Study unit 4

Copyright implications of e-commerce

Overview

In this study unit we explore the implications of e-commerce on intellectual property rights, especially on works in digital format that are protected by copyright. We examine the copyright implications of linking, framing, and the creation of mirror sites on the Internet, as well as the liability of online service providers (OSP's) copyright infringement.

Learning outcomes

After completing this study unit, you should be able to explain —

- ❏ understand the impact of e-commerce on intellectual property rights
- ❏ understand the copyright implications of the digitization of works
- ❏ understand and interpret the international treaties
- ❏ apply the law to questions relating to infringement by linking, framing, and the creation of mirror sites
- ❏ understand and apply the concept ‘contributory infringement’
- ❏ explain and apply the rules relating to the limitation of service provider liability
- ❏ understand two new forms of indirect copyright infringement — circumventing technical protection devices, and removing digital rights management information.

Setting the scene

JTV calls its web site *JTV-All*. On its home page, the site is divided into three parts:

- ❏ *JTV-eArt* — a catalogue with photos of Thandi's handicrafts, some of which can be bought online;
- ❏ *JTV-eWrite* — John's short stories, and two chapters of his unfinished novel; and
- ❏ *JTV-eHandi* — Vusi’s advice on do-it-yourself home

repairs.

John has invited visitors to the web site to following the creation of his novel. He writes a few new pages every week and then posts them on the site. He asks subscribers to post suggestions on a bulletin board about how the story line should develop.

Thandi has added a new feature to *JTV-eArt* — a short course on sculpting techniques. As course material she uses a printed study guide that she received during her studies at the University of Utopia. She also uses photos of sculptures by various established artists to illustrate the various techniques. Students who enroll for the course may send Thandi samples of their work to evaluate.

Vusi has asked Tio to create links from *JTV-EHandi* to the web sites of two major manufacturers of tools for home repairs — White & Wrecker, and Nitewoo. Tio creates the links directly to the instruction manuals of these two manufacturers. He also creates links to various web sites on which used tools and buildings materials are auctioned.

Discussion

Intellectual property and e-commerce

The *Green Paper* (at 56–57) states:

> 'Intellectual property rights are legal means to protect and balance the interests of an individual against those of the public. This is done in terms of disclosure, dissemination, alteration, use and abuse of ideas, with an exclusive right to control and profit from invention and/or authorship of such intangible goods, services and ideas. The World Intellectual Property Organization (WIPO) classifies intellectual property into two categories, namely, industrial property, such as inventions, trademarks, industrial designs and appellations of origin and copyright literature that refers to items such as musical, artistic, photographic and audio-visual works.
>
> 'It has become relatively easier to infringe intellectual property through the use of electronic technologies. Therefore there is an urgent need to formulate a system of laws that define and protect intellectual property as a *response* to technological change, particularly emerging circumvention technologies that are constantly defying

> copyrights on electronic systems. In this context, it becomes increasingly challenging to ensure intellectual property rights and related neighbouring rights are applied to the electronic environment in a manner that is promoting e-commerce.... South African intellectual property law is not fully equipped to deal with the implications of the Internet, convergence, multimedia, digital technology and hence e-commerce' (original emphasis).

Copyright implications of the digitization of works

The digitization process reduces information to binary bits of 0's and 1's. This is an essential function of all computerized technology (WR Cornish *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* 4th ed (1999) 13–60).

Traditional copyright notions

The *Green Paper* (at 57–58) states:

> 'The advent of the Internet has changed the underlying assumptions of the original copyright laws entailed in the Copyright Act 98 of 1978.... The application of traditional copyright law to open, public, global networks such as the Internet is hindered by the fact, that traditional protection of intellectual property rights has always specifically referred to the protection of information contained in tangible media such as books.'

Traditionally, works protected by copyright have the following features:

- ❏ the works are classified in different categories, such as literary works, artistic works, and computer programs; and
- ❏ the authors of the type of work in each category have certain exclusive rights (for example, authors of literary works may reproduce their works, adapt them, publish them, and so on).

Implications of digitized works

The *Green Paper* (at 57) states:

> 'The convergence of traditional forms of communication into a single electronic environment presents challenges in the attempt to amend the Act and accommodate this new environment .'

Copyright has no experience of dealing with combinations of different kinds of work, or with ‘multimedia'. The equivalence of works in digitized form makes it easier to combine what have earlier been thought of as *separate* categories of works. Also, these ‘combined works' are difficult to classify (see Pamela Samuelson `Digital Media and the Changing Face of Intellectual Property Law' (1990) 16 *Rutgers Computer & Technology LJ* 323 at 333).

The digitization of works has the following consequences:

- ❏ a homogeneous medium for storing and transmitting works is created;
- ❏ works which previously have fallen into distinct categories merge into multimedia products;
- ❏ multimedia works are difficult to classify;
- ❏ it is difficult to determine the exclusive rights of the authors of multimedia works, as these works cannot readily be classified in any of the current categories; and
- ❏ digitization and networking change the traditional ways in which works protected by copyright are used.

Causes of concern

The *Green Paper* (at 60) states:

> 'Copyrights are referred to as the rights to ensure protection of information from duplication and distribution. Computers are changing the way that copyrighted goods can be illegally copied and distributed. Violation of copyrights is difficult to monitor in the electronic environment, since content exists not physically but in electronic form and can be instantaneously distributed without even being copied. All of this occurs cheaply and easily. This creates new challenges for copyright owners and law enforcement agencies in that the distinction originally drawn between copying and

distribution is blurred.'

Works in digital format shares the features that make it difficult to protect the copyright subsisting in them. Also, digitization and networking fundamentally alter the traditional means of using works protected by copyright (see Thomas Dreier 'Unsolved Copyright Issues in Digital and Network Environment' March 1995 *Copyright World* 36). This is so because digital works, by their nature, share the following features:

- ease of copying or capturing data;
- ease of distribution or transmission;
- ease of manipulation or editing;
- ease of data storage;
- ease of searching or linking data; and
- it is difficult to determine the exclusive rights of authors, as the new types of work cannot readily be classified in the traditional categories.

Copyright implications

Where digital works are stored or made accessible, or where they are transmitted without authorization, it is difficult to establish copyright infringement for the following reasons:

- It is difficult to establish the identity of the person who transmitted an infringing copy of a work – was it the host, the online service provider, or a remote user?

- The removal of rights management information makes it difficult to prove copyright ownership.

Activity 4.1

John approaches you for legal advice. He tells you that Lisa, a friend of his, has copied *War,* one of his poems, without his authorization. She has included his poem, with accompanying illustrations and mood music, in a multimedia work called *Still Love and War*. Lisa places this work on her own web site.

Explain to John the copyright implications of the digitization of literary works like his poem.

After you have performed this activity, read the discussion in Tutorial Letter 201 for feedback.

