the default ownership position, where an entity engages a contractor to create software (in other words, where the contractor is not an employee of the entity, but engaged under a contract for services), is that the copyright in the software will remain with the contractor. Thus unless the contract for services sets out explicitly that the ownership in the software shall be assigned to the entity engaging the contractor's services, the entity will not obtain the copyright in the software, and will, instead, obtain some form of implied licence, the scope of which is unclear. 1224

Exclusive rights

According to section 2(1) of the Copyright Act the owner of copyright (including copyright in computer programs) has the exclusive economic rights set out in Chapter II of the Copyright Act (see section 16(1)). These are (following the sub-paragraph designations in the Act) the right:

- (a) to copy the work;
- (b) to issue copies of the work to the public;
- (c) to rent or lend the work to the public;
- (d) to perform, show or play the work in public;
- (e) to communicate the work to the public;
- (f) to make an adaptation of the work or to do any of the above in relation to an adaptation.

¹²²²The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contu1.html.

¹²²³The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of 1976.

¹²²⁴Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

All these rights theoretically apply in the case of a computer program, even if that seems counter-intuitive. For example by virtue of section 19(2), "performance" would include any mode of visual presentation. It can be argued that this includes running a program that presents an output on the screen. Equally, this could be covered by 20(2)(b) which includes "the making available to the public of the work by electronic transmission that members of the public may access it from a place and at a time individually chosen by them" 1225

Section 18(1) deals with exhaustion of distribution rights: the restricted act of issuing copies to the public only applies in relation to copies put into circulation in the EEA which have previously not been put into circulation by or with the consent of the copyright owner, or the act of putting into circulation outside the EEA copies not previously put into circulation in the EEA or elsewhere.

It is not clear under UK law whether "copies" in this context refers only to physical copies, or whether it can also include electronic copies.

Translation of a computer program into another "language or code" (which would presumably include compilation and assembly) is explicitly expressed to be making an adaptation (section 21(4)).

Exceptions to exclusive rights

Lawful users of computer programs are guaranteed the following rights (which are neither an infringement of copyright, nor a breach of any term of a contract purporting to restrict them¹²²⁶)

- (a) The making of backup copies (to the extent they are necessary)
- (b) decompilation; and
- (c) observing, studying and testing

(see further below)

- (1) In the absence of specific contractual provisions, no authorization by the rightholder is required for acts necessary for the use (including copying or adapting 1227) of the computer program by the lawful acquirer or for error correction 1228.
- (2) A lawful user of a computer program may not be prevented from making any backup copy, insofar as that copy is necessary to use the $program^{1229}$.
- (3) A lawful user of a copy of a computer program is entitled, without the authorization of the rightholder, to observe, study or test the functioning of the program in order to determine the ideas and principles which underlie any

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1225 17 U.S.C. §102(a).

1226 17 U.S.C. §411(a).

1227 17 U.S. Code §102(a).

1228 17 U.S. Code §201(a).

1229 17 U.S. Code §201(b).
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element of the program if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the program which he is entitled to do^{1230} . This right may not be excluded by contract.

The decompilation right in the Act¹²³¹ essentially echoes Article 6 of the Directive. It may not be excluded by contract, but is subject to conditions. The decompilation must be necessary to obtain information necessary to create an interoperable program, and that information may only used for that purpose. If the lawful user already has ready access to relevant information, then the decompilation is not permitted. The information must not be used to create a program which substantially similar in expression to the program decompiled.

This is of relevance to open source when an attempt is made to write open source code which is intended to interoperate with proprietary software. There is an argument that by creating an interoperable program for which the source code is available, the coder will be in breach of the obligation to keep the information confidential.

The exercise of these statutory rights is often difficult in practice because their scope is unclear.

Moral rights

Software is not subject to moral rights under United Kingdom law (and neither are computer generated works)¹²³².

Term of protection

The same term as for works of literature and art applies: 70 years as from the 1st January in the year following the death of the author 1233 . However, if the work is computer generated, copyright expires at the end of the period 50 years from the end of the calendar year in which the work was made. In practice, although the object code created by a compiler is a computer generated work, since it is also an adaptation of a literary work (the original source code), the licence of the rightholder in the source code would still be required for the duration of the copyright in the underlying source code, even if the copyright in the object code qua computer generated work had expired 1234 .

Where the authors are joint, the reference to the death of an author should be construed as the death of the last remaining author 1235.

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1230 Id.

1231 17 U.S. Code §101.

1232 17 U.S. Code §204.

1233 17 U.S. Code §201(a).

1234 17 U.S. Code §101.
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¹²³⁵1-6 Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.

Copyright assignment and assignation

As we have seen, in the absence of any agreement to the contrary, any copyright work created by an employee for an employer in the course of the employee's employment is automatically owned by the employer, without any additional formality. However, because there may be circumstances where it is not clear when the employee is acting within the course of his employment (for example, at home, in his own time, or on a project other than the one he was employed to work on) it is not unusual for employment contracts governed by the laws of the UK jurisdictions to contain clauses which are intended to clarify ownership. It is important to stress that when an employee creates a work in the course of his employment, this is not regarded as the employee being the original author of the work but somehow assigning the copyright to his employer, but, rather as being the employer who is the author in the first place, even although the instrumentality by which the work comes into existence is through the work of the employee.

In all cases where copyright belongs to one person or entity and is sought to be transferred to another, to effect that transfer there requires to be a written assignment or assignation, signed by the rights holder. 1237 However, no special form of words is required, nor is any special formality of execution or deed (such as a probative, or self-proving deed, though, of course such formal execution, though unusual, would not be excluded). Similarly, and whatever the experience in certain European jurisdictions may be, notaries are never used. Like any other business document, all that is needed is a simple document in writing, however informally expressed, and merely signed by the granter. 1238 Some commentators have suggested that a contract (or deed) is a necessary formality for an assignment to be enforceable (e.g. PLC). However, the different requirements of Scots law regarding unilateral obligation make it less likely that a contract or formal deed would be necessary in the case of an assignation, since under the Law of Scotland, only such a written assignation will be effective to effect the transfer of the copyright, but, under English Law, the court can, through the application of trust principles, recognise that in certain circumstances the beneficial ownership of copyright may pass in the absence of a written assignment, whilst the legal interest in the copyright remains with the original rightsholder. In itself, the legal interest in copyright has no value if it is severed from the beneficial interest (although the owner of the legal interest can pass good title to a third party who acquires that title for value without notice of the beneficial claim). The detailed ramifications of the severability of the legal and beneficial interests are beyond the scope of this work.

For clarity, it is always advisable to ensure that assignments or assignations are in writing and signed by the rightsholder, and, under English and Northern Irish law at least, are subject to consideration (even if it is a nominal £1), or

 $[\]overline{^{1236}Id.}$

¹²³⁷See, Id.

¹²³⁸1-6 Nimmer §§6.02, 6.03.

are made by deed. No consideration is required under Scots law.

It is possible to make partial assignment of a work: any of the exclusive rights granted to the copyright owner can be assigned separately. It is also possible to assign some or all of these rights for a limited period of time ¹²³⁹. Section 36(2)(b) of the predecessor legislation, the Copyright Act 1956, expressly permitted the assignment of rights in other countries in which the copyright holder had such rights. No such specific provision appears in the current Copyright Act, but it is not to doubted that such an assignment or assignation would be effective in respect of those rights.

It is also possible to assign prospective copyright in a future, but currently non-existent work, such that when the work comes into existence, the assignment or assignation will automatically take effect 1240 .

The assignment or assignation of software is treated exactly like the assignment or assignation of all other literary works.

In addition to assignment or assignation, ownership of copyright can also be transmitted by testamentary disposition (i.e. by will) or by operation of law¹²⁴¹ "Operation of law" may be, for example, succession according to the rules of intestate succession, or passing to an administrator, receiver or liquidator of a company or a trustee in bankruptcy. Although the principle of such transmission is common to all three jurisdictions, the actual outworking of that principle will differ according to the laws of succession, the insolvency laws and other relevant laws of each jurisdiction. In relation to the examples given, there is a substantial commonality amongst the jurisdictions in the laws of corporate insolvency (which are regulated by UK statute though with some differences to accommodate the legal systems and procedures of the different jurisdictions), not much commonality (at least between Scots Law and the law of the other jurisdictions) in the laws of personal insolvency, and virtually no similarity at all in the laws of succession. It is beyond the scope of the present work to discuss these matters.

Technical devices and effective technological measures

A "technical device" is any device intended to prevent or restrict acts that are not authorised by the copyright owner of that work and are restricted by copyright ¹²⁴². The definition is used in relation to computer programs. The Copyright Act has a similar definition for "technological measures", which apply to copyright works other than a computer program¹²⁴³. Computer programs and other copyright works are treated slightly differently in this regard (note that the bundle of files containing what would colloquially be described as a

¹²³⁹ Id. 1240 1-6 Nimmer §6.03. 1241 17 U.S.C. §201(a). 1242 1-6 Nimmer §6.06(A). 1243 Id.

computer program may consist of files which are computer programs within the legal sense — the executables, for example, and also files such as documentation or content which would be considered as other copyright works).

Where a technical device has been applied to a computer program, a person who manufactures, imports or distributes, supplies, offers or advertises to supply or has in his possession for commercial purposes any means the sole intended purpose of which is to facilitate the unauthorised removal or circumvention of the technical device, or publishes information which is intended to assist people in circumventing it, then that person is liable for a copyright infringement claim from any of (a) the distributor of the software; (b) the exclusive licensee; or (c) the owner or exclusive licensee of the technical device. 1244

Similarly, where effective technological measures have been applied to a copyright work which is not a computer program, if a person circumvents those measures knowing, or having reasonable grounds to know that he is circumventing them, then the owner or exclusive licensee of the underlying copyright work has the same rights as against the person circumventing as if he were an infringer of the copyright in that work¹²⁴⁵. There is an exception for people undertaking cryptographic research, so long as the rights of the underlying copyright owner are not prejudiced¹²⁴⁶. A person unlawfully removing or altering "electronic rights management information" is similarly liable¹²⁴⁷. Likewise, if a device or service for circumvention of a technological measure is manufactured, supplied etc., then the copyright owner, exclusive licensee and owner of the effective technological measure have similar rights against the manufacturer, supplier etc¹²⁴⁸.

Enforcement measures

The Copyright Act contains provisions intended to assist in the enforcement of copyrights.

There are several criminal offences relating to Copyright. In summary, these are:

- making an infringing work for sale or hire;
- importing an infringing work into the UK (other than for the importer's private or domestic use);

¹²⁴⁴ Id.

 $^{^{1245}17}$ U.S.C. $\S 103(a).$

 $^{^{1246}17}$ U.S.C. $\S 101.$

 $^{^{1247}}$ l-3 Nimmer $\$ 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

¹²⁴⁸Lothar Determan, Dangerous Liaisons — Software Combinations as Derivative Works? Distribution, Installation, and Execution of Linked Programs Under Copyright Law, Commercial Licenses, and the GPL, 21 Berkeley Tech. L. J. 1421, 1430 (2006).

- possessing in the course of a business an infringing copy with a view to committing any act infringing the copyright;
- selling, hiring, offering to sell or hire, exhibiting in public or distributing an infringing copy in the course of a business.

It will be noted that the above offences are all connected with commercial activities. In each case, an infringing copy is a copy which infringes copyright, and which the defendant knows or has reason to believe infringes copyright to be some copyright.

There is an offence, intended to criminalise uploading, which applies where a person, otherwise than in the course of a business, distributes an infringing copy to such an extent as to affect prejudicially the owner of the copyright ¹²⁵¹.

There is a further offence of making or possessing an article designed or adapted to make copies of a particular copyright work, where the defendant knows or has reason to believe that it may be used to make infringing copies for sale or hire in the course of a business¹²⁵².

It is quite difficult to bring a prosecution under this latter provision, as the article in question must be making the copies, and its copying capability must be designed or adapted to make copies of a particular work. Photocopiers, for example, would not come within this definition.

It is an offence to communicate an infringing copy to the public in the course of a business, or where the interests of the copyright owner are prejudiced, where the defendant knows or has reason to believe that the communication infringes copyright ¹²⁵³. This offence is intended to cover streaming. Operators of content linking sites may also find themselves liable for conspiracy to defraud (R. v. Vickerman, 2012).

Although it may be assumed that Parliament intended the scope of Criminal Offences to be exhaustively set out in the Copyright Act (note, for example, that there is no offence related to non-commercial downloading of copyright materials), a zealous private prosecutor has succeeded in a successful prosecution for conspiracy to defraud. ¹²⁵⁴

More recently, in implementation of WIPO Treaty Obligations and EU Directives, secondary legislation introduced the idea of "technical devices" (which apply to computer programs) and "technological measures" (which apply to copyright works other than computer programs) (see above). It is an offence to manufacture for sale or hire, supply or advertise commercially, possess or distribute commercially (or distribute non-commercially if this prejudicially affects the rights of the copyright owner) anything which is primarily intended

¹²⁴⁹ Id. 1250 1-6 Nimmer, §6.05. 1251 17 U.S.C. §103(a). 1252 Id. 1253 1-3 Nimmer §3.02.

for enabling or facilitating circumvention 1255 . However, there are no criminal offences associated with the unauthorised removal of technical devices.

The law also provides a number of remedies to copyright owners, exclusive licensees, and in certain cases people authorised by those rights holders, to facilitate the delivery up and/or seizure of infringing materials ¹²⁵⁶.

HM Revenue and Customs also has certain duties in relation to the impounding and seizure of goods which are imported into the United Kingdom and which infringe certain intellectual property rights. They have confirmed informally that a copyright holder of firmware contained in embedded devices may potentially invoke these powers where the firmware has been released under the GPL, but the relevant conditions of the GPL are not being complied with 1257.

Unprotected software, public domain software and orphan works

Only software that is original in the sense that it is an intellectual creation of the author benefits from copyright protection. Non-original software does not come into consideration for copyright protection and can, in principle, be used freely.

The level of originality required in the United Kingdom is relatively low. Originality does not equate to novelty (as in patent law): it is theoretically possible for two identical works to be created independently and for copyright in each to vest in their respective authors simultaneously.

In the United Kingdom, copyright arises automatically by operation of law upon the creation or first publication of a work. No form of registration is required, or even possible. The author has copyright in his work, whether he wants it or not. The work will not and cannot enter the public domain prior to the expiry of the relevant copyright term. However, this does not mean to say that there could not be devised a mechanism which might produce an effect similar to the work being in the public domain. For example, under English Law, it is likely that an unrestricted, irrevocable licence, expressed as a deed poll for the benefit of all third parties, coupled with a promise not to sue for infringement would be provide an equivalent to a dedication to the public domain. In Scots Law a similar mechanism could be used, though without the need for a deed poll. 1258

Another option available in English Law would be to license the software as part of a contract, explicitly extending the licence irrevocably to all third parties.

^{1255 17} U.S.C.§ 101.

^{1256 1-3} Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).
1257 17 U.S.C. §201(c).

