

Intellectual Property: basic concepts and legal framework

Legal Aspects – Master on Free Software 2012-13

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- Lesson 2: Copyright on Software. Legal aspects of free software
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The importance of licenses

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Licenses are legal basis and “social contract” of free/open source software.

Law and Code

- Tiny SCO group sued the huge IBM in 2005 put forward a cluster of complaints: trademarks, copyright infringements and theft of trade secrets...
- Software patents lawsuits.

What is Intellectual Property?

- Intellectual Property (IP) refers to creations of the human mind (i.e. “ideas”).
- IP is divided into two main categories: **Industrial Property** (patents, trademarks) and **Copyrights**.

Patents

Copyrights

Trademarks

IP: Concepts

- It's a broad concept that covers several types of legally recognized rights.
- IP rights are rights to **intangible things** ("ideas").
 - as expressed ("copyrights"),
 - or as embodied in a practical implementation ("patents")
- In International law, IP typically includes at least **copyrights**, **trademarks**, **patents**, and **trade secrets**.

Intellectual Property: WIPO Definition

WIPO gives an “common law” definition of IP:

WIPO Definition

Intellectual property refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce.

Origins

- With the invention of the printing press (~1450), works became commercial objects.
- First forms of plagiarism appeared, so that editors forced legislators to regulate and protect the original works.
- Regulation was also conceived as a way of controlling information (i.e. censorship)

Pro-IP Arguments

- **Utilitarian Defense of IP** (Common Law): Laws and policies that maximize “wealth” or “utility”. Greater incentives to create and innovate.
- **Natural-Rights arguments** (Continental Law): creations of the mind are entitled to protection just as tangible property is.

Intellectual Property vs Tangible Property

What are the differences?

Types of Property

- **Immovable property** (realty, land, houses...)
- **Moveable property** (chairs, cars, clocks...).

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- **Scarcity**: **conflict** over resources (scarce == ownable)

IP vs. tangible property

"If you have an apple and I have an apple and we exchange these apples then you and I will still each have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas." GEORGE BERNARD SHAW (1856-1925)

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Intellectual Property == **Intangible rights oxymoron?**

IP vs. physical property

More differences between Intellectual Property and Tangible (“physical”) Property:

- Expiration date.
- When you copy the IP resource, you don’t harm to the owner of copied object. However, a copy can harm the author.
- It’s difficult to see difference between “copy” (plagiarism) and “inspiration”.

IP Categories (Continental Law)

IP is divided into two categories (Continental Law):

- **Industrial property**: inventions, patents, trademarks, industrial designs, and geographic indications of source.
- **Copyright** ("Author's Rights"): literary and artistic works such as novels, poems and plays, films, musical works, artistic works such as drawings, paintings, photographs and sculptures, and architectural designs.

Rights related to copyright include those of performing artists in their performances ("neighboring rights").

IP Types (Common Law)

Common law system:

- **Copyrights**: Protect from unauthorized copy: artistic or literary works, computer programs, data collections, industrial designs, etc.
- **Trademarks**: Protect company symbols and names.
- **Trade secrets**: Protect access to some industrial secrets.
- **Patents**: Protect the rights of exploiting inventions as monopolies.

Trade secrets

- A trade secret is a way to protect investments in industrial area, through Industrial Property laws.
- Under trade secrets, there are several goods such as chemical or pharmaceutical formulas, but also software.
- An example would be the formula for Coca-cola
- Proprietary software enterprises hide the source code of their software products as a way to protect their investment in creating such software.
- Trade secret protection is obtained by declaring that the details of a subject are secret.
- However, disclosure, reverse-engineering, or independent invention may destroy it.

Why Trade secrets?

Why trade secret protection instead of patents?

Why Trade secrets?

Why trade secret protection instead of patents?

- it's not novel enough to be subject to patent protection,
- or not original enough to be protected by copyright.

Trademarks

- It's a word, phrase, symbol, or design used to identify the source of goods or services sold, and to distinguish them from the goods or services of others.
- Related to trademark protection: rights against forms of cybersquatting, and various “unfair competition” claims.

Trademarks (2)

- Sometimes, the names are not registered in most countries and this implied some problems. For example, in USA somebody registered the trademark “Linux” and tried to obtain money for its use.
- In FLOSS world, not very important, probably because registering a trademark is not free and most developers do not pay attention on them.
- However, there are some well known trademarks in this world, such as GNOME, GNU, Debian.

