

### Lecture 5 – Intellectual property

#### Introduction

Intellectual Property rights is a generic term referring to a set of more specific rights such as author's rights, copyright, moral rights, trade marks, patents etc. The fundamental aim of intellectual property law is to offer protection to the individual for his/her intellectual creation. The underlying idea is that this "creation" in economic terms represents an asset to which value can be attributed. The law aims to allow companies/individuals the right to protect these assets. Many companies have intellectual property without even being aware of it or understanding the need to take measures to protect it.

Intellectual property is big business: most products sell, not for what the physical product costs to make, but for a price that reflects heavy research costs (e.g. a new drug), or an ingenious idea (e.g. software) or spending on branding (e.g. cosmetics). Individuals and companies therefore seek to protect their intellectual property, especially from copying. Broadly speaking, intellectual property laws give companies and individuals the right to stop others from using or doing things with their property except under certain circumstances.

There are two main types of intellectual property rights: Industrial Property (inventions, trademarks and industrial designs) and copyright.

#### Industrial Property

Inventions: these are novel ideas that permit solution of specific technical problem. Protection may take the form of:

- a) Patents: these protect the idea, usually granting the patentee exclusive rights over exploitation of the invention. The period of patent protection is usually 15 - 20 years. Patents do more than prevent copying. They permit the owner of the patent to prohibit the making, using or selling of a covered invention even if it is independently created. In other words, the owner has exclusive rights for inventions that deal with the way things work usually for a period up to 20 years.
- b) Trade secrets rely on private measures to protect. Trade secret protection is available for almost any information of competitive value IF it can be kept secret. A trade secret action cannot be brought against anyone who independently creates the same information. Misappropriation of a trade secret only occurs when the information is obtained by, for example, industrial espionage or inducing an employee to breach a promise to keep the information confidential.

Trademarks (or brand names) are commercial indicators of source. They are marks to distinguish the goods and services of an enterprise. Most countries require registration of the mark. A trademark may be words, logos or other symbols that tell the consumers that the goods come from a particular company. They also can be sound or three-dimensional symbols such as McDonald's golden arches.

Industrial designs are the ornamental aspect of any useful article. To be afforded protection the design has to be original and novel, registration of the design is required, and protection usually lasts for 15 - 20 years.

The second major area of intellectual property rights and that of most applicability to the information industries is that of copyright.

## **Copyright**

Copyright covers literary, musical, artistic, photographic, cinematographic works, maps and technical drawings and now also computer software and databases. It is often denoted in works by the symbol © - however this symbol is not essential to guarantee copyright.

Copyright is the right conferred by law to enable creators of information works (literary, musical, artistic, software, broadcasts etc.) to benefit from their work. Such copyright material constitutes the main investment and assets of information providers and they will wish to protect their intellectual property, as without such protection there is no incentive to innovate and produce new information products and services. This implies that we need a legal structure that protects and encourages the production of copyright material. This is enshrined in Article 27 of the Universal Declaration of Human Rights:

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

The basic idea about copyright is that it protects the expression of the idea but not the idea itself. This protection covers the use of the work. In order to attract copyright protection a work need only be original or not a copy - it does not need to be novel. Copyright protection usually extends for 50 - 70 years beyond the life of the author

## **Economics of intellectual property rights**

The importance of intellectual property rights is not universally recognised. From a welfare economics perspective "ideas" can be considered as public goods which should be supplied at zero cost in order to maximise the welfare of society as a whole. On the other hand inventors require economic incentives in order to produce new inventions.

- The degree of protection afforded to intellectual property directly affects the profitability of R&D with implications for:
- flow of new products, processes, literary works direct employment and investment in R&D  
access to innovation
- New types of innovations e.g. biotechnology, software, information technology products/services may often not be covered explicitly by existing intellectual property laws in some countries

Take the case of patents. This form of protection for inventions is designed to protect and stimulate invention, to encourage firms or individuals to develop new things. It can be argued that invention leads to innovation (turning an invention into a marketable product) which in turn can stimulate economic growth and thus international competitiveness. So from a national perspective it can be argued that countries should try to stimulate (by affording protection to inventors for their ideas) the flow of inventions by passing and adhering to patent laws, which give the inventor a temporary monopoly over the use of the invention. It is a monopoly which prevents competitors from sharing that knowledge without payment.