Discussion

Digital licensing of information products

Licensing of computer programs: shrink-wrap agreements

When the computer software industry first emerged, software was either provided to customers as an inducement to buy hardware, or it was individually licensed to customers who often had specially commissioned it (see Pamela Samuelson *A Case Study on Computer Programs: Global Dimensions of Intellectual Property Rights in Science and Technology* (1993) 284–285). Contract law may in certain instances bolster or complement the copyright protection of works. But note that contract law applies only between parties bound by the contract; in principle, a contract cannot bind third parties. Also, contract law has not been harmonized, although international legal rules for e-commerce, including aspects of contracting on the Internet, are emerging (see, for example, in Europe, the Directive on Certain Legal Aspects of Information Society Services, in Particular Electronic Commerce, in the Internal Market (Directive 2000/31/EC)). When a mass-market for software began to emerge in the 1980's, a number of software developers began commercially to distribute their mass-market software in packages containing what became known as ‘shrink-wrap licenses'.

Shrink-wrap licence agreements were introduced to the market

to protect the copyright of the developers of computer programs. These agreements regulate the use of computer programs on a uniform basis on an international scale, and they are designed to deter software piracy.

This practice spread through the software industry despite the fact that there were substantial doubts about their enforceability, both as a matter of contract law and as a matter of intellectual property policy (see Pamela Samuelson ‘Licensing Information in the Global Information Market: Freedom of Contract Meets Public Policy', paper presented at the 7th Annual Conference on International Intellectual Property Law and Policy, in New York, 8–9 April 1999).

What is a shrink-wrap agreement?

A shrink-wrap agreement is simply a printed standard-form agreement that is placed on, or printed on top of, the packaging containing the computer program to be marketed. It is encased in a cellophane wrapper – shrink-wrapped. Other terms used for this type of agreement include ‘box-top', ‘tear-me-open', and ‘blister-pack' agreements (see Graham P Smith ‘”Tear-open Licences” – Are they Enforceable in England?' (1986) 2 *Computer Law and Practice* 128 at 129). Shrink-wrap agreements are used for mass-marketed software (see Richard H Stern ‘Shrink-wrap Licences of Mass Marketed Software: Enforceable Contracts or Whistling in the Dark?' (1985) 11 *Rutgers Computer & Technology LJ* 51). The shrink-wrap agreement comes into force when consumers break open the plastic shrink-wrap, or install the software on their computers, which acts indicate their assent to the terms of the license.

It is interesting to note that none of the ‘permitted acts' granted to the user would in any event have constituted copyright infringement in the absence of the copyright owner's express authorization. So the question arises – why a shrink-wrap agreement, if general copyright restrictions would have regulated the use similarly? There are three arguments in favour of the view that merely relying on general copyright norms would not be sufficient:

- Such an approach would be impractical, as the copyright laws of the different countries of distribution may well differ, which fact would necessitate drafting several different copyright notices.

- Some countries extend inadequate, or even no, copyright protection to computer programs.

- Software proprietors try and avoid the application of the ‘first sale doctrine'. The difficulty of defining the true nature of the agreement between the software developer and the user disappears when one distinguishes the sale contract from the licence contract. It is only where the retailer acts as the software developer's agent, or in the case of mail-order sales, that the two transactions may be difficult to sever.

Conclusion of a shrink-wrap agreement

A warning on the outside of the cellophane wrapper informs the customer that by breaking the seal she accepts the terms of the agreement, which are visible through the cellophane. The typical notice also states that if the user is unwilling to agree to the terms and conditions of the licence agreement, she may return the unopened package to the vendor for a full refund.

A similar concept to shrink-wrap agreements – ‘click wrapped’ agreements – has developed for the sale of computer programs through e-commerce. Basically, this entails a screen on a commercial web site displaying the terms and conditions of a contract of sale. If the user then wants to buy the software products offered through this ‘electronic shop’, she is instructed to ‘click’ on certain icons to indicate her acceptance of the terms of the contract. Refer to Study Unit 3 where the validity of this type of agreement is discussed.

United States of America

A very important development took place recently in America with the amendment of article 2 of the Uniform Commercial Code to prescribe certain specific rules for the sale of shrink-wrapped computer software. In the United States, the Uniform Computer Information Transactions Act of 2000 ('UCITA') is designed to create an enforceable set of rules for electronic licencing agreements.

Section 102 defines a 'mass-market license' as –

> 'a consumer transaction, or any other transaction in information or informational rights directed to the general public as a whole under substantially the same for the same information with an end-user licensee.'

It provides that the offer and acceptance may be in any manner and by any medium reasonable in the circumstances (ss 202 and 203). Electronic interactions between human and electronic agents (automated systems) are sufficient to create a valid contract (s 206).

A person adopts the terms of a contract by manifesting assent. She can do so by signing the record embodying the terms or by some other affirmative conduct such as clicking on an icon. The adopting party must have had the opportunity to review the contract terms before reacting. All that is required is that the terms or record be brought to her attention before manifesting assent. It is not necessary for her to have actually read, understood or negotiated the terms in order to be bound (s 203).

Section 208 deals specifically with mass-market licenses such as shrink-wrap and click-wrap licences. It sets out a series of rules that render mass-market licences enforceable, even though they are not signed by both parties, and even if the licence terms are not available before the purchase. The section endorses the use of click-on licences by providing that assent to the terms of the licence may be manifested before or during the initial use of, or access to, the software. If the licence terms are

presented to the licensee after an initial contract, the licensee must have had reason to know that the terms would be proposed later for assent.

A licensee manifests assent by signing the record or term, or by some other affirmative conduct (see further Gail Evans 'Opportunity Costs of Globalizing Information Licences: Embedding Consumer Rights Within Legislative Framework for Information Contracts' (1999) 10 *Fordham Intellectual Property, Media and Entertainment LJ* 277). This assent may be shown by using the product after having an opportunity to know of the licence terms. A party must be given an opportunity to decline to take such action after having had the opportunity to review the licence.

A licensee manifests assent by signing the record or term or by some other affirmative conduct that, under the licence, constitutes acceptance of the record or term, as long as the party was afforded an opportunity to decline to take such action after the licence. If the terms of the licence are available for review only after the licensee has paid the licence fee, the licence is not binding, and a refund is available, if the licensee stops using the software and returns all copies. If a specific term is one that the licensor should know would cause an ordinary and reasonable licensee to refuse the licence, then that term does not become part of the license, unless the licensee 'manifests assent' to that specific term.

The first appellate court decision to accept this approach to mass-market licenses was *ProCD v Zeidenberg*. The protected work was a CD-ROM version of a national telephone directory with millions of entries, packaged in a shrink-wrap license. Pro-CD charged a low price to consumers and a much higher one to commercial users of the product. The defendant 'bought' a consumer package and then, in violation of the license, sold the information contained over the Internet. Inside the box was a form indicating that the information on the disk was licensed for home use only. As Zeidenberg could have received a refund if he did not like the terms, and because of the potential for market failure if the license were not enforced, the court decided to enforce the shrink-wrap license. It found that Zeidenberg's loading of the software onto a web site breached the home-use licence term.

A second issue in *Pro-CD* was whether American federal copyright policy forbade enforcement of this contract clause. Zeidenberg also argued that federal copyright law should 'pre-empt' enforcement of a state contract law, since the state law could not alter the delicate balance of federal copyright law.