¹²⁵⁸1-6 Nimmer §6.05.

This licence would be enforceable by such third parties pursuant to the Contracts (Right of Third Parties) Act 1999. In this case, it is arguable that by virtue of the doctrine of promissory estoppel, if the copyright owner promised not to pursue copyright claims, even under a bare licence, and reliant on that promise, someone made use of the software in such a way as would be detrimental to them if the right was removed, the original copyright owner would be unable to terminate the licence.

The approach in Scotland would require to be rather different. Again, a licence could be granted by the copyright holder to another individual irrevocably extending the licence to all third parties. This would be recognised at common law in Scotland as conferring upon the third parties a *ius quaesitum tertio* enabling them to rely upon the terms of the licence. Scots Law does not require there to be consideration before there can be a contract, so there would be no need to invoke principles of personal bar. However, since a simple unilateral promise would be effective in Scots Law, there seems little point in venturing into the additional complications of bilateral contracts with a *ius quaesitum tertio*.

However, such schemes would produce only an analogue of releasing the work into the public domain: it would not in fact do so. There might always be the risk of other legal principles intervening — for example, if the copyright holder were to become insolvent, might his trustee in bankruptcy (or, if an entity, its liquidator) seek to renounce or reduce the contract under the relevant legislation, no consideration having been paid for the licence? Or, if an individual, might there be an attempt (say by the author's disappointed heirs) to have the contract reduced on the grounds that the deceased author was *incapax* when he granted it? These might seem like fanciful questions, but the point is merely to illustrate that a renunciation of copyright and release into the public domain is just not legally possible in the United Kingdom.

The concept of "orphan works" has recently been introduced into UK copyright law (section 116A Copyright Designs and Patents Act 1988), but the relevant provisions are not due to come into force until October 2014. They do not directly implement the Orphan Works Directive (2012/28/EU) and there is currently some debate about the interaction between the two systems.

The copyright law of the United Kingdom draws no distinction between FOSS and proprietary software. All such software is protected by copyright, and the copyright owners have the exclusive rights over the software. Third party use is lawful only if it takes place outside the scope of copyright (after expiry of the relevant term, for example) as an exception to the copyright, or under a licence of the software. Such licence may be a bare licence, or a contractual licence. Use outside the scope of a licence (or otherwise permitted by law) will amount to a breach of copyright.

 $[\]overline{^{1259}Id.}$

Analysis of FOSS under United Kingdom law

In essence, a licence is a permission to do something which would otherwise be unlawful; namely in the present instance, to copy. Such permission is rarely given without qualification: conditions are almost always attached. This is particularly the case in FOSS Licences, which may have attached to them conditions requiring software freedom, though the precise conditions vary from one type of FOSS Licence to the next.

Under English Law, proprietary licences are almost exclusively contractual. Thus the licensor, as one contracting party undertakes to authorise the licensee to undertake a number of acts which would otherwise be unlawful under copyright law, in exchange for which the licensee makes several contractual promises, such as a promise to pay a licence fee or a promise not to use the software for certain purposes (for domestic purposes only, for example, if the software is licensed on a "home and student" basis).

In contrast, there exists in English Law the concept of a "bare licence" which is a mere permission to do what would otherwise be unlawful, and which may be subject to conditions (or other constraints, such as to duration). If the conditions are fulfilled, the licensee is granted the authorisations required under the Copyright Act, and his use is not unlawful. If the licensee performs acts reserved to the licensor outside the scope of the conditions, those acts will be copyright infringement. There are no obligations on the licensee under a bare licence: an act of the licensee either infringes copyright (because it falls outside the scope of the licence or the licensee has not fulfilled the conditions) or it does not. The licensor of a bare licence is not contractually obliged to maintain the licence, and may therefore withdraw the licence on notice to the licensee. However, by analogy with real property law, it is arguable under English Law that once a licensee has relied on the grant of a bare licence to his detriment, the licensee can invoke the principle of promissory estoppel¹²⁶⁰ to restrain the licensor from withdrawing the licence.

Free and open source software licences are generally characterised under English Law as bare licences. This has consequences which are considered below.

A Scots law analysis may, however, be somewhat different. It is a feature of bare licences under English Law that the licensee will have given no consideration for the grant of the Licence. Since, under English Law, for there to be a contract there requires to be consideration, that would give obvious problems in relation to analysing such licences in contractual terms, necessitating the development of the concept of a bare licence. By contrast, under Scots Law, there is no requirement for consideration for there to be a contract and this enables a rather more straightforward analysis.

A licence is essentially a surrender by the copyright owner of his right to prevent copying, but it is only a conditional surrender. If the conditions are not observed

 $[\]overline{^{1260}Id}$.

by the licensee, then the permission does not apply and the copying is unlawful. A Scots Law analysis would regard all licences as being, in one sense, contractual (since it makes no difference whether there is a consideration or not), but given that the effect of the contract is a conditional surrender of the proprietor's rights, this may have important consequences, as more particularly discussed below.

There may, however, be an analogous problem to at least one of the problems presented in English Law by bare licences: where no duration is stated for the contract, the court might find the contract unenforceable due to lack of consensus on a material term (the duration). However, since the court will always seek to avoid such a result where possible, it is more likely that it would seek to construe the contact so as to find an implied term as to duration. Just what term the court would find would depend on the individual circumstances of each licence and may require evidence as to the surrounding facts and circumstances of the making of that licence as between the parties, or it might hear evidence as to what is the normal industry practice, or, it might, as with an English bare licence, treat the contract as being determinable by the will of the proprietor. However, the Court would, at the least, imply a term permitting termination on reasonable notice. In the case of FOSS licences the Court may be reluctant to imply a term that the contract is terminable at will (on whatever notice), as explained below.

Copyrights

Although FOSS can be written by one person or be owned by one legal entity (as a result of contributor assignments, for example), generally speaking, after some time software developed along FOSS principles will become the work of several authors, who are copyright holders, each of whom can make claims to it.

Where the contributions are severable (and the development process of the software may be able to assist with determining this, by examining the history of the code's development in the repository) then the portions will be owned separately. If, however, the contributions of the authors are not severable (for example where two coders are working on the same piece of code simultaneously, for example through the development methodology called "extreme coding"), then they will be joint owners of the code.

Joint ownership has an effect on copyright term: the basis date for calculating copyright term will be the last of the joint owners to die. The consent of all joint owners is required to license the code (which means that any individual joint owner wishing to use the code must obtain a license from all other joint owners, and any one joint owner may be subject to copyright infringement proceedings from the other joint owners). The only way this form of joint ownership may arise is through co-creation.

A second type of joint ownership may arise in England through the formation of a trust. In this case the two types of joint ownership are regarded under English Law as tenancy in common and joint tenancy. These forms of ownership do not depend on co-creation, and may be created by agreement, or assignment of copyright to joint owners in one of these forms. In brief, tenants in common can agree that they own certain proportion of the rights (e.g. 40/60). Joint tenants cannot, and it is not correct to describe them as owners of a share of the copyright in any meaningful sense. In both cases, the consent of all co-owners will be required for exploitation, as with the non-trust form of joint ownership. The details of trust law are beyond the scope of this chapter.

The position in Scotland, though having a broad similarity is quite different in important details. Joint ownership in Scotland takes the form of either common property or joint property. Common property is where property is owned by the parties in separate pro indiviso shares in the whole in such proportions as they may have agreed (for example, 50-50 or 60-40). Each share is legally, though not physically separate, and each proprietor may burden or alienate his own share (whether by, for example, assignation or testamentary bequest). In Joint property, there is a single indivisible ownership of the whole, and such burdening or alienation by one of the proprietors is not possible. Under modern conditions, common property is the norm and Joint property is restricted to ownership by a body of trustees 1261 or the members of an unincorporated association.

Of course, an assignation of a (say) one third *pro indiviso* share in the copyright of a program is not likely to be regarded in the market place as a particularly marketable commodity, so the practical outcome is as it is in England, namely, that for commercial exploitation, the consent of all the common owners is likely to be necessary, though the necessity is largely practical. In the case of Joint Property, properly so called, however, the necessity will also be legal.

As a general rule, since joint owners are only ever able to exploit the copyright with the agreement of the other joint owners, it is wise to document the rights that each joint owner has in a formal licence agreement, granting a licence from the joint owners to each joint owner individually. In this way, a general right to grant sub-licences, to exploit, create adaptations and so-on may be explicitly granted. If the co-owners intend that the software is released under an open source licence, then that licence itself may grant sufficient rights to each co-owner individually.

Under English and Scots law, it is not clear what happens to the copyright ownership of code which contains severable contributions in source code, which are then more closely intertwined in the object code. However it is submitted that not a great deal turns on this in practice.

In practice, and given the immensely long period of copyright subsisting in computer software, for code released under an open source licence, there are few practical differences between the different forms of co-ownership in open source.

By contributing to a pre-existing work by creating new modules or modifying

¹²⁶¹ Id.

or amending it, subsequent authors are creating a derivative work¹²⁶² of the underlying work, and therefore, the licence of the original author will be required both to amend it and to subsequently exploit it (open source licences will grant these rights).

Any co-owner will have standing to take proceedings against infringers, whether third parties, or another co-owner who is infringing.

It is not clear under English and Scots law how damages would be assessed for infringement of FOSS, including where the damages relate to a claim brought by one co-owner.

The assignment of copyrights

In order to control the copyright situation better (to facilitate re-licensing, for example), it may be useful to collect all copyrights concerning a FOSS project within one organisation. The existence of this organisation will simplify the management and enforcing of the joint rights. The collective management of copyrights is perfectly possible under English and Scots law, and is usually, but not necessarily, facilitated by an assignment or assignation of the copyrights. As we have seen above, copyrights can be assigned at law only in writing, in a document signed by the assignor.

Moral rights

FOSS originated in the United States, and therefore attaches less importance to the moral rights of the author. The Open Source Definition specifies that the author of software distributed under a FOSS license cannot oppose the use of the software by certain people and groups¹²⁶³ or for certain areas of application¹²⁶⁴.

Computer programs $per\ se$ do not attract moral rights¹²⁶⁵. However, related materials, to the extent that they are still literary works, may attract protection by way of moral rights (if they are created by independent contractors or other individuals who are not employees). Most obviously, this may include operation manuals.

Moral rights in the UK are less absolute than in many other European jurisdictions. All moral rights are potentially capable of waiver by the content creator (both before and after creation of any specific work), and copyright assignments and employment contracts frequently contain general waivers.

Enforcing FOSS licenses

In one sense, it is meaningless to talk about FOSS licences being "enforceable".

¹²⁶² Id. 1263 Id. 1264 17 U.S.C. §106. 1265 Id.

Under English law, FOSS licences are best understood as bare licences, and as such may provide a defence to a claim of copyright infringement, but, under English Law, no one is able to commence a claim under the FOSS licence itself. However this point has not been judicially determined in the United Kingdom¹²⁶⁶.

Under Scots Law, however, there is no obvious impediment to the owner of the copyright seeking to bring proceedings against a licensee for breach of the conditions under which the licence was granted. That action might seek either the statutory remedies available for copyright infringement (the conditions having been breached, the act of copying is no longer permitted) or it might seek the contractual remedies stipulated in the licence, since all licences (including what in English Law would be regarded as a mere "bare licence") are, equally, contractual. Further, because of the nature of the obligations of the Licensee as conditions attached to the grant of the permission, the right to enforce those conditions will go with the ownership of the copyright. It follows therefore that the copyright may be assigned to another without the need for a separate assignation of the supposed "right" to enforce the copyright. 1267

Another way of looking at the issue (and, it may be, from the English Law perspective) a better question is whether a FOSS licence can provide an effective defence against a claim of infringement. This point has also not been judicially determined in the United Kingdom, but it is difficult to construct an argument as to why such a licence would not act as an effective defence, except possibly that, as a bare licence granted under English Law, it may be withdrawn on notice by the copyright owner. However, the doctrine of promissory estoppel (discussed above) provides a mechanism to restrict this right of withdrawal where the licensee has relied on the licence.

Although a Scottish Court could similarly rely on the analogous concept of Personal Bar to restrict the exercise of the right of a proprietor to withdraw the Licence where that has been relied upon to his detriment by a Licensee, it is more likely that the Scottish Court would effectively deal with the matter at the stage of determining whether the copyright proprietor's permission can indeed be withdrawn at will. As explained above, the Court would set itself the task of seeing whether the contract (for such is even what English Law regards as a bare licence) contains an implied term as to duration. In the case of FOSS licences, it would consider the architecture and structure of the licences (particularly their cascade nature, the accretion of rights as the program is developed, and the automatic downstream licensing provisions) and, it is submitted, have little difficulty in coming to the view that there is an implied term that the license duration is perpetual, and that the licence cannot be terminated by the proprietor at will.

Parties to the licences

¹²⁶⁶17 U.S.C. §109(a).

¹²⁶⁷2-8 Nimmer §8.12.

If one author makes his work available under a FOSS license, the answer is clear: the licence is granted by the author to the licensee. In case of different co-authors, it becomes more complicated. If the licensors are co-owners of severable parts of the work, then there will be a sequence of licences in place between those co-owners and the licensee.

In most cases FOSS will be the work of several authors who did not work in joint consultation. FOSS is usually realised via a tree of authors who all contributed to the version of the program. In so far as a new author makes an original contribution to the work, a derivative work is produced. The licensee of the eventual work will need to have the consent of every author in the chain who made an original contribution to the eventual work, starting with the author of the first work. This consent can be by a direct licence (as with the GPL, where the licensee is expressed to receive a direct licence from all previous licensors of the work), or indirectly by giving consent in the FOSS license to the next author to modify and distribute the work (essentially a sub-licence).

Several FOSS licenses solve this by explicitly confirming that the licensee will receive a licence from all prior authors in the tree. GPL version 3, for instance, contains the following clause: "Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License¹²⁶⁸

Validity of the FOSS licence as a contract

An author chooses a FOSS license because he wants to distribute his work and make it available to others—possibly with certain restrictions. For him it is important that he can enforce these restrictions.

Conventional commercial licence agreements are reached by the explicit acceptance of the terms and conditions by the licensee following the signing of the terms and conditions, by opening the packaging, by clicking or selecting an "I agree" button or by any other action from which acceptance can be inferred. These methods to reach a licensing agreement have been sufficiently tried and tested and, at least between commercial parties, are generally considered to be valid.

Many FOSS licences are drafted in such a way that there is no obligation on the licensee: merely a set of conditions with which the licensee must comply in order to benefit from the protection of the licence. English law requires that for an contract to be validly formed, there must be an intention to create legal relations, an offer and an acceptance of that offer, and mutuality of obligations on both parties. If the licensee is operating within the scope of the conditions, then he obtains the protection of the licence. If he is operating outside their scope, then he is potentially liable to a copyright infringement claim. There is no obligation for him to act in accordance with the condition: but consequences are likely to flow if he fails to do so.

¹²⁶⁸Computer Assoc., 982 F.2d at 714.