Patents

- A patent is a property right in **inventions**, that is, in devices or processes that perform a “useful” function.
- A patent grants the inventor a limited **monopoly** (20 years) on the manufacture, use, or sale of the invention.
- The invention is not protected by secret. On the contrary, the invention is publicly available.
- For exploiting the invention the interested company must pay a license.
- A patent actually only grants to the patentee the right **to exclude** (i.e., to prevent others from practicing the patented invention). Why?

Patents (2)

- Patents can be obtained only for “practical applications” of ideas.
- Not for more abstract or theoretical ideas.
- Philosophical, mathematical or scientific truths cannot be protected. (Why?)
- Christmas Tree Stand Watering System (US Patent)
- Einstein’s “discovery” of the relation $E = mc^2$ is unpatentable.
- Distinction between **creation** (patentable) and **discovery** (unpatentable) is not clear.

Patents. Debate

- Is it fair to reward more **practical inventors** and entertainment providers (engineers and songwriters), and to leave more **theoretical science** and **math researchers** and **philosophers** unrewarded?

IP: Legal Framework

IP Laws are coordinated in nearly all the world, thanks to several organizations and initiatives:



- WIPO: Promotes both property types.
- TRIPS: Establishes minimal conditions to all countries of WTO.
- International agreements: Bern and Geneva Convention.

Universal Declaration on Human Rights, art. 27.2

Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

Spanish copyright. LPI

Ley de Propiedad Intelectual, RD 1/1996, art. 1

“La propiedad intelectual de una obra literaria, artística o científica corresponde al autor por el solo hecho de su creación.”

Ley de Propiedad Intelectual, RD 1/1996, art. 2

“La propiedad intelectual está integrada por derechos de carácter personal y patrimonial, que atribuyen al autor la plena disposición y el **derecho exclusivo** a la explotación de la obra, sin más **limitaciones** que las establecidas en la Ley.”

Copyright. Spanish Legal framework

- Ley de Propiedad Intelectual (LPI): Continental law.
- Derechos de autor vs. Derechos afines (o ‘ conexos’ , or “vecinos”)
- Derechos morales vs. Derechos de explotación (“patrimoniales”)

Patents. Spanish Legal framework

- Part of Industrial Property.
- Ley de Patentes de Invención y Modelos de Utilidad.

Ley de Patentes 11/1986 de 20 marzo, art. 4.1

“Son patentables las invenciones nuevas, que impliquen actividad inventiva y sean susceptibles de aplicación industrial, aun cuando tengan por objeto un compuesto que contenga materia biológica, o un procedimiento mediante el cual se produzca, transforme o utilice materia biológica.”

IP: Works protected

The type of works considered include:

- Literature works (novels, poems, theater works, reference documents, newspapers and software)
- Artistic works
- Scientific works
- Databases, movies
- Musical compositions and choreographies, architectonic works, publicity
- Maps and technical paintings

Like literature and music, **software** is protected primarily by copyright law:
It is a **literary work**.

Authors and copyright holders

- Authors is a (physical or juridical) person that creates a work.
- **Collaborative work**: unitary result of the collaboration of several authors where the input of each author may be identified and exploit independently.
- **Collective work** (art. 8 LPI): under the initiative and coordination of a physical or juridical person. It groups the input of several authors that cannot be identified independently and that compose a unique and autonomous creation. Examples: GNOME, Mozilla, FSF, etc.
- Usually IP rights are transferred to enterprises where creators work (for example, the companies where the programmers work).
- But the moral rights are still retained by the programmer.

The Copyright: Protection for Authors

The rights protected by copyright laws:

- **Moral rights**. Guarantee work dissemination and author attribution. Only in Continental law.
- **Economic rights** (**copyright** *per se* in Common Law). Property rights, guarantee economic exploitation.