The appellate court disagreed with the arguments. Easterbrook J, writing for the majority, found no pre-emption problem once he had differentiated between rights that were good against only a contract party in agreement, on the one hand, and rights good against the world at large, on the other. Since there was an 'extra element' of agreement, the state contract claim was not 'equivalent' to a copyright claim. So federal policy did not pre-empt enforcement of this state contract provision.

The *Pro-CD* decision has generated controversy, both in its assessment of state contract law and in its pre-emption analysis. Some commentators continue to question whether it is appropriate to enforce shrinkwrap and other mass market licences for copyrighted works. Although other commentators have endorsed the result of *ProCD*, they would have the courts distinguish between socially beneficial shrinkwrap license terms and those that reduce competition and retard innovation It is unclear to what extent European courts would follow *ProCD's* validation of shrink-wrap licences (see Samuelson op cit at 16).

European Union

Article 10 of the E-Commerce Directive refers expressly to electronic contracts concluded by electronic means, and especially refers to 'the different technical steps to follow to conclude the contract' (article 10(1)(a)). So the Directive thus also refers indirectly to click-wrap agreements.

One may conclude, then, that the prevailing notion in the EU is that click wrap agreements are fully enforceable. This has been confirmed by a Scottish court that gave effect to shrink-wrap terms that allowed a right to return software (*Beta v Adobe* 1996 FSR 367). But a Dutch court held that a license agreement could not be formed by opening the package of software, even as between commercial entities (*Coss Holland BV v TM Data Nederland BV*). It has been argued that it is highly doubtful, in

view of the legislation and the case law, that a European court would have come to the same conclusion in circumstances similar to those of the *ProCD* case (IMPRIMATUR *Contracts and Copyright Exemptions* (1998) 31).

Activity 4.2

Thandi and John approach you for legal advice. They want to maket the following works:

- ❏ *JTV-eArt* — a catalogue with photographs of Thandi's handicrafts, some of which may be bought online; and
- ❏ *JTV-eWriting* — John's short story.

They want to know whether they must licence the use of their copyright works, or whether they should sell their works on-line.

After you have performed this activity, read the discussion in Tutorial Letter 201 for feedback.

Activity 4.3

John approaches you for legal advice. He has written a computer program that teaches users how to write a short story. He wants to market the program on-line in the Europe and America, but he wants users to use the program only for non-commercial and private use. He want you to advise him on the following aspects:

- ❏ whether such an agreement will be valid and enforceable in America and Europe; and
- ❏ what the content and construction of the click-wrap agreement should be.

After you have performed these activities, read the discussion in Tutorial Letter 201 for feedback.

The Green Paper (at 58) states:

> 'Debates relating to intellectual property rights are ongoing in international forums such as the World Intellectual Property Organisation, the World Trade Organisation, the European Union and the Organisation for Economic Co-operation and Development and the Internet Corporation for Assigned Names and Numbers, with the purpose of finding a suitable framework for intellectual property rights.'

Also (at 59):

> 'The vast technological developments that we were faced with, such as the convergence of computing, telecommunications, and broadcasting technology has prompted a review of copyright law at an international level. The "digital agenda" was the most pertinent issue that prompted the contracting parties to adopt a new treaty. The contribution of the Internet in the creation, production, and use of literary and artistic works, performances and phonograms, including its potential to undermine the basic tenets of copyright and related rights, has compelled the WIPO to lead the adoption of two treaties in December 1996, namely, the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). These treaties are commonly referred to as the "Internet treaties". These treaties address issues of the definition and scope of rights in the electronic environment, and some of the challenges of online enforcement and licensing. Although South Africa has signed the WCT, it has not yet implemented this treaty.'

Reproduction right

The WIPO Copyright Treaty (WCT) is particularly important as far as the reproduction right is concerned. Reproduction is applied to the storage of works in digital systems of permanent, temporary, transient, and incidental nature. The Diplomatic Conference adopted the following statement on this issue (Agreed Statement Concerning Article 1(3)):

> 'The reproduction right, as set out in Article 9 of the Berne

> Convention, and the exceptions permitted thereunder, fully apply in the digital environment, in particular to the use of works in digital form. It is understood that the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention.'

There is international agreement that permanent electronic storage of a work is a restricted act. The American *White Paper on Intellectual Property and the National Information Infrastructure* (1995) notes:

> "It has long been clear under US law that the placement of copyrighted material into a computer's memory is a reproduction of that material ... in each of the following instances set out below, one or more copies is made.... When a printed work is 'scanned' into a digital file, a copy — the digital file itself — is made ... When other works — including photographs ... are digitalized, copies are made.... Whenever a digitalized file is "uploaded" from a user's computer to a bulletin board system (BBS) or other server, a copy is made. Whenever a digitalized file is "downloaded" from a BBS or other server, a copy is made. When a file is transferred from one computer network user to another, multiple copies generally are made.'

Right of communication to the public

The question arose whether transmitting a work in digital form over the Internet constitutes infringement of copyright, and more specifically, whether it constitutes broadcasting of the work, publishing the work, or placing it is a diffusion service? A new right of 'communication to the public' was created to enable copyright owners to control the dissemination of their works on the Internet.

Article 8 of the WCT states that —

> '... authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them.'

This new right entails that authors have the exclusive right of communicating their works to the public by wire or wireless

means. The right specifically includes the right to make works available to the public in such a way that the public may access them on demand interactively — from different places at different times as they choose individually.

An ‘interactive service’ is one that enables a member of the public to receive a transmission of a program specially created for the recipient, or on request, a transmission of a particular sound recording, whether or not as part of a program, which is selected by or on behalf of the recipient. Each individual web site needs to be analyzed to ascertain if it may be ‘interactive’ in this context. For example, can the listener visit the site and select the sound recordings heard during the visit? If so, how much control does the individual listener have on what is heard and when it is heard? One type of ‘interactive service’ enables a member of the public to receive a transmission of a program specially created for the recipient, even though it was created upon the request of a third party.

The Agreed Statement Concerning Article 8 states:

> ‘It is understood that the mere provision of physical facilities for enabling or making a communication does not in itself amount to communication within the meaning of this Treaty or the Berne Convention. It is further understood that nothing in Article 8 precludes a Contracting Party from applying Article 11*bis*(2).’

Fair use exceptions

The Green Paper (at 60) states:

> ‘The Copyright Act No 98 of 1978 recognizes the notion of “fair use”, which provides that copyright shall not be infringed by any fair dealing with certain works, such as copying for purposes of research or private study or personal or private use, etc. The Berne Convention noted that the “fair use” provisions in the context of digitized use should be approached just as they are in “traditional” environments. Commercial use, which harms actual or potential markets, will, therefore, probably constitute infringement, whereas non-profit educational transformative use will most probably often be deemed fair.’

In terms of article 10 of the WCT, signatories may carry forward

and appropriately extend limitations and exceptions to the digital environment. The Agreed Statement Concerning Article 10 of the Treaty emphasizes the need to maintain a balanced copyright regime:

> 'It is understood that the provisions of Article 10 permit Contracting Parties to carry forward and appropriately extend into the digital environment limitations and exceptions in their national laws which have been considered acceptable under the Berne Convention. Similarly, these provisions should be understood to permit contracting parties to devise new exceptions and limitations that are appropriate in the digital network environment.'

