

Gowers Review of Intellectual Property

November 2006

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FOREWORD

For many citizens, Intellectual Property (IP) is an obscure and distant domain – its laws shrouded in jargon and technical mystery, its applications relevant only to a specialist audience. And yet IP is everywhere. Even a simple coffee jar relies on a range of IP rights – from patents to copyright, designs to trade marks.

In the modern world, knowledge capital, more than physical capital, drives the UK economy. Against the backdrop of the increasing importance of ideas, IP rights, which protect their value, are more vital than ever.

The ideal IP system creates incentives for innovation, without unduly limiting access for consumers and follow-on innovators. It must strike the right balance in a rapidly changing world so that innovators can see further by standing on the shoulders of giants.

The Government's decision to commission this Review was an explicit recognition both of the growing importance of IP and of the challenges brought by the changing economic environment. In commissioning the Review, the Chancellor and the Secretaries of State for Trade and Industry, and Culture, Media and Sport asked me to establish whether the system was fit for purpose in an era of globalisation, digitisation and increasing economic specialisation.

The answer is a qualified 'yes'. I do not think the system is in need of radical overhaul. However, taking a holistic view of the system, I believe there is scope for reform to serve better the interests of consumers and industry alike. There are three areas in which the Review concentrates its recommendations to improve the UK framework for innovation:

- strengthening enforcement of IP rights, whether through clamping down on piracy or trade in counterfeit goods;
- reducing costs of registering and litigating IP rights for businesses large and small; and
- improving the balance and flexibility of IP rights to allow individuals, businesses and institutions to use content in ways consistent with the digital age.

Much IP policy is framed by European, and indeed global, treaties and agreements. I recognise that not all the recommendations are within the direct purview of the UK Government. However, I have not shied away from making recommendations with European or broader international import when they seemed necessary. Indeed, with the European Commission currently reviewing both the copyright acquis and the question of a Community patent, this is a timely point at which to put forward the Review's arguments.

I would like to express my thanks to all those who assisted me in producing this Review. Many individuals and organisations gave generously of their time to contribute insights, and in particular the great diversity and depth of responses to the Call for Evidence were invaluable. I owe a special debt to the Review team, who have supported me throughout: Richard Sargeant, Steve Coles, Alastair Cowie, Suzy Kantor, Nicola Kay, Stephen Rowan and Nathan Sansom.

I hope this Review provides sound recommendations on how the IP regime should respond to the challenges that it faces. Getting the balance right is vital to driving innovation, securing investment and stimulating competition. Lasting success will belong to those who get this right.



Andrew Gowers

E

EXECUTIVE SUMMARY

The changing context **E.1** Globalisation and technological advance are changing the shape of the world economy. Increased international trade and investment flows and the emergence of economies such as China and India create great new opportunities for advanced economies such as the UK, but also great challenges. The UK's comparative advantage in the changing global economy is increasingly likely to come through high value added, knowledge intensive goods and services. The Intellectual Property (IP) system provides an essential framework both to promote and protect the innovation and creativity of industry and artists.

Increasing importance of intangible assets **E.2** The increasing importance of knowledge capital is seen in its contribution to the value of firms. In 1984 the top ten firms listed on the London Stock Exchange had a combined market value of £40 billion and net assets of the same value. Advance twenty years and the asset stock of the largest firms has doubled while their market value has increased nearly ten times.¹ The difference in value is accounted for by intangible assets: goodwill, reputation and, most importantly, knowledge capital. Knowledge based industries have become central to the UK economy – in 2004 the Creative Industries contributed 7.3 per cent of UK Gross Value Added, and from 1997 to 2004 they grew significantly quicker than the average rate across the whole economy.² The pharmaceutical industry accounted for almost a quarter of the UK's total R&D expenditure in 2004. Innovative ideas create value, whether they are improved products, new brands or creative expressions. As a result, IP rights – the means by which these assets are owned – have become a cornerstone of economic activity.