Where it is ambiguous whether a term could be interpreted as a condition or an obligation, then it is argued, that by analogy with the principle that where contract terms are to be implied, they should be implied to the minimum extent possible to give business efficacy to the agreement, that a contract itself should not be implied unless such an implication is necessary to give business efficacy to the relationship. In many cases, it will not be necessary.

It is an open question as to whether the approach adopted by the Scottish Courts might differ. As noted above, Scots Law does not require consideration for there to be a contract. If the copyright owner undertakes to grant a licence on certain conditions and a licensee then, in effect, avails himself of the permission, it is at least arguable that his so availing himself of the permission amounts to an acceptance of the offer which falls to be inferred *rebus et factis* and there is thus a contract which does create obligations upon the licensee.

In any event, FOSS licenses which are concluded in accordance with the contractual mechanism and comply with the characteristics required by English Law (or which, in Scots Law terms discloses that a contractual consensus has been reached) will have been validly formed and enforceable as contracts. However, from the English perspective, owing to the lack of mutuality of obligations, it is arguable that many of them will be regarded by an English court as bare licences as opposed to contracts. As explained, this is unlikely to become an issue if the licence falls to be interpreted under Scots Law.

Typically, in a FOSS environment, however, software is made available with the simple specification on a website or in the source code of the software that it concerns FOSS. The license usually does not need to be explicitly accepted. Having to click and confirm every time could in some cases interfere with the use of the software. The Open Source Definition opposes demanding explicit agreement with the license conditions with the aim of confirming the agreement between licensor and licensee¹²⁶⁹.

The question is whether in these cases a valid licence is granted. In other words, as we have seen before, is a user of the software under a FOSS licence within the scope of its terms able to defend a claim of copyright infringement from the licensor? Using the software without the author's consent implies a copyright infringement. There is no reason to believe that the FOSS licence does not grant effective consent (although, as stated above, this is subject to a possible right of withdrawal on notice). Since there is no implication (that cannot be rebutted by the application of an explicit licence) that software made available on the internet has been dedicated to the public domain (to the extent that such dedication is at all possible), or is made available under some sort of liberal implied licence, this has the consequence that everyone who wants to use software which they find via the internet, needs actively to look for a licence.

Since the FOSS licence is the only means by which authorisation to use the software is granted, and failing that authorisation, the use will almost invariably

¹²⁶⁹See, 4-13 Nimmer §13.02(B).

be a breach of copyright, there is little value in a user trying to dispute the existence or validity of the licence under either English or Scots Law.

Violation of licence terms

Where a user is using software subject to copyright other than in accordance with the conditions contained in a licence, then that use will (unless a statutory exception applies) be in breach of copyright, and the user will be liable to a copyright claim from the copyright owner. This is equally true if the licence is contractual. However, in this latter case, the licensee may also be open to a claim for breach of contract. This distinction may also affect the interpretation of the terms of the licence, as it becomes open to the court to interpret contract terms as conditions or warranties. If the term is a condition, then use of the software outside its scope is both a breach of contract, and also a breach of copyright. If the term is a warranty, then the use of the software will not be a violation of copyright, but breach of the warranty will open the licensee to a contractual claim.

There are several other consequences of a FOSS licence being determined to be a contract.

A contract is amenable to specific performance: an equitable remedy, granted at the court's discretion, under which a party to a contract is compelled to perform it (as opposed to paying damages for his failure to perform). This may apply to obligations to release source code.

In addition, under English Law, as a contract, the Contracts (Rights of Third Parties) Act 1999 will apply (in default of its explicit exclusion). If, for example, a FOSS licence provides that the licensee must provide all third parties with copies of source code on request, then any third party (i.e. anyone in the world) would, under that Act, be entitled to apply to the court for an order to enforce that obligation as against the licensor. Similarly, under Scots Law, the third party would probably be able to rely upon a *ius quaesitum tertio*.

Further, under insolvency legislation, insolvency practitioners administering the affairs of an insolvent individual or company are granted certain powers to terminate unprofitable or onerous contracts, which may include FOSS licences granted under contract¹²⁷⁰. Similar provisions apply in Scotland.

Waiver and liability

There is, under English and Scots Law, no automatic connection between the ownership of copyright, and liability arising from a defect in that copyright work. Liability for a defect in that work will arise either because of an explicit or implied contract term in a contract between the provider of the software (who may or may not be its owner, and therefore the licensor) and the user. Contract terms implied by the Sale of Goods Act 1979 (which are unlikely to

¹²⁷⁰See, Computer Assoc., 982 F.2d at 715.

apply directly to software per se, but may apply to a physical good which incorporates software) include a warranty that the item is fit for purpose and of satisfactory quality. In a contract for the supply of services (made in the course of a business), the term implied is that the service provider applied reasonable care and skill in the supply of the services (Supply of Goods and Services Act 1982). In most cases, there will be no such contract between the supplier and the end-user where FOSS is involved, and, even if there is, it may well be the case that such a contract is not in the course of business.

It is theoretically possible that an author could be liable to a licensee in tort including negligence¹²⁷¹. However, it is generally difficult in English and Scots law for a person to claim for non-physical (i.e. pure economic) loss unless there is some sort of connection between the two parties where it is reasonable for one party to rely on the other's knowledge and expertise. ¹²⁷²

Typically, FOSS licenses contain strong exclusion clauses, which attempt to discharge the author from all liability¹²⁷³. One reason for this is that FOSS is often made available without a fee, as a result of which the author generates insufficient income to pay for liability insurances and legal costs¹²⁷⁴. Another is a simple principle of fairness in that programmer should not be asked to accept liability for something when she has no control over the distribution of it.

Although this reasoning is certainly valid for the amateur programmer, it applies much less for professional programmers who built their business model around FOSS¹²⁷⁵. Professional suppliers of FOSS or related services often provide warranties and indemnities¹²⁷⁶. There is no reason, in principle, why a person may not warrant the performance of another person's software (or indeed its title). However, care should be taken to ensure that such a business does not become an unlawful insurance business.

The Unfair Contract Terms Act 1977 is the primary piece of legislation governing exclusion clauses. Some exclusion clauses (such as those limiting liability for death and/or personal injury caused by the negligence of the person seeking to rely on them) are not capable of exclusion under the Act (irrespective of whether or not they are contained in a contract, although the title of the Act might suggest otherwise). Further, outside the context of a contract, clauses which seek to exclude liability for negligence are enforceable only to the extent that they are reasonable. The question as to whether a notice is reasonable or not, is ultimately a question of fact for the judge. Bearing in mind, first, the reluctance of judges to find liability for purely economic losses in non-contractual

 $^{^{1271}}Id.$

 $^{^{1272}\}mathrm{Apple}$ Computer, Inc v. Microsoft Corp., 35 F.3d 1435, 1445 (9th Cir. 1994).

¹²⁷³ See, Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 819 (1st Cir. 1995).

 $^{^{1274}}See, \ Id. \ {\rm at} \ 815.$

¹²⁷⁵4-13 Nimmer §13.03(F).

¹²⁷⁶ See, Order Re Copyrightability Of Certain Replicated Elements Of The Java Application Programming Interface (hereinafter *Order*) found at http://www.groklaw.net/pdf3/OraGoogle-1202.pdf.

negligence cases, and, second, that the software is licensed for free, it would seem unlikely that under English or Scots law the author of FOSS would find himself liable in negligence for mere non-performance of the software. However, where the software was specifically provided for use where its failure might cause death or personal injury, the exclusions of liability contained in the licence would not apply.

Perhaps anomalously, if the FOSS licence is found to be a contract 1277, the Unfair Contract Terms Act applies somewhat differently. The rule about inability to exclude liability for death and personal injury arising from negligence remains, but the reasonableness test in respect of other terms only applies where the licensee deals as a consumer or on the licensor's written standard terms of business. Taking the latter point first: it would initially seem that a FOSS licence would count as written standard terms. First, where the licensor is not acting in the course of a business, then the terms may be written and standard, but they will not be terms of business. Even if the licensor is licensing the software in the course of his business, it may be that the licence is not his standard terms: it has been argued, in the context of building contracts, that where the terms are not imposed by the contractor, but are standard terms drafted by a third party (for example, the Royal Institute of British Architects) that they are not the other's written standard terms of business. This argument may well be applicable to FOSS licences which are drafted by a third party (for example, the various flavours of GPL). If this argument is successful, the exclusion will be applicable if either the licensee or the licensor is not operating as a consumer (that is, operating within the scope of a business). The upshot of this is that even if a FOSS licence is found to be a contract, in many of the contexts in which FOSS is employed, the Unfair Contract Terms Act will not impinge on typical exclusion clauses (at least to the extent that they exclude liability for loss not relating to death or personal injury), and even if it does, then the judge will consider whether the exclusion is reasonable, for which the fact that there may well be no direct relationship between the licensor and licensee, and that the software is being licensed at no cost, will all be relevant factors.

If the FOSS licence can be construed as a contract, and the transaction is made with a consumer, then the Unfair Terms in Consumer Contracts 1999 will apply. Further analysis is not appropriate given the space available in this chapter, but consideration of exclusions of liability is likely to be similar to consideration under the Unfair Contract Terms Act 1977.

The Consumer Protection Act 1987 ("CPA") implements the directive 85/374/EEC. UK Government guidance suggests that software is a product for the purposes of the Act, and that the producer of software may find himself strictly liable where software finds itself into the supply chain of a dangerous product¹²⁷⁸. However, the CPA does provide a defence to a provider of a dangerous component where that component was supplied free and not with a

¹²⁷⁷17 U.S.C. §102(b).

 $^{^{1278}1-2}$ Nimmer §2.02.

The copyleft principle

Principle

A characteristic found in different (but not all¹²⁸⁰) FOSS licenses is the so-called "copyleft" principle. FOSS licenses which incorporate the copyleft principle 1281, lay down the principle that everyone in the chain of consecutive users, as a condition of the grant of the right of use of the software, needs to distribute the improvements he makes to the software and the derivative 1282 works he makes under the same conditions to other users, if he chooses to distribute such improvements or derivative works. In other words, software which incorporates copyleft FOSS, needs to be distributed in turn as copyleft FOSS.

The copyleft principle is restrictive. Businesses which rely on licence revenue as an income stream will find that they cannot incorporate third party code released under a copyleft licence into their proprietary offering. It is also restrictive, in that with few exceptions 1283, it is not possible to combine software under two different copyleft licences and then distribute them. The reason for this is that both copyleft licences will insist on the resulting software being released under their own terms to the exclusion of any other.

Sometimes warnings are issued for the dangers that companies run if a negligent or vindictive employee were to incorporate a piece of copyleft code in the code of proprietary software. In theory this could mean that the company would be obliged to make its proprietary software available under a copyleft FOSS license. Under English law, the court's powers to compel the release of the source code would be contained in the equitable order of specific performance. Only if the relevant FOSS licence amounted to a contract would this remedy be effective, and even then, the remedy would be at the discretion of the court.

Under Scots Law, the risk for the infringing company would be higher. In the first place, there is a greater likelihood that a FOSS licence would be regarded as contractual, and, second, the Scottish remedy of specific implement will generally be granted, the court's discretion to refuse it being limited to cases where to grant the remedy would give rise to exceptional hardship, where the obligation is for the payment of money, where the contract, if specific implement were granted would result in the creation of an intimate relationship 1284, where compliance would be impossible ¹²⁸⁵ and where the court cannot enforce the decree ¹²⁸⁶. In those cases where specific performance or specific implement was not granted,

 $^{^{1279}4-13}$ Nimmer \$13.03(B)(2)(a). ¹²⁸⁰Computer Assoc., 982 F.2d at 708. ¹²⁸¹See, BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007). $^{1282}See, 4-13$ Nimmer $\S13.03(B)(3).$ ¹²⁸³See, 4-13 Nimmer §13.03(F)(2). $^{1284}4-13$ Nimmer $\S13.03(F)(2)$.

¹²⁸⁵See, Computer Assoc., 982 F.2d at 715. ¹²⁸⁶See, Computer Assoc., 982 F.2d at 715.

it is likely that there would be the grant of an injunction, or, in Scotland, an interdict to prevent distribution of the infringing code, coupled with a damages claim. The infringing company, if it were not prepared to comply with the terms of the FOSS licence, would therefore have to release its software without the infringing FOSS code, either at a cost of impaired functionality, or alternatively by obtaining or writing code with similar functionality from elsewhere.

Damages

Damage caused by copyright violations are compensated for under English and Scots law by the applying one of two measures of damages, as selected by the copyright owner. These are either an account of profits (in Scotland, an action of accounting for profits) or damages representing the loss in value to the copyright owner of the underlying work.

The difficulty with seeking an account of profits or accounting for profits can be in determining what proportion of the profits of any infringing sale are capable of allocation to the specific piece of copyright owned by the claimant. However, where an infringer takes a piece of software (FOSS or otherwise) where the claimant is the owner, and sells it a profit in violation of the owner's rights, the claimant is entitled to the profits so derived.

So far as diminution of value of the underlying work is concerned, it can be difficult for a court to determine that there is a loss in economic value, especially where the work in question is made available free of charge. This is where dual licensing can assist the claimant: if the software is also made available under a proprietary licence for which a fee is charged, then the court may be persuaded that this is the appropriate fee on which to base damages for infringement ¹²⁸⁷.

Statutory damages such as dual or triple damages are not available under English or Scots law. However, under English law, punitive and exemplary damages may be awarded in extreme cases, but such awards are rare. Under Scots Law there is no concept of punitive or exemplary damages and under no circumstances are damages anything other than compensatory. The general rule in litigation in England is that "costs follow the event" and in Scotland that expenses follow success: in other words, the party which prevails is likely to be awarded its costs (in Scotland, its expenses). However, costs or expenses are at the discretion of the judge, who may, nonetheless award costs or expenses against a prevailing party for many reasons, including poor conduct of the case, the prevailing party winning on a technicality in a case which should never have been brought, and so on. Even where a party is awarded costs or expenses, recovery is rarely 100% of the costs expended, as costs and expenses are limited to what is known as "judicial expenses", which is to say only such expenses as it is considered proper to be recovered against an unsuccessful party, and only in a sum which is considered reasonable. This is established in a process called "taxation". In England, costs are typically reduced to around 60% of the

 $^{^{1287}}$ Order supra Note XXX

costs actually expended. In Scotland, the amount of the reduction in expenses is more difficult to predict, but there will almost always be a reduction which can be substantial.

FOSS cases in the United Kingdom

There have not yet been any reported cases (June 2014).

Legal procedures

Stephen Mason kindly reviewed this section from a litigator's perspective.

England

FOSS-related cases in England will typically be copyright infringement cases, and will be heard in the civil courts. Simple cases may be heard in the county court, but cases with special legal significance, or of higher worth, will be heard in the High Court. Cases are decided by a single judge: jury trials are extremely rare in civil cases in England.