Article 10 incorporates the 'three-step test' of article 9(2) of the Berne Convention (see also article 13 of the TRIPS Agreement. According to a WIPO Committee of Experts, when the implications of reprographic reproduction and exceptions in terms of article 9(2) are considered, the following must be taken into account:

- ❏ the nature of the work copied — in instances such as data bases and sheet music the free reprographic reproduction would necessarily conflict with the normal exploitation of the work;
- ❏ the extent of the copying — an entire book, or only one article from a periodical, for example;
- ❏ the number of copies made;
- ❏ the nature of the entity which makes or allows the making of the copies (a non-profit-making library, archive, or school, or a business where copies are made in connection with commercial activities); and
- ❏ the purpose of the copying (private use, or commercial activity).

Activity 4.4

Tio approaches you for legal advice. He wants to scan photographs of Thandi handicrafts and store the files on the hard drive of his computer. He then wants to send these image files to his friends in Canada. He wants to know whether he may do this without Thandi's permission. Explain to Tio whether his actions will entail any copyright infringement.

After you have performed this activity, read the discussion in Tutorial Letter 201 for feedback.

Activity 4.5

Thandi approaches you for legal advice. She tells you that one of her friends, Paul, trades on his own web site called *onLine Art*. bEn-Commerce hosts Paul's web site. Paul has printed out some of the photographs of Thandi's handicrafts in *JTV-eArt*, and made copies of the actual handicraft items. Then, he photographed these copies and sent the digital photos to Zoe, an art dealer in Chile who displays the photos on her own web site. She takes orders from the public, and Paul then ships copies of Thandi's work to these consumers. Zoe's web site is hosted by ChileOnLine.

Thandi wants to know whether her copyright has been infringed by Paul, Zoe, bEn-Commerce, and/or ChileOnLine.

After you have performed these activities, read the discussion in Tutorial Letter 201 for feedback.

Discussion

Special instances of copyright infringement on the Internet

Linking

'Linking' and 'framing' are both methods of using third-party

content available on the Internet to enhance a web page or CD-ROM. Linking is the practice of creating a link from one web page to another by including a hypertext ‘link’ — highlighted words or symbols that, when pointed to and ‘clicked’ upon, instructs the browser to go to a new web address. The creation of links is a basic element of the World Wide Web — the multiple transversing links create the conceptual ‘web’ that gives the medium its name.

The technical background to linking is provided by Stanley Lai *The Copyright Protection of Computer Software in the United Kingdom* (2000) 232–233):

> ‘The World Wide Web (WWW) operates on a text-based language called HTML (Hyper Text Markup Language). The text contained in triangular bracket (“<“ and “>”) are the HTML directives that determine (in a manner that is similar to the embedded codes used by word processing programs) how the text is to be formatted, and the points of insertion of graphics into text. The potency of HTML is illustrated by the following statement. This statement contains a link to another computer system and directs the web-browser program on the user’s computer in the following (or equivalent) terms:
>
> > “This is a citation to an image source (img src). Use the Hyper Text Transfer Protocol (http) to go to the computer site named ‘lcweb’ in the domain loc.gov (the Library of Congress website) and in the subdirectory ‘copyright’, retrieve the graphic image file (gif), called ‘mb100'.”
>
> ‘As this web page is being displayed on the computer screen, its constituent components are being retrieved from different computers. There is no limit imposed on the number of remote sites which can be used, nor on the physical locations of those sites.
>
> ‘The mere creation of a link does not, of itself, infringe copyright. The coloured or underlined descriptive words appearing on a web page that indicate a link are usually too few to constitute a work, and the possibly detailed technical address or Uniform Resource Locator (URL) that may reside behind a link is also unlikely to be a ‘work’. Still, if a web surfer clicks on the link his or her browser will download a full copy of the material at the linked address creating a copy in the RAM of the surfer’s computer courtesy of the address supplied by the party that published the link.’

It is widely accepted that the permission to download material through the link must be part of an implied license granted by the person who has made the material available on the web in the first place. What else could have been intended? The content has been put in a form specifically so it can be downloaded by anyone on the Internet who uses a browser to request a copy of the material at the relevant address.

But the scope of the implied license is the subject of debate. It is generally agreed that the common-law principles pertaining to implied contract terms dictate that the terms of the implied licence be limited. In particular, there is no reason to imply that by putting copyright material on the Internet the copyright owner is by implication permitting surfers to re-use the material for commercial purposes.

Especially, the practice of ‘deep’ hyper-linking — providing links that bypass the provider’s home page (which may contain advertising and other commercial information) — may not be use as permitted by the implied licence, particularly if the deep hyperlink is presented on a commercial site. Note, though, that the ‘deep link’ does not actually reproduce the copyright owner’s material. Deep linking is more an issue of contract or trade practice law, or both, than of copyright law.

Framing

Framing is the practice of creating a frame or window within a web page where the content of a different web page can be displayed. Usually, when a web surfer clicks on a link the new web page is presented as its owner intended, but many pages present the content of third party web pages listed as links ‘framed’ with reminders of the originating page. Frames are most often used to help define, and navigate within, one content provider’s web pages with great utility. When they are used to present third party material from commercial sites, issues of passing off and misleading or deceptive conduct, as well as copyright infringement, immediately arises.

The technical background to framing explained by Liu (op cit at 234) as follows:

> 'The remote user's web-browser display is subdivided into a set of rectangular windows or frames — each of which can be manipulated independently; or the text can be scrolled up or down. Framing is accomplished by using the provisions of the HTML language — the first step is to define a "frame set", which divides the screen into different sections (eg see the CNN interactive homepage). Typically a "site index" appears on the left of the page and remains there, regardless of which page is being displayed.'

Unfortunately, the well-known cases relating to these issues were settled out of court. In *Shetland Times v Wills and Zeine Ltd*, and *Ticketmaster v Microsoft* commercial sites presented valuable content of a competing site using 'deep' hyperlinks.

The complaint in *Ticketmaster* is that a Microsoft site called 'Seattle Sidewalk' provided links directly to Ticketmaster's online ticket sales page. In this way the consumer bypasses ticket sales information and advertisements.

The settlement in the *Shetland Island* case allowed 'deep' hyper-linking by the defendant of the *Shetland Times* reportage on the following conditions:

- ❏ the phrase '*Shetland Times* story' must appear underneath each headline hyperlink;
- ❏ adjacent to the headline, must be a button that shadows the *Shetland Times* masthead and logo; and
- ❏ the wordlink '*Shetland Times* Story' and the button must transport the viewer to the *Shetland Times* homepage.

Framing can have a similar effect to 'deep' hyper-linking. In the *Total News* case, *Total News* and its associated companies provided a news service with links to other major web-based news services but which, when clicked on by a surfer, did not load the whole page but presented the original news service within a *Total News* frame. *Total News* was sued by *The Washington Post*, Cable News Network Inc, and Reuters News Media Inc. The news networks pointed out that by adding its own advertising in the frame and reducing the size of their web pages as presented to the surfer, Total News was cluttering and reducing in size their advertising, so damaging the delivery of the advertising that each had promised to its advertisers.