Moral Rights

- Disclosure of the work
- Way of publication: with his name, a pseudonym or anonymously
- The right of attribution
- The right to the integrity of the work (distortion or mutilation)
- The withdrawal of his work (addressing compensation if needed)

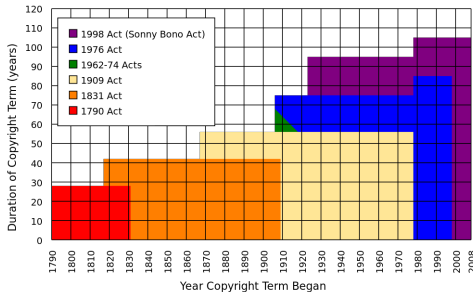
Moral Rights (2)

- These rights cannot be withdrawn, cannot be transferred, are inalienable and some even perpetual.
- Included in the Bern Convention in 1928.
- The US do not completely recognize moral rights as part of copyright law, but rather as part of other bodies of law, such as defamation, academic fraud or unfair competition (plagiarism).

Economic rights (copyright)

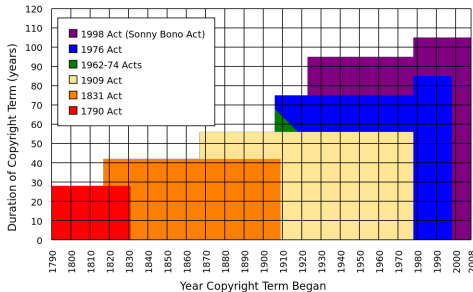
- **Reproduction** (includes communication and copying): loading, presentation on the screen, execution, transmission and storage.
 - Even for using a program you require the author's approval!
 - The right to copy/reproduce is fundamental in licenses; else the software cannot be run.
 - Stealing a book: attempting against the owner of the book but not the owner of the IP.
- **Distribution**: Public disposal of physical copies (i.e. offering the software over the Internet is not included). Software is not sold as this could make re-selling possible. What is sold is the CD; the software is licensed!
- **Public performance**: there is no distribution of physical copies (What is public and private on the Internet?)
- **Transformation** (for instance, translation)

The Copyright Term



- Minimum: 50 years after death of person.
- In general (USA, Europe): 70 years after *post mortem*.
- Automatic copyright when the work is published.
- When its term expires, it goes into Public Domain.

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Continued expansion of copyright law term.

Limitations? Fair Use

- **Fair Use** (USA) permits limited use of copyrighted material without acquiring permission from the rights holders.
 - Examples: commentary, search engines, criticism, news reporting, research, teaching, library archiving and scholarship.
- **Límites** (Cap. II, LPI, Spain):
 - Copia privada (art.31, DB and software programs excluded!).
 - Leyes y procedimientos. Beneficio de la discapacidad (31bis)
 - Cita e ilustración de la enseñanza (art. 32)
 - Utilización de bases de datos por el usuario legítimo (art. 34)
 - Informaciones de actualidad y en vías públicas (art. 35)
 - Reproducción, préstamo y consulta (bibliotecas) (art. 37)
 - Actos oficiales y ceremonias religiosas (art. 38)
 - Parodia (art. 39)

Copyright in short (recap)

Gives its owner an “exclusive right” to:

- To make and sell copies of the work (including, typically, electronic copies).
- To make derivative works
- to publicly perform/display the work
- To sell or assign these rights to others

Copyright in short (recap)

- Limitation on the **expression** of an idea (it's possible another expressions of the same idea).
- Gives exclusive rights to the owner.
- Economic rights have time expiration.
- There are exceptions (fair use)
- By default, all rights reserved.
- In software the expression is given by the code; algorithms are not protected.
- There are neighboring rights.

IP. Debate

- Do you think today it's justified the existence of Intellectual Property (copyright, patents, trademarks)?

IP Criticism

- The term itself (Stallman): analogy with physical property distorts and confuses.
- A long tradition of opposition to patent and copyrights.
- Econometric studies don't conclusively show net gains in wealth.
- Costs of the patent system (legal advice, registration, courts, lawyers, **patent trolling**...).
- Property rights in “ideal objects” necessarily **requires violation of other individual property rights!**
- Review Chihuly's lawsuit:

http://seattletimes.com/html/localnews/2002686721_chihuly16m.html

IP Criticism



- **Ethical issues:** more innovation and creativity wouldn't justify restricting the freedom of individuals to use their physical property.
- It's not coherent: protects only certain types of creations.
- Distinction between creation and discovery is not clear or rigorous.
- Any alternative? Contract theory (S. Kinsella)

Creations of the mind are not as tangible property is.

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