Copyright protection can be viewed in a similar way as it gives the copyright holder a monopoly over the use of the copyright item. Countries with developed information resources and whose economies are increasingly dependent on wealth generated through the production of information and knowledge goods and services will be anxious to protect these assets. They will seek to protect intellectual property rights to encourage the growth and development of these wealth creating industries. GATT countries negotiated the Trade Related Aspects of Intellectual Property Rights or TRIPs. The issue however is a complex one which will assume even greater importance in the years to come as increasing amounts of information are converted/created in electronic form.

Many less developed countries feel they are being denied access to knowledge and ideas because they lack the ability to pay for such information/knowledge based products: they also feel that TRIPs is of direct benefit to the developed countries. For example, many argue that a large number of people who buy fake software would never have paid the full price and that in a way piracy can be defended as a form of promotion in that whole generations have grown used to a particular company's software (Microsoft) and will as economies expand be more likely to buy it legally. One also must consider the market for "altruistic" piracy. In these cases, unauthorised copies are not sold by organised criminal gangs but rather given away by people who do not consider it a crime in the same way as they might view theft of a physical product such as a car radio. Content providers face a challenge persuading consumers to recognise that stealing information is theft.

There are significant differences in copyright legislation across the world. Some countries have no legislation at all; others have outdated legislation which, for example, does not afford copyright protection to such things as computer software or online databases. There may be arguments over whether new laws to cover the new medium are needed. Even where legislation has been passed to cover the "new" products and services of the electronic information age, enforcement of the legislation is problematic and proof of illegal copying may be difficult to substantiate as copyright only affords protection to the expression of the idea and not protection of the idea itself.

From the point of view of corporate information management in those countries where copyright legislation protects these electronic information products steps need to be taken to ensure that illegal copying of software does not take place. Computer systems should be audited to ensure that only legitimately licensed software resides on them and that the appropriate number of licences exists for the number of copies of the software in use. In addition users need to be made aware of the law. In some companies for example using illegal software or making copies of software are disciplinary offences. Prosecutions of

companies are on the increase as software companies and database producers seek to protect their intellectual property and ignorance of the law is no excuse!

### **Copyright as a specific example of intellectual property protection**

Copyright confers two types of rights to the owner of the work. **Economic rights** cover rights over reproduction, adaptation and distribution of the work. **Moral rights** cover the right of publishing, the right of authorship and the right of integrity.

The Berne Convention for the Protection of Literary and Artistic Works, the oldest international agreement on copyright, defines the difference between economic and moral rights as:

“Independently of the author’s economic rights and even after transfer of said rights the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honour or reputation”

From this it can be clearly seen that while the economic rights of the author can be transferred to someone else (either by sale, waiver or licence), the moral rights always remain with the individual.

### **Economic rights**

These are the rights to control copying and are what are commonly referred to as copyright. Copyright focuses on the rights of the author (of a literary or artistic work) to prevent an unauthorised reproduction or copying of that work and the right to prevent unauthorised distribution. It covers reproduction, publishing, translating, adapting, disseminating, recording, filming, broadcasting, performing etc. In practice these rights are often “waived” or “sold” to someone else (typically a publisher). Thus copyright deals with the commercial aspect of intellectual property protection.

### **Moral rights**

These refer to the intellectual aspect of creation and are aimed at giving the author control over his work in terms of its innate characteristics and his authorship. These moral rights cannot be waived - they remain with the originator even if the economic rights have been sold to someone else. So the author has the right of ownership (*droit de paternité*) and the right to be recognised as the author of the work and the right to prevent the work being attributed to someone else. The right of integrity (*droit au respect de l’oeuvre*) gives the author the right to prevent alteration, distortion or mutilation of the work. This right could for example allow an author to refuse a summary/abstract of his work even in cases where the copyright had been waived to a database producer.

The duration of copyright protection is usually the life of the author plus seventy years from the end of the calendar year within which the author dies.

### **What copyright law needs to cover**

Any copyright legislation will need to detail the following:

- Definition of works entitled to protection
- Definition of the owner
- Description of the restricted acts reserved to the owner
- Definition of duration of rights
- Rules for dealing in the works
- Permitted uses
- Civil remedies for infringement
- Criminal remedies for infringement
- Effective enforcement
- Protection for non-national works

## **Copyright in the digital age**

In this increasingly global information based society the issue of copyright protection is one of increasing importance especially in respect of electronic information products and services.

The Internet poses particular challenges and is seen by some as one big copying machine. All copyrightable works are able to be digitised as computer technology can handle not just text, but sound, pictures and video in digital form. Once on the Internet copying of these is effortless, costless, widespread and immediate. In the past copying intellectual products has been time consuming and reproduction was poor. That is now changed. With digital copying all copies are as good as the original in terms of quality. Furthermore the Internet does not respect national borders.