The *Total News* case was also settled. The terms of settlement allow linking in highlighted plain text but not in any manner that

may imply an affiliation between the plaintiffs and the defendant, cause confusion, or dilute the plaintiffs' trade marks.

Caching

Caching is may constitute a form of copyright infringement on the Internet. Liu (op cit at 235–236) explains the process as follows:

> 'Caching refers to the storing of copies of material from an original source site (eg a webpage) for later use when the same material is requested again, thereby obviating the need to go back to the original source for the material. To establish the necessary implications for the reproduction right and exceptions thereto, "caching" has to be studied to (i) determine its purpose; (ii) ascertain its various forms; (iii) ascertain its attributes, particularly in relation to transience; and (iv) ascertain its "integral" nature or otherwise.'

It is impossible to predict how many such caches exist in a particular connection. There are generally four types of caching.

- *Mirror caching* (also known as 'caching servers'): these occur when a frequently accessed website is downloaded to another server in anticipation that the information will be required sometime in the future. It relieves net traffic, since a user will avoid the need to read the page from the original source.

- *Web caching*: many OSPs operate 'web caches', of which there are two kinds — 'pull-caches', and 'push-caches'. The content of pull-caches is determined by which pages are requested by the users — they respond to actual demand for webpages from remote sites, and store the most frequently accessed webpages. Push-caches work by receiving pages from remote sites in anticipation of demand. In this way time-consuming reloads are avoided.

- *Proxy caching*: this occurs when a Local Area Network (LAN) or corporate in-house network stores frequently used material. Alternatively, ISPs also may store on their servers for a certain period of time webpages that have been previously requested by their users. On request,

such pages would be downloaded from server rather than original source.

- ❑ *User caching*: a user's web-browser (such as *Netscape* or *Internet Explorer*) caches the webpages accessed during a particular browsing session (the 'Back' and 'Forward' functions). *Netscape*, for example, has a cache file which stores all the webpages browsed by the user over time. If the user does not clean out her cache, the material (copyright infringing or otherwise, and perceptible) remains as a file in a subdirectory on the user's hard disk.

Activity 4.6

Vusi has asked Tio to create links from *JTV-eHandi* Netlink to the websites of two major manufacturers of tools for home repairs — White & Wrecker, and Nitewoo. Tio creates the links directly to the instruction manuals of these two manufacturers. He has also created links to various web sites on which used tools and building materials are auctioned on-line.

Vuzi approaches you for legal advice. He wants to know whether he may create these links. He would also like to display some pages from the White & Wrecker and Nitewoo instruction manuals on his web page. May he do so?

After you have performed these activities, read the discussion in Tutorial Letter 201 for feedback.

Discussion

Liability for contributory copyright infringement

Introduction

In countries such as the United States of America, liability for copyright infringement has been extended by the notion of 'contributory infringement'. In *Sony Corp v Universal Studios Inc*

(464 US 417 (1984) at 435) the Supreme Court stated:

> '…the absence of such express language in the copyright statute does not preclude the imposition of liability for copyright infringement on certain parties who have not themselves engaged in the infringing activity. For . . . the concept of contributory infringement is merely a species of the broader problem of identifying the circumstances in which it is just to hold one individual accountable for the actions of another.'

Although the principle of 'contributory infringement' has not been established in any reported decision on South African copyright law, there are indications that our courts may be prepared to accept such principle (see *Atari Inc & another v JB Radio Parts (Pty) Ltd* (TPD (case no 17419/83) unreported) (order granted but no written judgment delivered: see the discussion by OH Dean *Handbook of South African Copyright Law* (1999 revision) para 8.25 p 1-50); *Bosal Africa (Pty) Ltd v Grapnel (Pty) Ltd & another* 1985 (4) SA 882 (C) at 893 (claim dismissed for lack of proof of knowledge of infringement).

Were one to assume that copyright infringement is merely a form of delictual liability, then the liability of someone who assists, aids, or abets the commission of copyright infringement can be based on the broad principles of the Aquilian action. As was stated in *McKenzie v Van der Merwe* (917 AD 41 at 51):

> '[u]nder the lex Aquilia not only the persons who actually took part in the commission of a delict were held liable for the damage caused, but also those who assisted them in any way…'

(This principle has been applied in the trade-mark context: *Omega, Louis Brandt et Frere SA & another v African Textile Distributors* (1982 (1) SA 951 (T) at 954 and 957).

The remedies available, then, to a successful plaintiff in an action for 'contributory infringement' are damages and injunctive relief (an interdict). These remedies are also available to a successful plaintiff in an action for direct infringement of copyright (see section 24(1) of the Copyright Act).

Fault (knowledge in some form or other) is required in respect of an award of damages only (at common law, see *Hawker v Life Offices Association of South Africa & another* 1987 (3) SA 777

(C) at 780; *R & I Laboratories (Pty) Ltd v Beauty Without Cruelty International (South African Branch)* 1990 (3) SA 746 (C) at 754–755; *Long John International Ltd v Stellenbosch Wine Trust (Pty) Ltd & others* 1990 (4) SA 136 (D) at 143; for statutory copyright infringement, see s 24(2)). In passing, note that this principle is in line with article 45(1) of the TRIPS Agreement which requires that 'judicial authorities shall have the authority to order the infringer to pay the right holder damages adequate to compensate for the injury the right holder has suffered because of an infringement of that person's intellectual property right by an infringer who knowingly, or with reasonable grounds to know, engaged in infringing activity'.

Service provider liability

Introduction

When the liability of a particular the online service provider (OSP) is to be determined, one should remember that the law of delict and copyright law impose liability for acts or omissions in a specific instance. So an OSP's liability will depend on the role it plays in a particular transaction. Where, on the one hand, an OSP makes unauthorized reproductions of a protected work (for example, for technical reasons such as caching) it may be liable for direct infringement of copyright. But where, on the other hand, it merely transmits or facilitates access to copyright infringing material, it may be liable for 'contributory infringement' at common law.

The technical role of OSPs in the digital environment establishes potential liability of OSPs: the question is where such potential infringement is principal or accessory? Here, we will consider the liability of OSPs for copyright infringement only. (Liability may, of course, also be imposed on them by the law relating to trade secrets, unfair competition, product liability, defamation, and the like.)

Currently, this is one of the most controversial issues in copyright law. As was stated by Kamiel Koelman and Bernt Hugenholtz (*Online Service Provider Liability for Copyright Infringement*, paper delivered at a Workshop on Service Provider Liability, presented by the World Intellectual Property

Organization in Geneva, 9–10 December 1999 (OSP/LIA/1) at 1):

> 'Should providers be treated as electronic publishers, and thus made directly liable for all the infringing gigabytes flowing through their servers? Or are they mere the postmen of the Internet, common carriers exempt from all liability? As always in the realm of law, the answer lies somewhere in the middle.'