A case will typically commence with the claimant's lawyer sending a letter before action setting out the claim. Many types of claim in England will render the claimant at risk of costs if a strict pre-action protocol (or default practice direction) is not followed. There is currently no pre-action protocol for intellectual property cases so the default rules apply. A claimant will always be at risk of a costs claim unless care is taken to give the defendant an opportunity to settle the case. The English courts regard themselves as the dispute resolution mechanism of last resort, and failure a party to show evidence of adequate attempts to resolve the dispute by alternative means may render it liable to costs.

A claimant may apply for an injunction to restrain infringement of intellectual property rights, and there is no reason why this should not in theory apply to an infringement of a FOSS licence. However, injunctions are not granted as of right, and are always at the discretion of the judge. In an emergency, an injunction may be claimed ex parte meaning that the claimant applies without giving notice to the defendant. The courts are reluctant to grant such an extreme remedy, and will require the claimant to demonstrate the necessity of such a remedy, as well as giving an undertaking to bring the matter to trial, and pay the defendant's costs if the injunction proves to be unfounded. An interim injunction may be granted on notice, where the defendant is given an opportunity to set out its case prior to a full trial.

As well as demonstrating clean hands (that the claimant has not itself committed some wrongdoing), the claimant will have to establish that damages are an inadequate remedy (in FOSS cases, where a licence fee is not paid for use of the software, the claimant could put this argument particularly strongly, saying that its intention in making the software available was never to make money,

but to require those redistributing derivative works of it (in the case of copyleft software) to make those derivative works available under a similar licence. The court will also apply a balance of convenience test to determine whether the grant of an injunction pending the trial will, on balance, benefit the claimant more that it harms the defendant 1288.

A useful additional remedy is the forfeiture of infringing articles. Furthermore, if, there is perceived to be a risk that evidence may be destroyed (for example hard discs scrubbed) then a useful weapon is, again on an ex parte application, the granting of a search order for the seizure and securing of evidence¹²⁸⁹. The English civil law system is adversarial as opposed to inquisitorial, and the judge decides on the basis of the arguments put by the parties' lawyers (usually, in court cases, barristers). However, the English High Court possesses a division called the Technology and Construction Court where the Judges are somewhat more experienced in technology matters than other divisions of the High Court, and are accordingly more likely to take it on themselves to take on a minor inquisitorial role. It is by no means automatic that a FOSS case will be heard by the Technology and Construction Court, and in fact, this division is better regarded as being the appropriate one for handling projects-type cases with multiple parties, rather than two-party intellectual property claims.

We have seen already that the English litigation system operates a costs-follow-the-event mechanism, but that costs are in the gift of the judge who decides on the basis of the conduct of the parties, and are subject to the process assessment called taxation.

Aggrieved parties are able to appeal from the High Court to the Court of Appeal, in cases where the Judge has erred on a matter of law, and from there there is a right of appeal on a question of law to the Supreme Court (formerly the House of Lords), although leave has to be granted either by the Court of Appeal or, on an application, by the Supreme Court itself. In cases involving questions of EU Law it is open for the High Court or the Court of Appeal to refer the question to the European Court of Justice, though such a reference is not mandatory. However, a reference from the Supreme Court in such a case would be mandatory.

Scotland

Cases in Scotland relating to FOSS may be likely to be seeking either remedies for copyright infringement or remedies available under the Licence. Such cases do not involve any question of criminal law, and will be brought in the civil courts. Under the Scottish Court structure, the country is divided into a number of Sheriffdoms and each Sheriffdom will, typically, have a number of courts within it—one in every large town and some, indeed, even in very small communities in remoter parts of the country. The Sheriff has both a civil and a criminal jurisdiction but, of course, a licensing dispute will be heard by

 $[\]overline{1288}$ See, Id. at 710.

¹²⁸⁹4-13 Nimmer §13.03(B)(4).

him under the civil Ordinary Cause rules. There is no upper financial limit on the cases which can be heard in the Sheriff Court, nor is there any filter to reserve more difficult cases to higher courts. In the result, in the areas with which this Chapter is concerned, the Sheriff Court's Jurisdiction is, effectively, co-existensive with that of the Court of Session.

The Court of Session is the supreme civil Court in Scotland¹²⁹⁰ and is divided into the Outer House (the equivalent of the High Court in England) which hears cases at first instance, and the Inner House (the equivalent of the Court of Appeal in England) which hears Appeals from both the Outer House and the Sheriff Court. The standard form of litigation in the Outer House is by way of an Ordinary Action¹²⁹¹ though there is also available a special Intellectual Property Action procedure and a special Commercial Action procedure. Because a case concerns intellectual property and might competently be heard under the intellectual property procedure, does not compel it to be so heard. The pursuer might opt to raise the action as an ordinary action, or, if the case is commercial in nature, might (but is not compelled to) raise it as a commercial action.

There are both Intellectual Property Judges and Commercial judges, but neither of these types of specialist judges are allocated only cases in the areas in which they specialise. There is a heavy demand on judicial time in Scotland, and all of the Senators of the College of Justice¹²⁹² are liable to find themselves doing anything. Thus, intellectual property judges can find themselves hearing, say, road accident or medical negligence cases, or divorces, or cases about the more arcane areas of wills and succession or revenue law. Because of the collegiate nature of the Court of Session, an intellectual property judge might find himself in an emergency called upon to sit in the Inner House. Further, although the High Court of Justiciary (the supreme criminal Court in Scotland) is an entirely separate court with its own history and procedures, and its own judges (Lords of Justiciary) the judges of the High Court of Justiciary are the same people as the judges of the Court of Session, only wearing different robes and occupying a different office. Accordingly, the Intellectual Property judges are quite likely to find that they spend some of their time hearing criminal trials in Glasgow High Court. A similar position potentially arises in the case of Commercial judges. but there is an expectation that they will be largely relieved of duties other than sitting as a commercial judge. There is no such expectation in the case of Intellectual Property judges. As a result, it may happen that an intellectual property judge will not be available to hear an intellectual property case, but the rules allow any other judge to hear intellectual property cases.

In addition, a few, but by no means all Sheriff Courts also have a commercial action procedure modelled on the commercial procedure in the Court of Session.

Therefore, a pursuer who is contemplating raising an action relating to FOSS

¹²⁹⁰ Id

 $^{^{1291}}See,$ John William See v. Christopher Durang and LA. Stage Co., 711 F.2d 141, 143 (9th Cir. 1983).

 $^{^{1292}}Id.$

may competently be able to do so as a Sheriff Court Ordinary action, a Sheriff Court Commercial action, a Court of Session Ordinary action, a Court of Session Commercial action, or a Court of Session Intellectual Property action.

Commercial actions and Intellectual Property actions are subject to more proactive case management by the Court than are Ordinary actions and every effort is made to ensure that one judge is allocated to deal with the whole of the case (with Ordinary actions, cases are dealt with by whichever judge happens to be free at the time). Commercial actions are subject to a strict pre-action protocol involving the need for solicitors to send letters before action and to discuss the dispute and, if nothing else, at least narrow the issues. Theoretically, failure to go through the pre-action protocol may result in a penalty in expenses, though this does not always occur. It is also theoretically possible for the court to dismiss the action for failure to give effect to the pre-action protocol, but this seldom happens. There is no mandatory pre-action protocol in either Intellectual Property actions or Ordinary actions. Unlike England, the Scottish Courts do not tend to see themselves as the dispute resolution mechanism of last resort, and (certainly in Intellectual Property and Ordinary actions) there is no compulsitor for a party to attempt to resolve the dispute by alternative means.

Civil jury trials do not exist in the Sheriff Court and, in the Court of Session, are available only for reparation and defamation cases. Accordingly, any dispute relating to FOSS will be heard by a judge sitting alone, though, in the case of the Intellectual Property procedure, there is the possibility of the judge sitting with an expert assessor.

A pursuer may apply for an interdict to restrain a wrong, for example the infringement of intellectual property rights or of contractual rights. If he can demonstrate that there is sufficient urgency he can obtain an *interim* interdict before service of the Summons (i.e. without notifying the defender in advance, unless the defender has lodged a *caveat*); but, of course, he has no automatic entitlement to the grant of an *interim* interdict—he has to demonstrate that one is required on the balance of convenience. Even if an interim interdict is obtained, the defender might always enrol a motion for a recall of the interdict, and the court will then hear both sides on what is usually a fuller argument. Just where the balance of convenience lies is very much a matter for the judge in the whole circumstances of the case.

These remedies will apply in a FOSS case as they would in any other case.

A useful additional remedy available in Scotland as it is in England, is the forfeiture of infringing articles. Furthermore, if, there is perceived to be a risk that evidence may be destroyed (for example hard disks scrubbed) then a useful weapon is, again on an *ex parte* application before service of the Summons, the appointment by the Court of a Commissioner (usually a Senior Counsel) to conduct a "dawn raid" to seize and secure evidence.

The Scottish civil law system shares with the English system the characteristic of being adversarial as opposed to inquisitorial, and the judge decides the case

on the basis of the arguments put by the parties' lawyers. If the case is being conducted in the Court of Session, this will usually be an Advocate¹²⁹³ though may also be a Solicitor-Advocate¹²⁹⁴ and if the case is being conducted in the Sheriff Court, may be an Advocate but is rather more likely to be a Solicitor.

As noted above, expenses (which, however are subject to taxation) will usually follow success, though this may not always be the outcome, depending on the view which the judge may take of perceived special factors.

Aggrieved parties may appeal from the Sheriff to the Sheriff Principal of the Sheriffdom in which the case was heard, and from the Sheriff Principal to the Inner House of the Court of Session. The Appeal to the Sheriff Principal is optional, and an aggrieved party can elect to appeal instead from the Sheriff direct to the Inner House. If the case was heard in the Outer House of the Court of Session, then the Appeal lies to the Inner House. From there, there is a right of appeal to the Supreme Court (formerly the House of Lords). The right of appeal is absolute and no leave is required either from the Inner House or the Supreme Court, though the Appellant does require to obtain a certificate signed by two counsel certifying that there are stateable grounds of Appeal. In cases involving questions of EU Law it is open for the Sheriff Court or the Outer or Inner Houses of the Court of Session to refer the question to the European Court of Justice, though such a reference is not mandatory. However, a reference from the Supreme Court in such a case would be mandatory.

Recommended literature

- Law and the Internet Third edition, ed. Edwards and Waelde, Hart Publishing Oxford 2009, esp. Chapter 11, Andres Guadamuz
- A Manager's Guide to IT Law, second edition, British Computer Society, 2011
- Stephen Mason, general editor, Electronic Evidence (3rd edition, Lexis-Nexis Butterworths, 2012)

United States of America

author:[Webbink,Mark H.]

Introduction to software protection under United States law

Body of law

Rights in software in the United States arise from a mixture of federal and state law and the interpretation of those laws by the various courts. Software

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 $^{^{1294} \}rm Mist\mbox{-}On \; Sys. \; v. \; Gilley's European Tan Spa, 303 F. Supp. 2d 974, 978 (W.D. Wis. 2002).$

may be protected by a combination of copyright, patent, trademark, and trade secret law. Further, the licensing of rights in software is subject to contract law, bankruptcy law, antitrust (competition) law, uniform state laws, tax law, export control law, and other specialized federal and state statues.

Copyright and patent protection of software arises under Section 8, Article 1 of the U.S. Constitution. The Copyright Act is embodied in Title 17 of the U.S. Code, the statutes that implement the Constitutional directive. The Patent Act is embodied in Title 35 of the U.S. Code. Both copyright and patent law fall within the exclusive jurisdiction of the U.S. Federal government.

To the extent the publisher of software claims a trademark applicable to that software, such trademark rights may arise under federal trademark law, state trademark law, or common law rights in trademarks. Federal trademark law is embodied in the Lanham Act, Title 15, Chapter 22 of the U.S. Code. State trademark law is generally embodied in state statutes of the various states. In the U.S. rights in a trademark may arise under common law from mere usage.

Software may also be protected by trade secret law. Trade secrets are most commonly protected under a uniform state law (that is, a law that has been adopted in substantially the same form among a large number of states) like the Uniform Trade Secrets Act. ¹²⁹⁹ There is a federal statute on trade secrets, as well, but it is less commonly relied upon for contractual protection of software. ¹³⁰⁰

Of the remaining areas of law that may govern a software license, none is more important than contract law. Contract law in the U.S. is largely within the purview of state law, and U.S. courts give contracting parties a great deal of deference in determining the contractual terms that will govern their relationship. As a consequence, parties may, within limits, contract away rights and/or protections otherwise granted under copyright, patent, trademark or trade secret law.

Copyright protection of software

Software is protected by copyright and is equivalent to literary works within the meaning of the Berne Convention for the Protection of Literary and Artis-

 $^{^{1295}\}mbox{``(Congress shall have the power...)}$ To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

 $^{^{1296}17}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html.

 $^{^{1297}35}$ U.S. Code may be found at http://www.law.cornell.edu/uscode/html/uscode35/usc_sup_01_35.html.

 $^{^{1298}15}$ U.S. Code Chapter 22 may be found at http://www.law.cornell.edu/uscode/15/usc_sup_01_15_10_22.html.

 $^{^{1299}\}mbox{For}$ example, the Uniform Trade Secrets Act as embodied in California state law may be found at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=03001-04000&file=3426-3426.11.

 $^{^{1300}\}mathrm{The}$ Economic Espionage Act of 1996 found at 18 U.S. Code §§1831-1839, http://www.law.cornell.edu/uscode/18/1831.html.

tic Works as established by the World Intellectual Property Treaty of 1996. ¹³⁰¹ Software was recommended for formal inclusion under copyright in the U.S. in the final report of the National Commission on New Technological Uses of Copyrighted Works (CONTU)¹³⁰², the recommendations of which were incorporated in the Copyright Act of 1976. ¹³⁰³ Inclusion of software under copyright was further clarified with amendments to the Copyright Act adopted in 1980 that defined a computer program as "... a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result" and by limiting the rights in computer programs to assure the right of a lawful possessor to make a back-up or archival copy of the program. ¹³⁰⁴

It is important to note that in the U.S. copyright protection of software extends to each of the source code and binary versions of the software. While copyright in software arises automatically when it is "... created and fixed in a tangible form that it is perceptible either directly or with the aid of a machine or device" 1305 , enforcement of copyright in the U.S. requires registration of the copyright with the U.S. Copyright Office. 1306

Authors/Beneficiaries

Section 102 of the U.S. Copyright Act (the "Act") provides copyright protection for "original works of authorship fixed in any tangible medium of expression." Nothing more is required. Thus, whatever ownership interests exist in the copyright commences with the reduction of the expression to some tangible medium, whether paper or an electronic file.

The sole developer

Section 201(a) of the Act provides that copyright protection in a work "vests initially in the author or authors of the work." In the case of a sole developer, copyright in the software code will vest with her as the sole owner upon fixation of the code in a tangible medium of expression. That is, once she types and saves the code, fixing it in the computer's memory, she now owns the copyright in that code. Nothing more is required of the developer to own the copyright.

Works for hire

 $^{^{1301}} World$ Intellectual Property Copyright Treaty of 1996 found at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html#P45_2379.