Opportunities **E.3** Global and technological changes have brought undoubted opportunities for businesses and consumers. The erosion of global trade barriers has enabled companies to reach ever larger markets and gives consumers a wider range of products to choose from. Technological changes have enabled more 'open' models of innovation, with greater cross-fertilisation across firms and the ability to harness the creativity of consumers.

Challenges **E.4** However, while global and technical changes have given IP a greater prominence in developed economies, they have also brought challenges. Ideas are expensive to make, but cheap to copy. Ideas are becoming even cheaper to copy and distribute as digital technology and the Internet reduce the marginal cost of reproduction and distribution towards zero. As a result, the UK's music and film industries lose around twenty per cent of their annual turnover through pirated CDs and illegal online file sharing. Furthermore, global markets must contend with rights that remain largely national in scope.

Terms of reference **E.5** In response to the profound global changes affecting the IP system, the Chancellor of the Exchequer commissioned this Review in the 2005 Pre-Budget Report. The Review was charged with examining all the elements of the IP system, to ensure that it delivers incentives while minimising inefficiency. Its terms of reference were to consider:

- the way in which Government administers the awarding of IP rights and its support to consumers and business;
- how well businesses are able to negotiate the complexity and expense of the copyright and patent system, including copyright and patent licensing arrangements, litigation and enforcement; and

¹ *Wealth Creation in the Knowledge Economy*, Potter D., accessed at: <http://www.number-10.gov.uk/output/Page3051.asp>.

² *DCMS Creative Industries Economic Estimates*, DCMS, 2006.

- whether the current technical and legal IP infringement framework reflects the digital environment, and whether provisions for ‘fair use’ by citizens are reasonable.

E.6 The Review found the current system to be broadly performing satisfactorily. However, there are a number of areas where reform is necessary to improve the system for all its users. The Review therefore sets out a range of pragmatic recommendations, which can be grouped around three themes: first, stronger enforcement of rights; second, lower costs for business; and finally, balanced and flexible rights.

Stronger enforcement of rights

E.7 Counterfeit goods and piracy are damaging the UK’s creative industries, as well as threatening jobs. The Review recommends:

- consulting to ensure that an effective and dissuasive system of damages exists for civil IP cases. This will provide an effective deterrent to IP infringement;
- matching penalties in the physical and digital world for IP infringement. This will remove the current unjustifiable anomaly whereby infringement in the digital world carries softer penalties than infringement in the physical world. This is particularly important given that so much infringement now occurs via digital media; and
- giving Trading Standards the power and duty to enforce copyright infringement. This will ensure that preventing the sale of copyright infringing goods, for example counterfeit CDs, will become a duty of Trading Standards agencies throughout the country.

Lower costs for business

E.8 It is expensive to obtain and defend IP rights in the UK, and costs spiral when securing rights internationally. These costs are onerous for all businesses, and for SMEs in particular. The Review recommends:

- better provision of IP information to UK businesses at home and abroad. This will extend from greater information provided to firms on how to use IP strategically when they register at Companies House, through stronger support and better information via the Business Link network, to expert advice provided by UK Trade and Investment and the Patent Office for UK firms abroad;
- consulting to enable fast-track litigation to be used in IP cases. This should mean that capped fees, limited disclosure and time limits will apply to IP cases, greatly reducing the cost; and
- supporting the establishment of a unitary Community Patent (COMPAT). This will substantially reduce the cost of patent applications in Europe, which are currently twice as expensive as in the USA.

Balanced and flexible rights

E.9 Balanced and flexible rights should enable consumers to use material in ways that do not damage the interests of rights holders and will help ensure that citizens have trust in the system. They will enable cultural institutions to preserve our heritage, and help research institutes to further knowledge by using ideas protected by others. The Review recommends:

- proposing an ‘orphan works’ provision to the European Commission. This will make it easier for creative artists to re-use ‘orphan’ copyright protected material (for which no author can be found), thus unlocking previously unusable material;

- introducing a limited private copying exception, which will allow consumers to format shift legitimately purchased content, for example music from a CD to an MP3 player. This will allow consumers to use copyright protected material in a manner which does not damage the interests of rights holders;
- clarifying the research exception. This will create greater scope for research on protected material by universities and business and expand the stock of knowledge; and
- enabling libraries to copy and format shift master copies of archival works. This will prevent valuable cultural artefacts from deteriorating because they exist only on outdated formats.