Article 8 of the WCT states:

> '. . . authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them.'

The Agreed Statement Concerning Article 8 states:

> 'It is understood that the mere provision of physical facilities for enabling or making a communication does not in itself amount to communication within the meaning of this Treaty or the Berne Convention. It is further understood that nothing in Article 8 precludes a Contracting Party from applying Article 11*bis*(2) [of the Berne Convention].'

(See also *Playboy Enterprises Inc v Frena* 839 F Supp 1552 (MD Fla 1993); *Sega Enterprises Limited v MAPHIA* 857 F Supp 679 (ND Cal 1994); *Religious Technology Centre v Netcom On-Line Communication Services Inc* WL 707167 (ND Cal 1995). Compare *Church of Religious Technology v Dataweb BV*, a decision of the District Court of the Hague, 12 March 1996.)

Two models exist for limiting the liability of OSPs for copyright infringement in this context. At the outset, note a striking difference between the two models: whereas the European model has opted for an all-embracing horizontal approach, the American model deals with copyright liability strictly within the framework of copyright law.

American model

In 1998, the United States Congress passed the Digital Millennium Copyright Act ('DMCA'); it was signed into law on 28 October 1998. The DMCA incorporates the Online Copyright Infringement Liability Limitation Act as Title II. The Act adds a new section 512 to chapter 5 of the United States Copyright Act, which deals with the enforcement of copyright. This statute limits the availability of remedies which an author may seek for copyright infringement against an OSP. The limitation of liability depends upon the OSP's meeting certain threshold requirements and performing certain functions or acts.

To start, three general observations about the effect of the statute:

- ❏ Although the DMCA limits the liability of OSPs in certain circumstances, it does not impose new liabilities on them, or curtail or affect any existing defences available to an OSP against a claim for copyright infringement.

- ❏ The DMCA does not limit the rights of authors to hold an OSP's users, subscribers, or account holders liable for their acts of copyright infringement.

- ❏ The statute does not exempt OSPs for acts of copyright infringement that fall outside the four corners of the statute, or prevent authors from holding OSPs liable to compensate damage caused by such acts (see Batur Oktay & Greg Wrenn 'A Look Back at the Notice-Takedown Provisions of the US Digitial Millennium Copyright Act One Year After Enactment', paper delivered at a Workshop on Service Provider Liability, presented by the World Intellectual Property Organization in Geneva, 9–10 December 1999 (OSP/LIA/2) at 1).

How is a service provider defined? To qualify as a 'service provider', an entity should —

- ❏ offer the transmission, routing, or provision of connections 'for digital online communications, between or among points specified by a user, of material of the user's choosing, without modification to the content of the material sent or received';

- ❑ provide ‘online services or network access’; or
- ❑ operate facilities for such services or access.

This definition encompasses the basic functions and services needed by users to access the Internet and enjoy its benefits. At the same time, it does not encompass all people using the Internet, only those who perform the functions that make the Internet available to users.

To avail itself of the liability limitations, a service provider has to meet three threshold requirements:

- ❑ it must have adopted and ‘reasonably implemented’ a policy providing that it will terminate, in appropriate circumstances, the accounts or subscriptions of repeat infringers;
- ❑ it must inform its subscribers and account holders of its policy; and
- ❑ it must accommodate and not interfere with ‘standard technical measures’.

The availability of remedies for copyright infringement against a service provider is limited if it satisfies the three threshold requirements and perform certain stated functions or acts:

- ❑ transmitting, routing, and providing connections to infringing material (the ‘mere conduit’ limitation);
- ❑ system caching; storing infringing material at the direction of a user (the ‘hosting’ limitation); or
- ❑ linking or referring users to infringing material (the ‘linking’ limitation).

The ‘mere conduit’ limitation: Section 512(a) provides the an author’s exclusive right of reproduction may be infringed in the digital context by the unauthorized creation of copies of a work at multiple points while the work is in transit over a global information network. So the DMCA limits the availability of remedies for copyright infringement against the service provider for

> ‘transmitting, routing, or providing connections for, material through a system or network controlled or operated by or for . . . [it,] or by reason of the intermediate or transient storage of that material in the course of such transmitting, routing, or providing connections’.

To qualify for this limitation, the service provider should prove

the following elements:

- ❏ the infringing transmission must have been initiated by or at the direction of a person other than the service provider;
- ❏ the service provider's 'transmission, routing, provision of connections, or storage' must have been carried out by 'an automatic technical process without selection of the material by the service provider';
- ❏ the service provider should not select the recipients of the material, except 'as an automatic response' to someone else's request;
- ❏ the service provider must not maintain any stored copy of the material on its system or network in a manner that would allow 'non-recipients' to access the copy or for longer than necessary to allow the service provider to transmit, route, or provide connections for the material; and
- ❏ the service provider must not modify the content while it was transmitted through its system or network.

The system caching limitation: The DMCA also limits the availability of remedies for copyright infringement against a service provider for the intermediate and temporary storage of material on its system or network. This act is commonly known as 'system caching'. Section 512(b) provides that to avail itself of this limitation, the service provider should prove eight elements:

- ❏ The allegedly infringing material at issue in a given suit must have been uploaded or made available online by a person other than the service provider.

- ❏ The material must have been transmitted to a third party at the request of the third party.

- ❏ The material must have been temporarily stored on the service provider's network 'through an automatic technical process for the purpose of making the material available to users of the system or network' who requested the material from the person who originally made the content available.

- ❏ The material must have been transmitted by the service provider to subsequent users without modification.

- ❑ In making the cached copy, the service provider must have complied with 'rules concerning the refreshing, reloading, or other updating of the material when specified by the person making the material available online in accordance with a generally accepted industry standard data communications protocol for the system or network through which that person makes the material available'. This requirement does not apply if the person who originally posted or transmitted the content uses these rules 'to prevent or unreasonably impair the intermediate storage' which is the subject of the specific limitation.

- ❑ The service provider must not 'interfere with the ability of technology associated with the material' that returns information to the party which originally posted or transmitted it. This requirement applies only when the technology does not significantly interfere with the performance of the service provider's system or network or the intermediate storage of the material; is consistent with generally accepted industry standard communications protocols; and does not extract information from the service provider's system or network other than information that would otherwise have been available to the person who originally posted or transmitted the material, had subsequent users gained access to the material directly from that person.

- ❑ Where the party that originally posted, transmitted, or made available the infringing content conditioned access to the material on payment of a fee or provision of a password or other similar requirements, the service provider must permit access to the stored material 'in significant part' only to users of its system or network that comply with those conditions.

- ❑ When infringing material is posted without the authorization of the copyright owner, the service provider must respond 'expeditiously to remove, or disable access to, the material . . . upon notification'. This requirement applies only if the material was previously removed from the web site where it originated from, access to that web site has been disabled, or a court has ordered that the

material be removed or access be disabled, *and* the party giving notice includes a statement confirming these facts.