 $^{^{1302}}$ The final report of the National Commission on New Technological Uses of Copyrighted Works found at http://digital-law-online.info/CONTU/contul.html.

¹³⁰³The U.S. Copyright Act of 1976 found at http://en.wikisource.org/wiki/Copyright_Act_ of 1976.

¹³⁰⁴Public Law 96-517 found at http://law.copyrightdata.com/amendments.php.

 $^{^{1305}17}$ U.S.C. $\S 102(a).$

¹³⁰⁶17 U.S.C. §411(a).

¹³⁰⁷17 U.S. Code §102(a).

¹³⁰⁸17 U.S. Code §201(a).

In the case of a developer writing software code within the scope of her employment, the resulting work is known as a "work made for hire." With a work made for hire, "the employer or other person for whom the work was prepared is considered the author for purposes of [the Act]," and the owner of the copyright in the work.¹³⁰⁹ The developer and her employer may agree otherwise, where ownership remains with the developer, through an express agreement in a written instrument signed by both parties.¹³¹⁰ The intention of the developer and her employer, expressed before the code is written, will dictate who owns the copyright in the resulting work.

The result changes where the software developer is not an employee. Software is not a form of copyrightable material that statutorily falls under the list of special order or commissioned works within the scope of works made for hire unless it constitutes a commissioned contribution to a collective work. Thus, the transfer of ownership of software produced outside of the scope of employment must be supported by express contractual language in writing.

Joint ownership

Section 201(a) of the Act further provides that "[t]he authors of a joint work are co-owners of copyright in the work." Joint authorship in a work arises when "a work is prepared by two or more authors with the intention that their contribution be merged into inseparable and interdependent parts of a unitary whole [emphasis added]." The hallmark of joint authorship is the authors' joint laboring in furtherance of a preconcerted common design." That is, each contributor must intend for their contributions to be merged; however, it is not necessary that the contributors "work in physical propinquity, or in concert, nor that the respective contributions made by each joint author must be equal in quantity or quality." Furthermore, it is not necessary that the contributors expressly agree, in writing, to create a joint work. 1317

The touchstone of joint authorship is the intention of the joint authors that their contributions be merged at, or before, the moment in time when the contribution of each joint author is created. That is, two developers, who intend that the code they contribute to a project be merged into inseparable and interdependent parts of a unitary whole must express that intent before development

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1309 17 U.S. Code §201(b).
1310 Id.
1311 17 U.S. Code §101.
1312 17 U.S. Code §204.
1313 17 U.S. Code §201(a).
1314 17 U.S. Code §101.
1315 1-6 Melville B. Nimmer, Nimmer on Copyright §6.03. Nimmer is only available in hard copy from LexisNexis or in electronic form from either the LexisNexis or Westlaw legal research services. Nimmer is widely considered the authoritative treatise on U.S. copyright law.
1316 Id.
1317 See, Id.
1318 1-6 Nimmer §§6.02, 6.03.
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commences, and each will own an equal and "undivided ownership in the entire work." 1319

So long as the intent to create a joint work exists prior to the commencement of work, it is even possible for joint authorship to occur "even though the joint authors do not work together in their common design, do not make their respective contributions during the same period, and indeed even if they are complete strangers to each other." This situation is common among developers working independently in developing software modules that are to be included in a unified open-source project. The intent and timing of these developers will dictate who owns the copyright in the resulting work.

The joint authors are the co-owners of a single copyright in the joint work. 1321 However, joint authorship is not the only means by which joint ownership of a work may arise.

A joint work will result under any one of the following circumstances: (1) if the work is a product of joint authorship; (2) if the author or copyright proprietor transfers such copyright to more than one person; (3) if the author or copyright proprietor transfers an undivided interest in such copyright to one or more persons, reserving to himself an undivided interest; (4) if upon the death of the author or copyright proprietor, such copyright passes by will or intestacy to more than one person; (5) if the renewal rights under the Copyright Act or the terminated rights under the termination of transfers provisions, vest in a class consisting of more than one person; (6) if the work is subject to state community property laws.

— 1-6 Nimmer §6.01.

Each co-owner of a joint work "obtains an undivided ownership in the whole of the joint work, including any portion thereof." 1322 In other words, each co-owner may use or license the work, without the consent of other co-owners, in any way she may wish. 1323 Co-owners of a copyright do, however, owe to each other a duty to account for any income derived from their use or license of the work. 1324

The derivative work

The Act also protects derivative works and compilations. ¹³²⁵ A derivative work is a work based in whole, or in substantial part, upon a pre-existing work that

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1319 Id.

1320 1-6 Nimmer §6.03.

1321 17 U.S.C. §201(a).

1322 1-6 Nimmer §6.06(A).

1323 Id.

1324 Id.

1325 17 U.S.C. §103(a).
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recasts, transforms, or adapts the underlying work in some way.¹³²⁶ For copyright protection to extend to a derivative work, "the additional matter injected in a prior work, or the manner of rearranging or otherwise transforming a prior work, must constitute more than a minimal contribution."¹³²⁷ Since most new works are influenced, in some way, by a pre-existing work, there exists a fine line between a derivative work and an entirely new work.¹³²⁸ If a developer uses very little of a pre-existing work, taking only code not protected by copyright (like a basic function), or if she uses the pre-existing code in such a way that the resulting program is substantially different from the original, the new creation is simply a new, original work of authorship and not a derivative work.¹³²⁹

Ownership of a separate copyright in a derivative work not only requires more than a minimal contribution to the prior work, but also permission from the owner or owners of the copyright in the prior work. Even with such permission, the creator of the derivative work will own the copyright in only that portion of the derivative work he contributed and not in any portion of the pre-existing work upon which the derivative work is based. ¹³³⁰

Compilations and collective works

Finally, the Act protects interests in compilations, including collective works. ¹³³¹ A compilation is "a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship." ¹³³² The preexisting materials or data incorporated in a compilation may or may not, on their own, be capable of being protected by copyright. ¹³³³ For example, a program created by stringing together a set of basic functions (which in themselves are not protected by copyright) may receive copyright protection in the selection, coordination, and arrangement of such basic functions.

Those compilations that do, however, incorporate preexisting material capable of receiving copyright protection are known as collective works. The Act defines a collective work as "a work, such as a periodical issue, anthology, or encyclopedia, in which a number of contributions, constituting separate and

¹³²⁶¹⁷ U.S.C. §101.

^{1327 1-3} Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

¹³²⁸Lothar Determan, Dangerous Liaisons — Software Combinations as Derivative Works? Distribution, Installation, and Execution of Linked Programs Under Copyright Law, Commercial Licenses, and the GPL, 21 Berkeley Tech. L. J. 1421, 1430 (2006).

¹³³⁰1-6 Nimmer, §6.05.

¹³³¹17 U.S.C. §103(a).

 $^{^{1332}} Id.$

¹³³³1-3 Nimmer §3.02.

 $^{^{1334}}Id.$

independent works in themselves, are assembled into a collective whole."¹³³⁵ For example, a program that includes preexisting modules (which in themselves are protected by copyright) may receive copyright protection in the selection, coordination, and arrangement of the modules.

As with derivative works, for copyright protection to extend to a compilation or collective work, "the additional matter injected in a prior work, or the manner of rearranging or otherwise transforming a prior work, must constitute more than a minimal contribution." ¹³³⁶ In the case of a collective work, the copyright in the prior work and copyright in the collective work as a whole are separate and distinct; the author of the prior work retains copyright ownership in her work, while ownership of the collective work, including contributions made by the author of the collective work, vests in the author of the collective work. ¹³³⁷

Joint works vs. derivative works vs. compilations

Joint works of authorship share similarities with derivative works and compilations and, but for the intention of the authors, could be seen as one and the same. ¹³³⁸ Depending on the intent at the time of creation, one author's recasting, transforming, or adapting of another author's preexisting work may create either a derivative work or a joint work consisting of inseparable parts. ¹³³⁹ Similarly, depending on the intent at the time of creation the assembling of the works of several different authors into a collective whole may create either a compilation or a joint work consisting of interdependent parts. ¹³⁴⁰ Which case applies in each instance "lies in the intent of each contributing author at the time his contribution is written." ¹³⁴¹ If, at the time of creation, the author intends his contribution and those contributions of others "be merged into inseparable or interdependent parts of a unitary whole" then such a merger creates a joint work. ¹³⁴² On the other hand, if the intention to merge occurs only after creation of the work, then such a merger results in a derivative work or a compilation. ¹³⁴³

Exclusive rights

The right holder's exclusive rights to do or to authorize are set out in Sec. 106 of the Act. 1344 The author of software has the exclusive right to reproduce the

^{1335 17} U.S.C.§ 101.

¹³³⁶¹⁻³ Nimmer § 3.03(A) (citing Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); Siegel v. Time Warner Inc., 496 F. Supp. 2d 1111, 1151 (C.D. Cal. 2007); Sherry Mfg. Co. v. Towel King of Fla., Inc., 753 F.2d 1565 (11th Cir. 1985); Montgomery v. Noga, 168 F.3d 1282, 1290 n.12 (11th Cir. 1999); Moore Pub., Inc. v. Big Sky Mktg., Inc., 756 F. Supp. 1371, 1374, 1378 (D. Idaho 1990)).

¹³³⁷17 U.S.C. §201(c).

¹³³⁸1-6 Nimmer §6.05.

 $^{^{1339}} Id.$

 $^{^{1340}}Id.$

 $^{^{1341}}Id.$

 $^{^{1342}}Id.$

 $^{^{1343}}Id.$

¹³⁴⁴17 U.S.C. §106.

copyrighted work, to prepare derivative works based on the copyrighted work, and to distribute copies of the copyrighted work to the public by sale or other transfer or ownership, or by rental, lease, or lending. 1345 The exclusive right to distribute only pertains to the original public distribution of a work and does not extend to a subsequent distribution by a party holding legal rights in a copy of the work. 1346 However, a party receiving a copy under such subsequent distribution remains bound by any contractual limitations to which the original recipient agreed. 1347

Exceptions to exclusive rights

Functionality exception to copyright protection

When developing computer programs it is inevitable that some of the code will be functional in nature. As stated earlier, the Act awards copyright protection to creative expression. "Functional elements and elements taken from the public domain do not qualify for copyright protection." Therefore, there is no striking similarity even between two identical works so as to warrant an inference of copying to the extent that, albeit copyrightable, functional considerations can account for the identity. What makes an element "functional?" Elements are functional if they are necessary to the program and do not exhibit any creativity. Aspects of a program's structure which are dictated by the nature of other programs with which they were designed to interact are functional in nature and, thus, not protected by copyright. 1350

Functional elements may also be dictated by the nature of the program being developed. In *Computer Associates*, "the district court found that the overlap exhibited between the list of services required for both ADAPTER and OSCAR 3.5 was determined by the demands of the operating system and of the applications program to which it was to be linked through ADAPTER or OSCAR."¹³⁵¹ These aspects of the program's structure are therefore functional in nature and not copyrightable.

For example, graphical user interfaces [GUI's] generated by computer programs are partly artistic and partly functional. They are a tool to facilitate communication between the user and the computer. GUIs do graphically what a character-based interface, which requires a user to type in alphanumeric commands, does manually.¹³⁵²

In Lotus the court held that the Lotus menu command hierarchy is an uncopy-

rightable method of operation. 1353

The Lotus menu command hierarchy provides the means by which users control and operate Lotus 1-2-3. If users wish to copy material, for example, they use the Copy command. If users wish to print material, they use the Print command. Users must use the command terms to tell the computer what to do. Without the menu command hierarchy, users would not be able to access and control, or indeed make use of, Lotus 1-2-3's functional capabilities.

— Id. at 815.

The menu command hierarchy in Lotus 1-2-3 is functional by nature of the program and therefore not copyrightable. 1354

Other areas to consider when determining whether an element is purely or primarily functional include:

- 1. hardware standards;
- 2. software standards;
- 3. computer manufacturer design standards;
- 4. target industry practices; and
- 5. computer industry programming practices. ¹³⁵⁵

An extensive discussion on the functionality exception to copyright in software and its application may be found in an order of the Court in $Oracle\ America$, $Inc.\ v.\ Google,\ Inc.^{1356}$

Idea/Expression merger exception to copyright protection

Under the Act, in no case does copyright protection extend to any idea regardless of the form in which it is described, explained, illustrated, or embodied in such work. It is a fundamental precept of copyright that only the expression of ideas, and not the ideas themselves, are copyrightable. Merely stating the rule, however, does not make any easier the task of drawing the line between where idea ends and expression begins. It

The line between idea and expression may be drawn with reference to the end sought to be achieved by the work in question. In other

 $^{^{1353}}See$, Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 819 (1st Cir. 1995).

 $^{^{1354}}See,\ Id.$ at 815.

¹³⁵⁵4-13 Nimmer §13.03(F).

¹³⁵⁶ See, Order Re Copyrightability Of Certain Replicated Elements Of The Java Application Programming Interface (hereinafter *Order*) found at http://www.groklaw.net/pdf3/OraGoogle-1202.pdf.

¹³⁵⁷17 U.S.C. §102(b).

¹³⁵⁸1-2 Nimmer §2.02.

 $^{^{1359}4-13}$ Nimmer \$13.03(B)(2)(a).

words, the purpose or function of a utilitarian work would be the work's idea, and everything that is not necessary to that purpose or function would be part of the expression of the idea... Where there are various means of achieving the desired purpose, then the particular means chosen is not necessary to the purpose; hence, there is expression, not idea.

— Whelp Assoc. Inc. v. Jaslow Dental Lab

The characteristics of computer software, a utilitarian work, make the determination of idea and expression more complicated. Competitive forces that exist in the software marketplace lead to the problem that multiple programmers may design identical or highly similar works. ¹³⁶⁰

Efficiency is an industry-wide goal. Since, as we have already noted, there may be only a limited number of efficient implementations for any given program task, it is quite possible that multiple programmers, working independently, will design the identical method employed in the allegedly infringed work. Of course, if this is the case, there is no copyright infringement.

— Id.

The merger doctrine is as an exception to the idea-expression dichotomy which holds that, when there are so few ways of expressing an idea, not even the expression is protected by copyright.¹³⁶¹ When idea and expression merge such that a given idea is inseparably tied to a particular expression, rigorously protecting the expression would confer a monopoly over the idea itself, in contravention of the statutory command. To prevent such an occurrence, courts have invoked the merger doctrine.¹³⁶²

In the realm of computer programs, merger issues may arise in unusual ways. Although, there may be many ways to implement a particular idea, efficiency concerns can make one or two choices so compelling, as to virtually eliminate any other form of expression. 1363

Computer searching and sorting algorithms provide good examples of this phenomenon. Any computer system that deals with significant quantities of data will spend much of its operating time engaged in sorting and searching through that data. Because the amount of time spent on sorting and searching operations can significantly influence a program's operating speed, efficient methods of sorting are highly desirable. A great deal of computer science research has been devoted to developing methods of sorting or searching through data, and to analyzing the relative efficiency of various methods. As

¹³⁶⁰Computer Assoc., 982 F.2d at 708.