The rapid growth of the Internet and the rise in multimedia information processing pose new challenges for copyright protection and exacerbate the tensions between creators of copyright material and users. On the one hand creators of software and information services like databases wish recompense for their effort but users may argue that prices are so high they resort to copying. The counter argument from producers is often that they need to recoup expensive research and development costs and prices are high because piracy is rife.

The creation of multimedia products is another problematic area. Obtaining copyright permission on a large number of pictures, sounds, video clips etc. may not only be expensive but very time consuming. Some see this as a barrier to the development of new products. Tools for the digital manipulation of pictures, sound and video pose a challenge - how much does something need to be altered before it is no longer a copy?

Digital formats as mentioned pose particular problems. The main economic rights which are conferred on the copyright holder relate to the right to authorise reproduction (i.e. making copies) and secondly to authorise distribution of those copies. These are the restricted acts reserved to the owner i.e. without the owner's permission no one else can copy or distribute copyright material. A problem arises with works which are in digital form. Is the electronic transmission of a copyright work reproduction or dissemination or both?

A number of other questions are also raised by the digital age. Copyright law makes a distinction between reproduction for public use (which can only be done with the copyright

holder's permission) and private use where, within certain limits, reproduction can take place without the copyright holders permission (the idea of "fair use"). So for example for the purposes of private study an individual student or lecturer can legitimately make a copy of a single article from an issue of a journal without first obtaining permission from the copyright owner. However the possibilities of going beyond "acceptable limits" for fair use are magnified once a work exists in digital form. A person could download a whole issue of an electronic journal or a whole database.

Another area concerns surfing on the Web. When a web page is accessed from a computer that information is downloaded into the client computer's RAM. Is this reproduction? Does it infringe copyright? Some lawyers would argue that it does, since material can be held in RAM for more than a transitory period and further the work may be held simultaneously in the RAMs of thousands of computers.

A particular problem arises in respect to databases. Although we may consider copyright work to be "artistic" or "intellectual", what of works which require a lot of effort to compile for example a collection of addresses or credit references? These may not appear to be particularly artistic or intellectual in terms of content but they have cost a lot to compile. Should such works be entitled to copyright protection (regardless of whether the actual contents of the database are covered by copyright)?

Opinions differ. In European Law databases do attract copyright protection, in the US they do not (though the contents of the database may in their own right be copyrightable). The UK has a Statutory Instrument, The Copyright and Rights in Databases Regulations 1997.

In most copyright law the distribution right covers the first sale of the copyright work but not subsequent sales. Thus the copyright holder controls the first sale of a book, but not any subsequent sale of it. Thus legally books can be sold a second, third, fourth time without any reference to the copyright holder. In a digital world the initial copy can be perfectly copied again and again. So if I download a digital copy of an article which I pay for can I then distribute a copy of this to others?

Another area of contention is that copyright law is based on national laws. The right to distribute copies of a work in one country does not allow those copies to be sold in another. Hence publishers "buy" territorial rights, but the Internet does not respect national boundaries. Even with physical copyright products like books, consumers in the UK can buy the US edition of a particular book and have it sent to them from e.g. amazon.com more cheaply than buying the UK copy of the book. The US edition of the book cannot, because of copyright law, be "sold" in the UK since that distribution right is reserved to the UK copyright holder.

For these reasons bodies like the European Union and the World Intellectual Property Organisation (WIPO) have been drawing up new laws which reflect the reality of the digital age. In general, the content producers/exporting countries are seeking to extend copyright protection to new forms of information products and services such as on-line databases to ensure that any electronic reproduction or distribution of a copyright work will require the permission of the copyright owner.

Thus copyright represents a good example of the complexity of developing information policy. It illustrates the inherent tension between producers and users of intellectual property. Different groups each have their own viewpoints. Publishers and rights owners, students/academics, the general public have competing interests. Those countries where the content industries are well established and contribute increasingly to economic growth will have different interests to pursue in international fora from those where such industries make a negligible contribution. The cost, price and value of information are highlighted when copyright issues come to the fore. Concern is expressed by some at consolidation within the content industries such that near monopoly positions occur. Whoever controls content controls the medium.

### **Further reading**

Copyright, Designs and Patents Act 1988

<http://www.legislation.gov.uk/ukpga/1988/48/contents>

UK copyright law – recent changes

<http://www.cilip.org.uk/cilip/advocacy-campaigns-awards/advocacy-campaigns/copyright/changes-uk-copyright-law-update>

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