The hosting limitation: Section 512(c) provides that service providers may also enjoy a limitation on remedies for infringing material on their systems or networks at the instance of users if they can prove four elements:

- ❏ The service provider should either lack knowledge of the infringement or take appropriate measures once it has acquired such knowledge. This element is satisfied if the service provider does not have actual knowledge that material or an activity using the material is infringing; in the absence of actual knowledge, is not aware of facts or circumstances from which the infringing activity is 'apparent'; or upon learning of the infringement, acted 'expeditiously' to remove or disable access to the offending material.

- ❏ When the service provider has the right and ability to control an infringing act, it should not receive 'a benefit financially directly attributable to the infringing act'.

- ❏ The service provider should remove or disable access to infringing material upon receipt of proper notification.

- ❏ The service provider should designate an agent to receive notification of claimed acts of infringement and make available certain contact information about the designated agent on its web site and in a required filing with the United States Copyright Office.

The linking limitation: Section 512(d) provides that the remedies available against a service provider for copyright infringement are limited where the provider links or refers users to infringing material or activity by using 'information location tools, including a directory, index, reference, pointer, or hypertext link'. To qualify for this limitation, a service provider must meet the four requirements of the hosting limitation.

In exchange for the four limitations discussed out above, service providers agreed to a procedure in the DMCA commonly known as 'notice and takedown'.

In addition to the four limitations created for all service providers, Nonprofit Education Institutions (NEIs) may benefit from special rules that may immunize universities for the infringing acts of academic staff or graduate students which otherwise might be imputed to an NEI as employer, and prevent it from relying on these four limitations.

Section 512(e) provides that the acts or knowledge of a member of the academic staff or a graduate student will not be imputed to the 'public or other non-profit institution of higher education' ("NEI") that employs her if:

- ❏ the academic or graduate student is 'an employee of such institution . . . performing a teaching or research function';
- ❏ the academic's or graduate student's infringement does not involve the provision of online access to instructional materials that are or were required or recommended by that academic or graduate student within the proceeding three-year period for a course taught at such NEI;
- ❏ the NEI has not received more than two notifications, which claim copyright infringement by such academic or graduate student, within the three-year period; and
- ❏ the NEI provides all users of its system or network with informational materials that accurately describe and promote compliance with American copyright law.

The DMCA authorizes limited injunctive relief against service providers who comply with the Act's requirements to deny access to infringers and block infringing content. Section 512(j) provides that a court may grant only three specific forms of equitable relief against a service provider (other than a service provider that is also an NEI) which qualifies for the system caching, hosting, or linking limitations:

- ❏ an order restraining the service provider 'from providing access to infringing material or activity residing at a particular site on the provider's system or network';
- ❏ an order requiring a particular infringer's account or subscription to be terminated by the service provider in order to deny it access to the system or network; and
- ❏ such other injunctive relief as the court may consider necessary to prevent or restrain infringement of specific material at a particular online location, 'if such relief is the least burdensome to the service provider among the forms of relief comparably effective for that purpose'.

In the case of a service provider (that is not also an NEI) entitled to the 'mere conduit' limitation, a court may only enjoin such service provider from providing access to a subscriber or account holder who is using the service provider's services to engage in infringing activity by terminating its account or restraining it from providing access to infringing material at a particular online location outside the United States.

Injunctive relief may be granted only where a service provider is given notice and the opportunity to appear, except in the case of orders 'ensuring the preservation of evidence or other orders having no material adverse effect on the operation of the service provider's communications network'.

European models

Directive on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society

The European Commission has addressed the reproduction right in this Directive. Article 2 states:

> 'Members States shall provide for the exclusive right to authorize or prohibit direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part. . . .'

This provision covers the transient copying which occurs during the transmission of a work over the Internet. The proposed article 5(1) states that the folllowing reproductions shall be exempted:

> 'temporary acts of reproduction . . . which are transient or incidental [and] an integral and essential part of a technological process and whose sole purpose is to enable:
> (a) a transmission in a network between third parties by an intermediary, or
> (b) a lawful use of a work or other subject-matter to be made, and which have no independent economic significance. . . .'

While system caching does seem to be fall within the ambit of

article 5(1), OSP's which store protected works more or less permanently on their servers (such as hosting service providers) may still incur liability for direct copyright infringement.

E- Commerce Directive

This Directive applies to 'information society services' — those 'normally provided for remuneration, at a distance, by means of electronic equipment for the processing (including digital compression) and storage of data, and at the individual request of a recipient of services'.

The liability rules are modeled upon the 1997 *Informations- und Kommunikationsdienste-Gesetz* (Multimedia Act) in Germany. Unlike the DMCA, the Directive applies to both civil and criminal liability for copyright infringement.

Like the DCMA, the Directive limits the liability of OSPs —

- ❏ acting as mere conduits (article 12)
- ❏ engaging in system (proxy) caching (article 13), and
- ❏ acting as hosts (article 14).

Two observations:

- ❏ In respect of the system caching limitation under the Directive, it is not the knowledge of the unlawful nature of the cached material as such — rather the knowledge of removal at the initial source, or the fact that a competent authority has ordered such removal — that may prompt an OSP to block access to the cached copy.

- ❏ Although the Directive intends to limit civil and criminal liability in horizontal fashion, the exemption from liability is entirely uniform regarding hosting service providers.

Article 14(1)(a) sets a double standard — the absence of 'actual knowledge' and 'awareness'. The latter threshold applies only 'as regards claims for damages'. So a hosting OSP will incur criminal liability only if she has actual knowledge that the activity is illegal.

The Directive does not deal with information location tools or

educational institutions providing online services. It also does not contain any specific 'notice and takedown' procedures. Article 21 states that the need for proposals concerning the liability of OSP's for hyperlinks and location tool services, as well as 'take down notices' and attribution of liability following the taking down of content will be analysed by the Commission before 17 July 2003.

Conclusions

The basic principles which can be distilled from the above two models are, broadly, that:

- ❏ access providers ('mere conduits') are exempt from liability;
- ❏ in the absence of knowledge or 'awareness', hosting OSPs are not liable for damages;
- ❏ once hosting OSPs acquire the necessary knowledge or 'awareness', they are not liable for damages if they immediately disable access to the infringing content; and
- ❏ injunctive relief is available against OSPs.

Electronic rights management information

Article 12 of the WCT effectively obliges Contracting Parties to create a new form of indirect copyright infringement:

> '(1) Contracting Parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty or the Berne Convention:
>
> (i) to remove or alter any electronic rights management information without authority;
>
> (ii) to distribute, import for distribution, broadcast or communicate to the public, without authority, works or copies of works knowing that electronic rights management information has been removed or altered without authority.
>
> (2) As used in this Article, "rights management information" means information which identifies the

> work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public.'

Agreed Statement Concerning Article 12 of the WCT continues:

> 'It is understood that the reference to 'infringement of any right covered by this Treaty or the Berne Convention' includes both exclusive rights and rights of remuneration.
>
> 'It is further understood that Contracting Parties will not rely on this Article to devise or implement rights management systems that would have the effect of imposing formalities which are not permitted under the Berne Convention or this Treaty, prohibiting the free movement of goods or impeding the enjoyment of rights under this Treaty.'