 $^{^{1361}}See$, BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

¹³⁶²See, 4-13 Nimmer §13.03(B)(3).

¹³⁶³See, 4-13 Nimmer §13.03(F)(2).

a result of such research, it is now recognized that some methods of sorting or searching are significantly more efficient than others in handling particular types of data, even though any of numerous methods will work. In such cases, the merger doctrine should be applied to deny protection to those elements of a program dictated purely by efficiency concerns.

— Id.

While the merger doctrine and the functionality exception to copyright protection are similar, there is a slight difference which distinguishes the two. "Under the merger doctrine, when an idea can be expressed in only one fashion, that expression is not protected by copyright." Here the focus is on the limitations of the expression of an idea which results in the merger of that idea and its expression. In contrast, elements are functional if they are necessary to the program and do not exhibit any creativity. In reference to the functionality exception, the focus is not on the limitations on expression of an idea resulting in merger of the two, but on aspects of a program's structure which are dictated by the nature of other programs with which they were designed to interact. In the same of the contract of the programs with which they were designed to interact.

An extensive discussion on the idea/expression merger exception to copyright in software and its application may be found in an order of the Court in *Oracle America*, *Inc. v. Google*, *Inc.*¹³⁶⁷. One important aspect of this holding by the Court was that Java specifications constitute unprotectable ideas and that it is only an implementation of a specification that constitutes protected expression.

Scènes à faire in software exception to copyright protection

The Act does not directly define the scènes à faire doctrine. Scènes à faire refers to aspects of a work that are indispensable or standard parts of the material to be copyrighted. The [scènes à faire] doctrine is often invoked to immunize from liability similarity of incidents or plot that necessarily follows from a common theme or setting. Judge Leon Yankwich has called such incidents scènes à faire, i.e., scenes which must be done.

As was remarked above concerning merger, this doctrine does not limit the subject matter of copyright; instead, it defines the contours of infringing conduct. Labeling certain stock elements as "scènes à faire" does not imply that they are uncopyrightable; it merely states that similarities between plaintiff's and defendant's works that are limited to hackneyed elements cannot furnish the basis for finding substantial similarity.

¹³⁶⁴4-13 Nimmer §13.03(F)(2).

¹³⁶⁵See, Computer Assoc., 982 F.2d at 715.

 $^{^{1366}}See,$ Computer Assoc., 982 F.2d at 715.

 $^{^{1367}\}mathrm{Order}\ supra$ Note XXX

¹³⁶⁸See, Id. at 710.

¹³⁶⁹4-13 Nimmer §13.03(B)(4).

 $^{^{1370}}Id.$

-- Id.

In Durang, the court found that alleged similarities that follow obviously from the unprotected idea are therefore unprotected "scènes à faire." The Durang court held that the lower court properly applied the scènes à faire doctrine to hold unprotectable, forms of expression that were either stock scenes or scenes that flowed necessarily from common unprotectable ideas. The Durang court went on to explain that common in that context means common to the works at issue, not necessarily commonly found in other artistic works.

Further, under the doctrine of scènes à faire, elements of an original work are not protected if the "common idea is only capable of expression in more or less stereotyped form." "Beyond mere plot incidents applicable to works of fiction, the scènes à faire doctrine can be invoked throughout other copyright contexts as well; from guidebooks to infomercials to Frequently Asked Questions web pages and beyond." ¹³⁷⁵

In *Gilley's European Tan Spa*, "[the] plaintiff contended that defendants infringed plaintiff's exclusive rights under the Copyright Act by preparing and displaying on their web page an unauthorized Frequently Asked Questions page that mirrors the Frequently Asked Questions page found on plaintiff's web page." ¹³⁷⁶.

The Gilley's court held a business cannot copyright a Frequently Asked Questions page as such or copyright words or phrases commonly used to assemble any given Frequently Asked Questions page. The format of a Frequently Asked Questions page is a common idea in our society; the elements of a Frequently Asked Questions page (a list of questions beginning with common words) are stereotypical. Some additional similarity beyond generic formatting is necessary to establish infringe-ment.

— Id. at 978.

Applied to computer programs, the merger and scenes à faire doctrines suggest that if a limited number of options exist to achieve a given function efficiently, interoperate with another application, or run in a given environment, copyright will not permit exclusive control over those program elements. Scenes à faire is distinguishable from the merger doctrine because, the merger doctrine holds that when there are so few ways of expressing an idea, not even the expression is protected by copyright. The idea and expression are in essence, fused. In

 $[\]overline{1371}$ See, John William See v. Christopher Durang and LA. Stage Co., 711 F.2d 141, 143 (9th Cir. 1983).

 $^{^{1372}}Id.$

 $^{^{1373}}Id.$

 $^{^{1374} \}rm Mist\mbox{-}On \; Sys. \; v. \; Gilley's European Tan Spa, 303 F. Supp. 2d 974, 978 (W.D. Wis. 2002).$

 $^{^{1375}4-13}$ Nimmer $\S13.03(B)(4)$.

¹³⁷⁶Mist-On Sys., 303 F. Supp. 2d at 976 (W.D. Wis. 2002)

¹³⁷⁷Computer Assocs., 982 F.2d at 709-10.

¹³⁷⁸BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

contrast, scènes à faire relates to alleged similarities that follow obviously from the unprotected idea. The focus in scènes à faire is not on the merged idea and expression or the limited number of ways to express the idea, but on the similarities between expression in question which are a natural result of the idea being expressed.

Moreover, scènes à faire is also distinguishable from the functionality exception to copyright protection. While scènes à faire is expression that relates to stock scenes or elements which are necessary to the idea such as frequently asked questions or readme files, functionality relates to aspects of a program's structure which are dictated by the nature of other programs with which they were designed to interact, ¹³⁸⁰ such as hardware or software standards. As software development languages become more and more sophisticated in the ready-made tools they provide developers and as more and more developers, especially open source developers, reuse standard or stock bits of code to carry out standard functions, we can expect to see the scènes à faire doctrine applied with greater regularity in software to deny copyright protection.

Public domain exception to copyright protection

Works eligible for copyright protection may nonetheless enter the public domain, i.e., no longer enjoy that copyright protection. For example, a work whose copyright term has expired is obviously not protected. Similarly, a work may have entered the public domain by reason of the failure to satisfy certain statutory formalities of the Act as it existed prior to 1978. In addition, an author may choose to lift the protections of copyright and voluntary place the work into the public domain. "Moreover, copyright protection under the Act is not available for any work of the United States Government, but the United States Government is not precluded from receiving and holding copyrights transferred to it by assignment, bequest, or otherwise." 1382

What is the public domain? "A work of authorship is in the public domain if it is no longer under copyright protection, it failed to meet the requirements for copyright protection, or the holder of the copyright disclaimed copyright in the work." Works in the public domain are free for anyone to use without permission from the former owners(s) of the copyright. Material found in the public domain is free for the taking and cannot be appropriated by a single author even though it is included in a copyrighted work. 1385

An enormous amount of public domain software exists in the computer industry, perhaps to a much greater extent than is true of

¹³⁷⁹ See v. Durang, 711 F.2d at 143.

¹³⁸⁰Computer Assoc., 982 F.2d at 715.

 $^{^{1381}}See, 1-2 \text{ Nimmer } \S 2.03(G).$

¹³⁸²17 U.S.C §105.

 $^{^{1383} \}rm http://copyright.gov/help/faq/faq-definitions.html.$

¹³⁸⁴ See, Id.

¹³⁸⁵See, Computer Assocs., 982 F.2d at 710.

other fields. Nationwide computer "bulletin boards" permit users to share and distribute programs. In addition, computer programming texts may contain examples of actual code that programmers are encouraged to copy. Programmers often will build existing public domain software into their works. The courts thus must be careful to limit protection only to those elements of the program that represent the author's original work.

-4-13 Nimmer $\S13.03(F)(4)$.

Copyright protection is automatic and vested in the author the moment it is created and fixed in a tangible form. Voluntarily placing a copyrighted work in the public domain requires some manifest expression of the author's intent. Consequently, anyone considering reusing code purportedly in the public domain should be cautious about assuming that code to be in the public domain without some express statement from the copyright holder declaring the code to be in the public domain. An invitation to use with nothing more may be sufficient, but combined with a requirement of attribution suggests the author is merely granting permission to use while retaining the copyright and its various protections. A more definite state, such as "as the author of this work I disclaim the copyright in the work and declare the work to be in the public domain" would leave little doubt as to the copyright holder's intent. The Creative Commons Copyright-Only Dedication statement gives some indication of the complexity of committing a work to the public domain. 1388

Facts in software exception to copyright protection

Facts, whether alone or as part of a compilation, are not original and therefore may not be copyrighted. A factual compilation is eligible for copyright if it features an original selection or arrangement of facts, but the copyright is limited to the particular selection or arrangement. In no event may copyright extend to the facts themselves.

— Feist Publ'ns Inc. v. Rural Tel. Serv. Co.

"In no case does copyright protection for an original work of authorship extend to any ... discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." Nimmer explains that the discoverer merely finds and records.

He may not claim that the facts are original with him, although there may be originality and hence, authorship in the manner of reporting, i.e., the expression, of the facts. As copyright may only be conferred

 $^{^{1386} \}rm http://www.copyright.gov/help/faq/faq-general.html.$

 $^{^{1387}4-13}$ Nimmer \$13.03(F)(4).

¹³⁸⁸http://creativecommons.org/licenses/publicdomain/.

¹³⁸⁹17 U.S.C. §102(b).

upon authors, it follows that quite apart from their status as ideas, discoveries as facts per se may not be the subject of copyright.

— 1-2 Nimmer $\S 2.03(E)$.

(The Court in Fiest)¹³⁹⁰ noted] the tension between two well-established copyright propositions, ... facts are not copyrightable, whereas compilations of facts generally are. As the tool for untangling those disparate strands, the Court relied on the bedrock principle of copyright subsistence—that only original works of authorship qualify for protection. Given that facts, by themselves, are never copyrightable, the Court reasoned that the element of originality that renders a factual compilation protectable must lie in selection, coordination, or arrangement of facts, with the scope of protection concomitantly limited to that original selection, coordination, or arrangement. That formulation, it should be noted, corresponds to the scope of copyright generally for derivative or collective works.

-1-3 Nimmer $\S 3.04(2)(a)$.

How does this relate to computer software? In WIREdata an owner of a copyright attempted to hide data in its copyrighted program. Specifically, the copyright owner attempted to use copyright law to block access to data that not only are neither copyrightable nor copyrighted, but were not created or obtained by the copyright owner.

The information at issue in [WIREdata] was collected and then was slotted into plaintiff's database. Defendant did not want that database's organized structure; it only wanted the raw data. That last consideration proved decisive in defeating plaintiff's copyright infringement claim: A work that merely copies uncopyrighted material such as facts is wholly unoriginal and the making of such a work is therefore not an infringement of copyright.

- Id.

Within the framework of computer software development it will not be unusual to find lines of code that merely make a factual statement. A reference in a line of code to another place in the program, a table showing equivalences, or a target name may all be merely factual statements within the context of the software and, thus, not eligible for copyright protection.

Fair use

¹³⁹⁰Feist, 499 U.S. at 350 (1991).

¹³⁹¹Assessment Techs. of WI, LLC v. WIREdata, Inc., 350 F.3d 640 (7th Cir. 2003).

 $^{^{1392}}$ 1-3 Nimmer $\S 3.04(B)(3)(a)$.

Originally developed by the courts through case law, certain uses or reproductions of a work protected by copyright are considered to be fair, and thus, not an infringement of the owner's exclusive rights granted by copyright law. ¹³⁹³ In other words, fair use is a defense to copyright infringement.

Section 107 of the Act contains a list of the various purposes for which the reproduction of a particular work may be considered fair, such as criticism, comment, news reporting, teaching, scholarship, and research.¹³⁹⁴ In addition, the Act sets out four factors to be considered by a court determining whether or not a particular use is fair:

- the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- the nature of the copyrighted work;
- the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- the effect of the use upon the potential market for or value of the copyrighted work. $^{1395}\,$

From a practical perspective, it is important to recognize that the fair use doctrine is malleable—the court has wide discretion in its application of the four factors to the particular facts of the case before it. There are no hard and fast rules in fair use and the difference between an infringing use and a fair use may be murky and not easy to delineate. Using a work protected by copyright without permission poses a substantial amount of risk. But for fair use, the unauthorized use of a work protected by copyright is an infringement. Unless the use falls within one of the permissible statutory uses, there is no way to conclusively know whether the use is fair without costly and expensive litigation.

Statutory limitations on copyright in software

Sec. 117 of the Copyright Act imposes statutory limitations on the rights of authors or holders of copyright in computer programs by assuring the right of a lawful owner of a copy of the software to load that software onto a computing device and to make an archival copy of that software. This right to use or make a temporary copy also extends to the so-called "maintenance or repair exception," i.e., it is not an infringement to activate a machine for maintenance and repair purposes and incidental to such activation run the software installed on the machine. 1397

 $[\]overline{^{1393}17}$ U.S.C. § 107.

 $^{^{1394}\}bar{I}d.$

 $^{^{1395}}Id$

¹³⁹⁶17 U.S. Code §117(a).

 $^{^{1397}17}$ U.S. Code 117(c)

Moral rights

Unlike the copyright laws of many European nations, the United States does not generally recognize moral rights in copyrighted works. The exception lies with works of visual arts, such as posters, maps, globes, motion pictures, electronic publications, and applied art. ¹³⁹⁸ As a consequence, the ability to assert moral rights under copyright in computer programs would be rare.

Term of protection

In the United States the duration of copyright in computer programs is dependent on the nature of the authorship. Where the computer program was written by a single author on or after January 1, 1978, the copyright expires 70 years following the death of the author. 1399 If a work was created by joint authors, the 70-year period is calculated from the date of the death of the last surviving author. Where the computer program was written anonymously, under a pseudonym, or as a work made for hire, the copyright endures for a term of 95 years from the year of its first publication, or a term of 120 years from the year of its creation, whichever expires first. Should the author or his/her legal successor record his/her identity with the U.S. Copyright Office prior to the date of expiration, the copyright term is calculated under the general rules for known authors. 1401 As to derivative works, compilations or collective works, there is no special rule as both the author of the preexisting works (if any) and the author of the derivative work, compilation or collective work hold independent copyrights. Thus, each protection term is calculated separately under the general rule.

Copyright assignment

Under U.S. copyright law the ownership of a copyright may be transferred in whole or in part by any means of conveyance or by operation of law, and may be bequeathed by will or pass as personal property by the applicable laws of intestate succession. 1402 Rights in copyright are considered bundled and may be unbundled for purposes of license or transfer, i.e., they may be licensed or transferred outright either individually or in their entirety. 1403

To be effective, any transfer of rights under copyright, whether by license or complete assignment, must be in writing and signed by the holder of the rights in the copyright or that holder's authorized agent. 1404 Such transfers may, but are not required to be recorded with the U.S. Copyright Office; however, a failure to record an exclusive grant may result in a preemption of such grant by a

 $^{^{1398}\}mathrm{Visual}$ Artists Rights Act of 1990, 17 U.S. Code §106A. ¹³⁹⁹17 U.S. Code §302(a).