The approach of the Review **E.10** The Review takes an evidence-based approach to its policy analysis and has supplemented internal analysis by commissioning external experts to examine the economic impact of changes to the length of copyright term on sound recordings, and the question of orphan works. Both of these reports are published alongside the Review. The Review also consulted widely with a range of stakeholders in industry, academia and the public sector. The formal Call for Evidence between March and April 2006 received over 500 responses. These are listed in Annex B, and those that were not submitted as confidential have been published on the Review website.

Structure of the Review **E.11** The remainder of the Review is structured into two broad sections. The first half comprises an explanation of what IP is and what it is for, an analysis of recent trends, and an assessment of how well the current system is performing. The second half considers:

- the **instruments** of the IP system (patents, copyrights, trade marks and designs), and makes recommendations to ensure they are balanced, coherent and flexible;
- the **operation** of these instruments, and makes recommendations to improve the way rights are awarded, used and enforced; and
- the **governance** of the IP system, and makes recommendations to improve IP-related bodies, such as the Patent Office and the courts.

The full list of recommendations follows.

E.12 Taken together, the package of measures the Review recommends will ensure that the UK has an IP system that meets the needs of all its users, and which is fit for the digital age.

List of recommendations in the Review

Instruments

Balance

Recommendation 1: Amend section 60(5) of the Patents Act 1977 to clarify the research exception to facilitate experimentation, innovation and education.

Recommendation 2: Enable educational provisions to cover distance learning and interactive whiteboards by 2008 by amending sections 35 and 36 of the Copyright, Designs and Patents Act, 1988 (CDPA).

Recommendation 3: The European Commission should retain the length of protection on sound recordings and performers' rights at 50 years.

Recommendation 4: Policy makers should adopt the principle that the term and scope of protection for IP rights should not be altered retrospectively.

Coherence

Recommendation 5: UKPO should undertake joint working with African patent offices from mid-2007, with the aim of:

- helping them to take advantage of the flexibilities currently existing in the WTO/TRIPS architecture where appropriate; and
- encouraging them to make positive use of IP rights through dissemination of information in patents.

Recommendation 6: Encourage the international community under the auspices of the WTO to review the TRIPS status of the least developed countries prior to 2016 and consider whether further extension for reaching TRIPS compliance would be appropriate.

Recommendation 7: Government should encourage WTO members to ratify the amendments to TRIPS to make importation of drugs easier and cheaper.

Flexibility

Recommendation 8: Introduce a limited private copying exception by 2008 for format shifting for works published after the date that the law comes into effect. There should be no accompanying levies for consumers.

Recommendation 9: Allow private copying for research to cover all forms of content. This relates to the copying, not the distribution, of media.

Recommendation 10a: Amend s.42 of the CDPA by 2008 to permit libraries to copy the master copy of all classes of work in permanent collection for archival purposes and to allow further copies to be made from the archived copy to mitigate against subsequent wear and tear.

Recommendation 10b: Enable libraries to format shift archival copies by 2008 to ensure records do not become obsolete.

Recommendation 11: Propose that Directive 2001/29/EC be amended to allow for an exception for creative, transformative or derivative works, within the parameters of the Berne Three Step Test.

Recommendation 12: Create an exception to copyright for the purpose of caricature, parody or pastiche by 2008.

Recommendation 13: Propose a provision for orphan works to the European Commission, amending Directive 2001/29/EC.

Recommendation 14a: The Patent Office should issue clear guidance on the parameters of a 'reasonable search' for orphan works, in consultation with rights holders, collecting societies, rights owners and archives, when an orphan works exception comes into being.

Recommendation 14b: The Patent Office should establish a voluntary register of copyright; either on its own, or through partnerships with database holders, by 2008.