Devices to circumvent copyright protection systems

Over the last few years software developers have been testing prototype copy protection systems for computer software and digital works. Equally substantial efforts have also gone into the circumvention of these protection systems, to the ultimate detriment of the copyright owner. As a result, various legislative steps have been taken to prohibit acts and, to a lesser extent, devices that circumvent these technical protection systems.

The obligation to act against the circumvention of such technical devices arises from article 11 of the WCT:

> 'Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.'

To place this provision in its context, Dean S Marks and Bruce H Turnbull ('Technical Protection Measures: the Intersection of Technological, Law and Commercial Licenses' [2000] *European Intellectual Property Review* 198) state:

> 'Advances in both analog and digital technology offer content owners new opportunities for distributing their works and offer consumers new means for receiving and enjoying these works. Such advances, however, also pose a serious challenge: how can works be protected in a world where: (I) duplication is easy and expensive, (ii) every copy made (whether from the original or another copy) is perfect, and (iii) the distribution to users around the world can be accomplished virtually cost-free and immediately over the Internet? This challenge is particularly acute in today's world where an individual consumer no longer simply receives works, but can also send and re-distribute such works to others. Further complicating the challenge of protecting works is the fact that copyrighted works now flow in an environment that encompasses consumer electronic devices, computers, satellites and global networks such as the Internet.'

Article 11, then, requires protection against the circumvention of technical devices which either

- ❑ restrict access to copyright material and copying of such material, or
- ❑ prevent further copies from being made, once copyright material has been downloaded into a user's computer.

While there is no doubting the need for some form of technological protection of this nature in the Internet context, this form of protection raises a core issue — 'how to leave room for those who are protected by a legal exception from infringement actually to secure access to material to which they are entitled' (WR Cornish *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* 4th ed (1999) § 13-87). Professor Cornish (idem § 13-85) illustrates the problem thus:

> '... the content provider may impose contractual or technical barriers in the way of obtaining copyright material. As a result both the initial downloading and subsequent deployment call for consideration.
>
> The provider may set out contractual conditions to which a person seeking access must agree (by "click-on") before gaining access to the material. Unless there are arrangements for electronic negotiation, the terms offered will ordinarily be in standard form: take or leave. What if they seek to take away from the user a freedom which falls within one of the fair dealing related exceptions in national law? Suppose that they insist upon a fee before the scholar makes a permanent copy of even the smallest part of a work; or a fee for any quotation in an examination paper; or specific permission before using any part for criticism or

review or for reporting current events?'

Article 6(1) of the EC Harmonization Directive requires Member States to provide 'adequate legal protection against the circumvention of any effective technological measures, which the person concerned carries out in the knowledge, or with reasonable grounds to know, that he or she is pursuing that objective'. Article 6(2) then obliges Member States also to provide adequate legal protection against the manufacture, import, distribution, sale, rental, advertisement for sale or rental, or possession for commercial purposes of devices, products, or components, or the provision of services, which —

- ❑ are promoted, advertised or marketed for the purpose of circumvention;
- ❑ have only a limited commercially significant purpose or use other than to circumvent, or
- ❑ are primarily designed, produced, adapted, or performed for the purpose of enabling or facilitating the circumvention of any effective technological measures.

The expression 'technological measures' connotes any technology, device, or component that, in the normal course of its operation, is designed to prevent or inhibit the infringement of any copyright, or any right related to copyright as provided by law (such as performers' rights), or the sui generis right (such as electronic database protection).

Technological measures are deemed to be 'effective' where the access to or use of a protected work or other subject matter is controlled through application of an access or other devices. Such measures may include decryption, descrambling, or other transformation of the work or other subject matter (see article 6(3)).

In the United States, the position is regulated by chapter 12 of the DMCA.

Conflict of laws and jurisdiction

The *Green Paper* (p 58) states:

> 'There is currently no sufficient international agreement on various issues fundamental to the protection of intellectual

> property rights in the electronic environment. To date multilateral and bilateral treaties prove to be the most feasible way to deal with trans-boarder intellectual property related issues
>
> 'However, the transnational nature of e-commerce suggests that several national laws could apply to a single act of transgression. This can create legal uncertainty that may unduly hamper the progress and the growth of e-commerce and the general flow of information, at the same time also facilitating resolutions of issues.'

Conflicts in substantive law and jurisdiction affecting copyright and the Internet have not yet been solved. Where infringement is alleged, complex principles of international private law will dictate where the action is to be instituted. It is important that the court be able to establish jurisdiction and to give effect to the judgment.

The limits upon a state's jurisdictional competence are matters of public international law. A state's jurisdictional competence contains two elements:

- ❑ A state has jurisdiction to make laws, known variously as a state's legislative, prescriptive, or subject-matter jurisdiction.

- ❑ A state has jurisdiction to enforce its laws — to give effect to a general rule or an individual decision by means of substantive implementing measures, known as a State's enforcement jurisdiction. (Refer to Study Unit 3 for a comprehensive discussion of jurisdictional issues.)

The twin issues of jurisdiction and the recognition and enforcement of foreign judgments have been the focus of the Hague Conference on Private International Law (see, generally, Peter H Pfund 'The Project of the Hague Conference to Prepare a Convention on Jurisdiction and the Recognition/Enforcement of Judgments in Civil and Commercial Matters' (1998) 24 *Brooklyn J of International Law* 7). On 30 October 1999, a Special Commission of the Conference adopted a Preliminary Draft Convention on Jurisdiction and Foreign Judgments in Civil and Commercial Matters. But at the most recent meeting of the Conference, the first part of the Nineteenth Diplomatic Session in June 2001 (the second part of the diplomatic session will be held in 2002), it was clear that there was little agreement on the

electronic commerce issues rased by the draft instrument (see further Barbara S Wellbury & Rufus J Pichler 'Electronic Commerce and the Proposed Hague Convention on Jurisdiction and Foreign Judgments in Civil and Commercial Matters — Putting the Cart before the Horse?' (2001) 2 *Computer und Recht International* 129).

Territoriality and copyright law

The *Green Paper* (p 58) notes:

> 'Traditionally, intellectual property rights are limited by territorial boundaries. The scope of the rights established in each country is determined by that country and the effect of those rights, as well as their protection, are, in principle, confined to the territory of the country. The trend is that the copyright law of the country, in which an act of infringement takes place, presides over the matter.'

Actions relating to the validity or infringement of copyright are, like patent and trade marks actions, of a local nature.

Actions for copyright infringement committed within a foreign jurisdiction must be brought before the courts of that jurisdiction. Generally, an action for copyright infringement must thus be brought in the country where the infringing action took place. Although a copyright owner's rights are recognized and enforceable in all Member States of the Berne Convention, the jurisdiction of national courts generally extend only to infringing acts committed within the territory.

Conclusion

You should now appreciate some of the implications of e-commerce on works in digital format that are protected by copyright. In particular, you should be able to understand the copyright implications of linking, framing, and the creation of mirror sites, understand the concept 'contributory infringement' and relate it to the liability of OSPs, and appreciate the evolution of two new forms of indirect copyright infringement — circumventing technical protection devices, and removing electronic rights management information.