¹⁴⁰⁰17 U.S. Code §302(b).

 $^{^{1401}17}$ U.S. Code §302(c).

¹⁴⁰²17 U.S. Code §201(d)(1).

¹⁴⁰³17 U.S. Code §201(d)(2).

¹⁴⁰⁴17 U.S. Code §204(a).

subsequent grant if such subsequent grant is the first to be recorded, provided the exclusive grant is not recorded within one month of its execution (two months if executed outside the U.S.). Nonexclusive licenses embodied in a writing are not subject to such preemption. 1406

A unique provision of U.S. copyright law pertaining to licenses and assignments is that all such licenses and assignments, except those made pursuant to a work for hire, are subject to revocation by the author or the author's estate under certain conditions. Such revocation may occur only during a period commencing with the end of the 35th year following the date of the grant (or if the grant includes a right of publication, the end of the 35th year following such publication) and ending at the end of the 40th year following the date of the grant. To effect the revocation, the empowered party(ies) must serve notice of termination on the grantee under the license or assignment. An important exception to such termination is that rights in any derivative works prepared under such grant and existing prior to the date of termination shall survive such termination, but only in the form in which the derivative work existed at the time of such termination.

Enforcement

Infringement

Enforcement of copyright in software where infringement occurs is no different than for other matter subject to copyright protection. Infringement may be found where any of the exclusive rights of the copyright holder have been undertaken without authorization. Infringement the copyright holder must record the copyright with the U.S. Copyright Office. It Registration serves the dual purpose of establishing the earliest date for liability for statutory damages and attorney's fees.

Only the exclusive holder of a right or all of the rights (whether the original author, an assignee, or licensee) in copyright has standing to bring a civil action for infringement. The exclusive holder of less than all of the rights may only claim infringement of those rights held; it is not necessary for the exclusive holder of a right to join the primary copyright holder. Nonexclusive licenses

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1405 17 U.S. Code §205(d).
1406 17 U.S. Code §205(e).
1407 17 U.S. Code §203(a)(1-2).
1408 17 U.S. Code §203(a)(3).
1409 17 U.S. Code §203(a)(4).
1410 17 U.S. Code §203(b)(1).
1411 17 U.S. Code §501(a).
1412 17 U.S. Code §411.
1413 17 U.S. Code §412.
1414 17 U.S. Code §501(b).
1415 Id.; Eden Toys, Inc. v. Florelee Undergarment Co., 697 F.2d 27 (2d Cir. 1982); Random House, Inc. v. Rosetta Books LLC, 150 F. Supp. 2d 613, 617 (S.D.N.Y. 2001), aff'd per curiam, 283 F.3d 490 (2d Cir. 2002)
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have no right to bring an action for infringement. 1416

Remedies available to a successful complainant may include injunctive relief, impoundment and disposition of the infringing articles, statutory damages or actual damages and lost profits, and costs of court and attorney's fees. 1417

Jurisdiction and venue in copyright cases only lies with the federal courts. ¹⁴¹⁸ This will be true even when breach of contract claims are asserted so long as at least one claim lies solely in copyright and such copyright claim is the primary basis of the suit. ¹⁴¹⁹

Breach of contract

Apart from the right to bring an action for infringement, licensor's of software may also bring an action for breach of contract where the subject matter of the breach does not relate to rights granted under copyright. As examples, the failure to pay license fees in a timely manner, royalty rates, and a breach of warranty all constitute contract claims. Unlike an action for copyright infringement, in a breach of contract action only money damages are generally available and not injunctive relief. A general exception to this rule would be in an action for specific performance under the contract. Most importantly, unlike copyright infringement where injunctive relief is a matter of right, injunctive relief will only be granted in breach of contract actions where such breach would result in irreparable harm that could not be adequately remedied by money damages.

Patent protection of software

Unlike copyright, patent protection of software is not automatic, and such protection is largely limited to the jurisdiction issuing the patent. Whether inventions contained in software constitute patentable subject matter has been the subject of a great deal of debate and evolving law in the U.S. Prior to the 1980's it was generally believed that one could not obtain a patent on inventions embodied in software, as such software consisted primarily of algorithms and, by law, algorithms were deemed unpatentable subject matter. This view first changed in 1981 in the $Diamond\ v.\ Diehr$ case when the U.S. Supreme Court held that the use of an algorithm in software does not preclude it as patentable subject matter so long as the claimed invention related solely to the use of the software to solve a specific technological problem and did not preclude all other uses of the algorithm. 1420

The interpretations of patent eligibility of software inventions continue to evolve. The U.S. Supreme Court in the case of $In\ re\ Bilski^{1421}$ held that the machine

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^{1416}\mathrm{Eden} Toys, 697 F.2d at 32 (1982). ^{1417}17 U.S. Code §§502-505. ^{1418}28 U.S. Code §1338. ^{1419}\mathrm{Wooster} v. Crane & Co., 147 F. 15 (8th Cir. 1906). ^{1420}\mathrm{Diamond} v. Diehr, 450 U.S. 175 (1981). ^{1421}\mathrm{In} re Bilski, 130 S. Ct. 3218 (2010).
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or transformation test previously adopted by the U.S. Court of Appeals for the Federal Circuit, i.e., "(a) claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing," constituted a test, although not the sole test, of whether a process is patent eligible. ¹⁴²² In any case, inventions embodied in software remain patent eligible in the U.S., but the scope of that patent protection appears to be narrowing.

A scope of a patent is defined by the claims asserted in the patent. In patents related to software such claims generally define the broad outline of the invention in terms of a process. Thus, the claims are not limited to a particular embodiment of that process (or, like copyright, to a specific set of written instructions) but may apply to an unlimited number of embodiments so long as each embodiment incorporates each element of one of the claims asserted in the patent. As a consequence, patents related to software may be infringed by numerous computer programs, and any computer program may infringe the claims of numerous patents.

Exclusive rights

A patent holder in the U.S. has the exclusive right to make, have made, use, sell, or import any product made by means of a claimed process or product embodying the claimed invention. As with copyright, these rights may be assigned or licensed to another either in whole or in part.

Exhaustion and implied licenses

Upon the unrestricted sale (as contrasted with the license) of a patented invention all patent rights in the invention are exhausted, i.e., the purchaser has the right to do anything with the purchased invention without fear of a claim of infringement. Related to the doctrine of exhaustion are implied licenses. When a patent holder incorporates the patented invention in a product and sells the product without an express license to the patent, courts will generally imply the grant of license since the patent holder essentially invites infringement. There is a line of cases in the U.S. that interprets the boundaries of such exhaustion and implied licenses:

- Adams v. $Burke^{1424}$ claims that are directly infringed by the product are exhausted at the time of sale.
- $Univis\ Lens^{1425}$ implied license in claims necessary to finish an incomplete product.
- Intel v. ULSI¹⁴²⁶ implied license accompanies the sale of infringing

 $[\]overline{^{1422}}$ In re Bilski, 130 S. Ct. at 3226 (2010).

 $^{^{1423}35}$ U.S.C. $\S 271(a)\&(g)$.

¹⁴²⁴Adams v. Burke, 84 U.S. 453 (1873).

¹⁴²⁵United States v. Univis lens, 316 U.S. 241 (1942).

¹⁴²⁶Intel Corp. v. ULSI System Technology, 995 F.2d 1566 (Fed. Cir. 1993).

goods by a licensed manufacturer.

• Cyrix v. Intel¹⁴²⁷ — implied license in claims necessary to make a complete product commercially viable (use for intended purpose).

In addition to these cases specifically related to patent claims, licenses may be implied by courts for a variety of other legal and equitable reasons. For example, the conduct of the two parties may be construed as establishing a license. Also, equitable estoppel may be found where a party knowingly infringes and the patent holder, knowing of the infringement and objecting to such infringement, takes no action to halt the infringement, misleading the infringer into believing the patent holder will not act. Finally, a court may impose legal estoppel on a patent holder who has licensed or assigned a right, received consideration, and then sought to derogate from the right granted.

Term of protection

Patent protection in the U.S. is granted for a term of 20 years measured from the date of the filing of the patent application for all patents issued on or after June 9, 1995.¹⁴²⁸ For patents issued prior to that date the term is the longer of 20 years from the date of filing or 17 years from the date of issue; this transition term phasing out on June 9, 2012.

Effective March 13, 2013, the U.S. joined most other national patent bodies in granting patent protection to the first party to file. 1429

Extraterritorial reach

Sec. 271(f) of the Patent Act¹⁴³⁰ extends infringement liability to any party who "without authority supplies or causes to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States." This provision had been read to imply that the making outside the U.S. of copies from of an infringing gold master provided by a U.S. software developer would constitute additional infringing acts increasing the liability of the U.S. developer. In the case of AT&Tv. $Microsoft^{1431}$ the Supreme Court held that so long as the copies were made outside the U.S. from a gold master provided from the U.S. no liability accrued where the infringing act arises from the actual loading of the software onto a computer or the operation of the software on that computer.

¹⁴²⁷Cyrix Corp. v. Intel Corp., 77 F.3d 1381 (Fed. Cir. 1996).

 $^{^{1428}35}$ U.S.C. $\S154.(a)(2).$

 $^{^{1429}}$ America Invents Act, Public Law 112-29 found at
http://www.gpo.gov/fdsys/pkg/PLAW-112publ
29/html/PLAW-112publ
29.htm.

¹⁴³⁰35 U.S.C. §271(f)(1).

¹⁴³¹AT&T v. Microsoft, 550 U.S. 437 (2007).

Infringement

Liability for patent infringement arises when a party "without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent." The Patent Act also recognizes liability for inducing infringement. ¹⁴³³

A patent that is asserted in an infringement action is presumed to be valid, ¹⁴³⁴ and at present such validity may only be overcome by clear and convincing evidence of invalidity. This clear and convincing evidence standard is higher than the preponderance of the evidence standard used by patent examiners at the time of examination even if the evidence supporting invalidity was not before the examiner at the time of examination.

Remedies for patent infringement include injunctive relief, monetary damages in the form of a reasonable royalty, and attorney's fees and costs of court. 1435 Where infringement is found to be willful the court may award treble damages. 1436 Damages for patent infringement only begin to accrue when a party has been placed on notice of their infringement. While such notice may be provided by marking the goods for patents, such marking rarely occurs with respect to software. Consequently, notice of infringement of patents related to software usually only arises upon the giving of written notice to the infringer. 1437

Other matters of law

Representations, warranties and disclaimers

Although there is a legal distinction between a representation (a fact that is true at the time of the making of an agreement) and a warranty (a fact that is true at the time of the making of an agreement and throughout the term of the agreement unless otherwise limited), U.S. courts rarely draw such a distinction except in determining the remedy (revocation for a breach of a representation versus money damages for breach of a warranty). A representation or warranty constitutes an assumption of risk on the part of the party making the representation or warranty. As such, most such representations and warranties must be expressly stated within the license agreement. However, some warranties may be implied. Those may include an implied warranty of title (i.e., the licensor holds good title to the copyright or patent being license), of non-infringement (i.e., the licensing of the copyright or patent will not constitute an infringing act on the part of the licensee with respect to a third party's copyright or patent), of merchantability (i.e., the goods must reasonably conform to an ordinary buyer's

¹⁴³²35 U.S.C. §271(a).

¹⁴³³35 U.S.C. §271(b).

 $^{^{1434}35}$ U.S.C. §282.

¹⁴³⁵35 U.S.C. §§283-285.

¹⁴³⁶35 U.S.C. §284.

¹⁴³⁷35 U.S.C. §287.

expectations) and of fitness for a particular purpose (i.e., the goods are held out by the seller to address a specific purpose). Most licensors will include a disclaimer of any and all such implied warranties in order to limit their exposure to only those express warranties to which they have agreed, and such disclaimers are generally held valid under principles of contract law. You will often see such disclaimers stated in all capital letters or bold print; this is commonly done to conform to the safe harbor provisions of laws pertaining to warranties, including the Uniform Commercial Code and the Magnuson-Moss Warranty Act. ¹⁴³⁸

Liability and limitation

Under principles of contract law parties may agree to limit the scope of liability that may be imposed on a party under a license agreement, and such limitations are generally held to be valid.

Export control

Although there are numerous other laws that are applicable to the licensing of software, we only make mention of one here—export control. U.S. law prohibits the exporting of software incorporating cryptographic code except under a license issued by the Bureau of Industry and Security. Obligations and liability under the statute extend beyond the original distributor to any downstream party that redistributes the software. As a consequence, most original distributors include in their license a notice of such obligations and liability.

Analysis of FOSS under United States law

Rights in FOSS under copyright, patent, and trademark law and the enforcement of such rights does not differ from other forms of licensing. The principle question to be addressed in each instance, particularly with respect to the exercise of rights granted under the FOSS license is whether any of such rights are subject to conditions. Absent such conditions applicable to the exercise of the right in question, such FOSS licenses will be interpreted exclusively under principles of contract law, and as a consequence, injunctive relief (the most valuable tool available to a FOSS licensor) is likely to be unavailable. Consequently, when considering the selection and enforcement of a FOSS license, the licensor will want to give due consideration as to whether a court would likely find a condition limiting the exercise of such right (e.g., the obligations imposed by the GNU General Public License (GPL) on any party distributing code licensed under the GPL) or no such condition (e.g., arguably the Berkeley Software Distribution (BSD) and MIT licenses impose no such conditions).

¹⁴³⁸Magnuson-Moss, 15 U.S.C. §2301 et seq..

¹⁴³⁹15 Code of Federal Regulations §742.15.

FOSS cases in the United States

There have been few cases in the U.S. that have addressed the enforcement of free and open source licenses. Many of the so-called free and open source cases have dealt primarily with trademark issues.

Jacobsen v. Katzer

Jacobsen v. Katzer¹⁴⁴⁰ is undoubtedly the most important of the cases addressing free and open source software in the U.S. At issue was the provision of the Artistic license that requires licensees to include both copyright notices and a tracking of modifications in derivative works.

Citing to Nimmer in support of enforcement of the license the court stated: "An express (or possibly an implied) condition that a licensee must affix a proper copyright notice to all copies of the work that he causes to be published will render a publication devoid of such notice without authority from the licensor and therefore, an infringing act." ¹⁴⁴¹

In broad language that would support most, if not all, open source licenses the court stated:

Copyright holders who engage in open source licensing have the right to control the modification and distribution of copyrighted material... Copyright licenses are designed to support the right to exclude; money damages alone do not support or enforce that right. The choice to exact consideration in the form of compliance with the open source requirements of disclosure and explanation of changes, rather than as a dollar-denominated fee, is entitled to no less legal recognition. Indeed, because a calculation of damages is inherently speculative, these types of license restrictions might well be rendered meaningless absent the ability to enforce through injunctive relief.