Recommendation 15: Make it easier for users to file notice of complaints procedures relating to Digital Rights Management tools by providing an accessible web interface on the Patent Office website by 2008.

Recommendation 16: DTI should investigate the possibility of providing consumer guidance on DRM systems through a labelling convention without imposing unnecessary regulatory burdens.

Recommendation 17: Maintain policy of not extending patent rights beyond their present limits within the areas of software, business methods and genes.

Operations

Award

Recommendation 18: The Government should encourage the EPO to pursue work sharing with the USPTO and JPO.

Recommendation 19: The Patent Office should pursue work sharing arrangements with EPC member States, and trilaterally with the USA and Japan to reduce cross-national duplication of effort.

Recommendation 20: Continue to support and expedite the establishment of a single Community Patent through negotiations in Europe.

Recommendation 21: Government should support the London Agreement as an interim step towards COMPAT, and as an improvement in its own right.

Recommendation 22: Maintain a high quality of patents awarded by increasing the use of 'section 21' observations: streamlining procedures and raising awareness.

Recommendation 23: The Patent Office should conduct a pilot of Beth Noveck's Community Patent Review in 2007 in the UK to determine whether this would have a positive impact on the quality of the patent stock.

Recommendation 24: The Patent Office should develop stronger links with universities and other research institutions, including through short placements, to ensure that IP examiners are aware of recent developments in technology.

Recommendation 25a: Introduce accelerated grant process for patents to complement the accelerated examination and combined patent search and examination procedures.

Recommendation 25b: Introduce fast track registration for trade marks.

Use

Recommendation 26: The Patent Office should provide comprehensive information on how to register and use IP rights for firms registering with Companies House.

Recommendation 27: Improve SME business IP support by establishing formal collaboration between the Patent Office and Business Link and by conducting a pilot replicating the French 'IP Genesis' scheme.

Recommendation 28: Investigate how best to provide practical IP advice to UK firms operating in foreign markets, in coordination with industry bodies, the Patent Office and UK Trade and Investment.

Recommendation 29: The Patent Office should develop 'Business-to-Business' model IP licences through industry consultation, and assessment of the Lambert model licences.

Recommendation 30a: The Patent Office should publish and maintain an open standards web database, linked to the EPO's esp@cenet web database, containing all patents issued under licence of right.

Recommendation 30b: The Patent Office should publish and maintain an open standards web database, linked to esp@cenet containing all expired patents.

Recommendation 31: DTI should consider whether guidance for firms on reporting of intangible assets could be improved, including the provision of model IP reports.

Recommendation 32: Form a working group with Patent Office, RDA and Business Link representation, to identify and promote best practice to maximise the use of effective schemes nationwide.

Recommendation 33: The Review invites the OFT to consider conducting a market survey into the UK collecting societies to ensure the needs of all stakeholders are being met.

Recommendation 34: Increase cooperation between the UK Patent Office, the Office of Fair Trading and the Competition Commission to ensure that competition and IP policy together foster competitive and innovative markets for the benefit of consumers.

Enforcement

Recommendation 35: The Patent Office should continue to raise public awareness, focussing in particular on the wider impacts of IP crime, and the exceptions to rights.

Recommendation 36: Match penalties for online and physical copyright infringement by amending section 107 of the CDPA by 2008.

Recommendation 37: Monitor success of current measures to combat unfair competition in cases relating to IP, and if changes are found to be ineffective, Government should consult on appropriate changes.

Recommendation 38: DCA should review the issues raised in its forthcoming consultation paper on damages and seek further evidence to ensure that an effective and dissuasive system of damages exists for civil IP cases and that it is operating effectively. It should bring forward any proposals for change by the end of 2007.

Recommendation 39: Observe the industry agreement of protocols for sharing data between ISPs and rights holders to remove and disbar users engaged in 'piracy'. If this has not proved operationally successful by the end of 2007, Government should consider whether to legislate.

Recommendation 40: DTI should consult on measures to tighten regulation of occasional sales and markets by 2007.