— Jacobsen 535 F.3d at 1381 (2008).

Although the Jacobsen case later settled, this Federal Circuit ruling clearly established the enforceability of free and open source licenses containing at least one condition limiting a licensee's right to exercise one or more rights granted under a copyright license.

Wallace v. International Business Machines Corp.

Although a bit of an odd case and one not directly related to the enforcement of a free and open source license, $Wallace\ v.\ IBM^{1442}$ is worth mentioning because of the antitrust (anti-competition) issue raised by the plaintiff, Mr. Wallace, i.e., that the distribution of free and open source software at no cost constitutes

¹⁴⁴⁰ Jacobsen v. Katzer, 535 F.3d 1373 (Fed. Cir. 2008).

 $^{^{1441}3\}text{-}10$ Nimmer on Copyright $\S10.15$.

¹⁴⁴²Wallace v. International Business Machines Corp., 467 F.3d 1104 (CA 7 2006).

illegal price fixing within the terms of U.S. antitrust law. The court found no such price fixing or restraint and found the GPL to be "a cooperative agreement that facilitates production of new derivative works, and agreements that yield new products that would not arise through unilateral action are lawful." ¹⁴⁴³

Recommended literature

Recommended literature in the United States

• O. Johnny, M. Miller and M. H. Webbink: Copyright in Open Source Software — Understanding the Boundaries

http://www.ifosslr.org/ifosslr/article/view/30

 M. H. Webbink: Packaging Open Source http://www.ifosslr.org/ifosslr/article/view/26

• H. Anderson and T. Dare: Passport Without a Visa: Open Source Software Licensing and Trademarks

http://www.ifosslr.org/ifosslr/article/view/11

 K. Copenhaver: Open Source Policies and Processes for In-Bound Software.

http://www.ifosslr.org/ifosslr/article/view/27

• L. Rosen: Bad Facts Make Good Law: The Jacobsen Case and Open Source,

http://www.ifosslr.org/ifosslr/article/view/5

Comprehensive books

- Andrew M. St. Laurent: Understanding Open Source and Free Software Licensing (2008, O'Reilly Media)
- Lawrence E. Rosen: Open Source Licensing: Software Freedom and Intellectual Property Law (2004 Prentice Hall)
- Heather J. Meeker: The Open Source Alternative: Understanding Risks and Leveraging Opportunities (2008 John Wiley & Sons)

Authors

Simone Aliprandi (Italy)

(b. 1979) is an Italian attorney-at-law and researcher. He got an additional degree in Public Administration Science and earned a Ph.D. degree in Information Society at the Bicocca University of Milan. He founded and still coordinates the

 $^{^{1443}}$ Wallace, 467 F.3d at 1107 (2006).

Copyleft-Italia.it project and has published numerous books devoted to openculture and copyleft. He also collaborates as a legal consultant with Array (http://array.eu).

http://www.aliprandi.org

Juliette Ancelle (Switzerland)

is an associate of the boutique law firm id est avocats sàrl. She studied at the Universities of Lausanne and Montreal, as well as at the New York University School of Law, where she graduated with an LL.M. in 2009. She was admitted to the New York State Bar that same year. She advises and represents clients mainly in business and corporate matters as well as in intellectual property cases, including open source. She maintains a on Social Media and IP issues.

http://www.idest.pro/?hl=en

Malcolm Bain (Spain)

(b. 1966) is an attorney-at-law and partner at id law partners, a Barcelona based boutique law firm specialising in ICT law. He is a member of the editorial committee of the International Free and Open Source Software Law Review, and lectures at several universities in Spain on the legal aspects of free and open source law.

http://www.id-lawpartners.com

Shane Coughlan

is an expert in communication methods and business development. He is best known for building bridges between commercial and non-commercial stakeholders in the technology sector. His professional accomplishments include establishing a legal department for the main NGO promoting Free Software in Europe, building a professional network of over 270 legal counsel and technical experts across 4 continents, and aligning corporate and community interests to launch the first law review dedicated to Free/Open Source Software.

Wouter Dammers (The Netherlands)

(b. 1985) is an attorney-at-law at LAWFOX Advocatuur in Amsterdam, The Netherlands. Wouter specializes in IT law, open source compliance, e-commerce, privacy and IP law. Wouter is known for providing practical legal advise involving IT and internet related issues. He regularly drafts and reviews contracts involving software development, IT projects and privacy compliance. Wouter is familiar in conducting legal proceedings and providing dispute resolution. Wouter finalized his Master Law and Technology (cum laude, 2009) and his Master International and European Public Law (with merit, 2008) at Tilburg University. Wouter regularly blogs, tweets (@WouterDammers) and publishes on IT-related topics.

https://www.lawfox.nl

Arnoud Engelfriet (Introduction)

(b. 1974) is an IT lawyer and European patent attorney. He works as partner

at ICTRecht legal services in the Netherlands. In 2005, while working for Royal Philips, he was involved in the software patent debate surrounding the Directive and has the mental scars to prove it.

With his computer science background Arnoud focuses on complex legal/technical ICT issues and software licenses (in particular open source). His blog Ius mentis is one of the most popular sites on the subject of IT and law in the Netherlands. Arnoud is a part-time teacher at the VU University of Amsterdam.

http://ictrecht.nl/

Tim Engelhardt (Germany)

(b. 1974) is an attorney-at-law at the Berlin-based law firm JBB Rechtsanwälte. He graduated from the University of Munich and Columbia Law School (LL.M.). He completed his doctoral thesis on the EU law of geographical indications at the University of Zurich. In his practice he specialises in various aspects of IT and IP law. His particular focus is on FOSS issues, including both the enforcement of FOSS rights and advising on licensing matters.

http://www.jbb.de/en

Eli Greenbaum (Israel)

is an attorney at Yigal Arnon & Co. in Jerusalem, specialising in intellectual property law and transactions. He has an M.S. in Applied Physics from Columbia University and a J.D. from Yale Law School. Eli has published widely in the areas of open source software and open hardware.

http://www.arnon.co.il

Michel Jaccard (Switzerland)

is the founder of id est avocats sàrl, and a widely respected tech media, IP and corporate law expert. He studied and worked in Lausanne, Geneva and New York and now teaches and publishes extensively on legal issues relating to software licensing, information technology, business process outsourcing structures, data protection and online services. He regularly advises clients on intellectual property and technology, as well as on corporate acquisitions, disposals and collaboration. He has been a member of the editorial committee of the IFOSS law review until Spring 2011.

http://www.idest.pro/?hl=en

Till Jaeger (Germany)

(b. 1969) is an attorney-at-law and partner at JBB Rechtsanwälte, a Berlin based law firm. Till Jaeger is a founding member of the Institute for Legal Questions on Free and Open Source Software (ifrOSS) in Germany, which researches legal questions regarding the Open Source model (http://www.ifross.org). He has represented the gpl-violations.org project in several lawsuits to enforce the GPL. Till Jaeger was a member of the Committee C in the GPLv3 drafting process.

 $\rm http://www.jbb.de/en$

Andrew Katz (United Kingdom)

(b. 1966) is a partner at Moorcrofts LLP, a boutique law firm based in the Thames Valley, England. He became a barrister in 1990 and in 1993 requalified (and now practises as) a solicitor. Prior to his legal career, Andrew was a programmer. He is a founder editor of the International Free and Open Source Software Law Review. He is a visiting lecturer at Queen Mary College, University of London, and sits on the legal advisory panel of the Open Rights Group, and the UK panel for the Free Software Foundation Europe.

http://www.moorcrofts.com

Lucien Cheng-Hsia Lin (Taiwan)

(b. 1976) is a legal specialist and management advisor at "Open Source Software Foundry, OSSF", a mission-oriented project launched and sponsored by the highest academic institution in Taiwan, Academia Sinica, from 2003. He is in charge of the analysis and interpretation of FOSS licenses, the record and track of FOSS business trends and models for OSSF office, and serves as the legal lead of Creative Commons Taiwan from 2014. He is also a guest lecturer at National Chiao Tung University located in Hsinchu, Taiwan.

http://www.openfoundry.org/en/about

Iain G. Mitchell QC (United Kingdom — Scotland)

is in private practice as an Advocate (Barrister) in Scotland. He is the Chairman of the Scottish Society for Computers & Law, Chairman of the Faculty of Advocates Information Technology Group, Co-convenor of the Scottish Lawyers European Group, and a Liveryman of the Worshipful Company of Information Technologists. He holds office as the United Kingdom representative on the Information Technology committee of the CCBE and is a member of the IT Panel of the Bar Council of England & Wales and of the Scottish Courts Technology Forum. He is a member of the editorial committee of the International Free and Open Source Software Law Review and was editor of the former e-law review. He is recommended in the Legal 500 for IT Law and is rated in Band 1 for both IT Law and Public Procurement Law in the Chambers Directory.

Jongbaek Park (Korea)

heads the Open Source Team as a senior partner at Bae Kim & Lee LLC, an international law firm based in Korea. He also serves as the president of Korea Open Source Law Center, an inter-disciplinary organisation dedicated to research, training, providing solutions to issues surrounding open source software and hosting annual conference, FOSS Con, Korea with FSFE and NIPA. He is a widely acknowledged expert in the field of open source software in Korea. He has delivered a number of lectures about FOSS licenses at various forums and conferences. The author would like to acknowledge significant contributions to research by three attorneys, Youngduk Rew, former legal coordinator at Korea Open Source Law Center, Hye Jin Hwang and Nari Hong.

Fabrice Perbost (France)

is a partner in the Paris office of Kahn & Associés. Fabrice advises companies in the field of intellectual property and technologies, particularly as regards private and public contracts. In the course of his activity, Fabrice has developed a specific expertise in the Open Source model. Fabrice is a member of several IP/IT working groups such as ITechLaw (International Technology Law Association) and also a lecturer at two Paris universities.

http://www.kahnlaw.com/en

Carlo Piana (Italy)

is an Italian lawyer and a digital liberties activist. He is external General Counsel to the Free Software Foundation Europe and the President of the Board of the Protocol Freedom Foundation. He advises and assists clients in matters concerning information technology, Free and Open Source Software, data protection and trademarks/domain names. He is a member of the editorial committee of the International Free and Open Source Software Law Review.

http://array.eu/

João Pedro Quintais (Portugal)

is a PhD candidate at the Institute for Information Law (IViR), University of Amsterdam. His current research focuses on alternative models to copyright enforcement on the Internet. João Pedro holds an LL.M in Intellectual Property and Competition Law from the Munich Intellectual Property Law Center. He's a qualified lawyer, member of the Portuguese Bar Association, who has worked since 2004 in the intellectual property and information technology areas, both as a lawyer and as legal counsel for a multinational software house.

http://www.ivir.nl/staff/quintais.html

Ana Ramalho (Portugal)

is an Associate Professor of Intellectual Property at the University of South Wales (United Kingdom). Her current research interests are the aspects of the intersection between copyright law and European Union law, in particular regarding matters of competence. Ana is also part of several editorial boards and has served as an ad-hoc consultant to IP related organizations such as World Intellectual Property Organization (WIPO) or the European Patent Office (EPO).

Andrew Rens (South Africa)

(b 1968) is a South African law and technology scholar and attorney. He is a Senior Lecturing Fellow at Duke Law School and an attorney at Garratt Hugo & De Souza Incorporated, Johannesburg, South Africa. He advises commercial and non-profit clients on open source licenses, open media licences, open data, open hardware and open standards.

http://opencounsel.net

Tomasz Rychlicki (Poland)

(b. 1975) is a Polish patent and trade mark attorney and IT&IP lawyer. He grad-

uated from the University of Gdańsk, the Faculty of Law, European Law Center. Tomasz also studied at Chicago-Kent College of Law in the LL.M. Program in International Intellectual Property Law. He is a member of the Editorial Board of the Journal of Intellectual Property Law & Practice and a country correspondent for the Computer and Telecommunications Law Review. Tomasz is one of the founding members of the Editorial Committe of the International Free and Open Source Software Law Review.

http://www.rychlicki.net

Henri Tanskanen (Finland)

is an Associate at HH Partners, Attorneys-at-law Ltd., with a background in corporate open source compliance work. He also works as an Open Source Specialist for Validos ry, an association providing sharing and production of open source compliance information to its corporate members.

http://www.hhpartners.fi

Ywein Van den Brande (Belgium)

(b. 1977) is an attorney-at-law and partner at Crealaw, a Brussels based law firm. With his dual background of lawyer and information scientist, Ywein focuses on IT and IP. He is a member of the editorial committee of the International Free and Open Source Software Law Review. He is a guest lecturer at Groep T/KULeuven.

http://www.crealaw.eu

Wanda van Kerkvoorden (The Netherlands)

(b. 1968) is an attorney-at-law and partner at SOLV, an Amsterdam based law firm. Wanda is specialised in supervising complex ICT projects and conducting legal proceedings involving ICT disputes. She also advises on and conducts legal proceedings involving ASP/SaaS, cloud computing, compliance and (open source) software protection. She is a member of the international iTechLaw association.

http://www.solv.nl

Martin von Willebrand (Finland)

is the Head of Technology and Partner at HH Partners, Attorneys-at-law, Ltd. He is the chairman of Validos ry, an association providing sharing and production of open source compliance information to its corporate members, including for example Fujitsu Finland, Vaisala, Cargotec, Cassidian Finland and Tieto. He is a board and steering group member of COSS – The Finnish Centre for Open Systems and Solutions. He has widely received recommendations for his work mainly in the technology field from publications such as Legal 500, Chambers Europe and Who's Who Legal. His clients in the free software field include, in addition to many businesses such as Ixonos Oyj, Free Software Foundation Europe, the Ministry of Environment of Finland, Validos and Aalto University.

http://www.hhpartners.fi

Alan Walter (France)

specialises in intellectual property and technologies. He provides legal assistance in both advice and litigation in several fields like software industry (in particular Open Source matters), Internet & innovative technologies regulation, IP, and privacy and data protection.

alan.walter@runbox.com

Mark H. Webbink (United States)

(b. 1950) is senior lecturing fellow at Duke University School of Law. Webbink is the former general counsel of Red Hat, Inc., and presently serves on the board of directors of the Software Freedom Law Center. A founding member of the editorial board of the International Free and Open Source Software Law Review. In May 2011 Webbink assumed the role of editor and publisher of the well known open source blog Groklaw.

http://www.nyls.edu/faculty/faculty_profiles/mark_webbink

Yang Xia (China)

is an associate professor at the Law School of Beijing Normal University, one of the oldest universities in China. The main research field of Mr. Yang Xia focuses on computer law, software law and high technology law. Yang Xia teaches Science and Technology law, Computer law, Intellectual Property law and Legal English. Yang Xia was awarded the European Union Eramus Mundus scholarship for his studies at the EU law center of the University of Warsaw and is member of CLAST (China Law Association on Science and Technology).

http://www.bnu.edu.cn/eng/