Recommendation 41: The Home Office should recognise IP crime as an area for Police action as a component of organised crime within the updated National Community Safety Plan.

Recommendation 42: Give Trading Standards the power to enforce copyright infringement by enacting section 107A of the Copyright, Designs and Patents Act 1988 by 2007.

Recommendation 43: Strengthen Practice Directions, to provide greater encouragement for parties to mediate, in particular this should raise the profile of mediation with judges.

Recommendation 44: The Patent Office should consult with the Judicial Studies Board to determine the extent to which the complexity of IP law may give rise to a training need for judges and magistrates and their legal advisers.

Recommendation 45: Support the establishment of a single EU court to adjudicate cross-border IP disputes by promoting the European Patent Litigation Agreement.

Governance

Recommendation 46: Establish a new Strategic Advisory Board for IP policy (SABIP), covering the full range of IP rights, reporting to the minister responsible, by 2007. The Board should be drawn from a wide range of external experts as well as key senior policy officials from relevant government departments, and should be based in London. £150,000 should be allocated to fund the secretariat by the Patent Office.

Recommendation 47: The Patent Office should provide an annual IP strategic analysis fund of £500,000 managed by the policy advisory board in consultation with the IP Policy Directorate.

Recommendation 48: Patent Office should introduce a clear split of responsibility between delivery and policy directorates.

Recommendation 49: Encourage IP policy officials to obtain policy experience outside the IP Policy Branch, and support short industry placement schemes for policy staff.

Recommendation 50: Realign UK Patent Office administrative fees to cover costs more closely on Patent Office administrative operations (e.g. granting patents).

Recommendation 51: Increase the transparency of Patent Office financial reporting.

Recommendation 52: Ensure that under current arrangements in the Patent Office, there is a clear internal separation of responsibility between the granting of rights and disputes over their ownership or validity. This should be achieved by clearly separating the line management structures.

Recommendation 53: Change the name of the UK Patent Office to the UK Intellectual Property Office (UK-IPO) to reflect the breadth of functions the office has, and to dispel confusion.

Recommendation 54: DCA should review the issues raised in relation to IP cases and the fast track, and seek views in the context of its forthcoming consultation paper, which will consider the case track limits, and how the claims process can be made more timely, proportionate and cost-effective. It should bring forward any proposals for change by the end of 2007.

DEFINITION

WHAT IS INTELLECTUAL PROPERTY?

1.1 Property is simply a bundle of rights to own, use and prevent others from using something, for example a plot of land, a car or a house. Intellectual Property (IP) is a bundle of rights that protects applications of ideas and information that have commercial value.¹ IP rights give creators certain exclusive rights over the knowledge and information they create (e.g. the text of a book) to prevent others using it without permission.

Box 1.1: IP resides in everyday objects



The contents of a jar, the lid and seal may be protected by **patents**. Registered and unregistered **design rights** can also protect the lid and shape of the jar. **Copyright** can protect the artwork in labels, and **trade marks** can protect the shape of the jar, labels, colours used, and brand names.

Source: The 'NESCAFÉ Gold Blend' image is reproduced with the kind permission of Société des Produits Nestlé S.A.

Knowledge is non-rivalrous

1.2 Unlike physical property, knowledge, ideas and creations are partial '**public goods**'. Knowledge is inherently non-rivalrous. That means one person's possession, use and enjoyment of the good is not diminished by another's possession, use and enjoyment of the good. As Thomas Jefferson said: "he who receives an idea from me, receives instruction himself without lessening mine ... as he who lights his taper at mine, receives light without darkening me".² By contrast, physical property is typically rivalrous, with one person's consumption preventing simultaneous consumption by another. Privatising property gives rights over it to a legal individual, creating a legal barrier which prevents others from accessing it. IP confers a set of time-limited legal rights over the expression and use of certain ideas. Although the knowledge protected by the IP remains non-rivalrous, the legal force of IP rights prevents others from using it.

WHY DO WE NEED INTELLECTUAL PROPERTY?

1.3 IP serves three principal functions: to incentivise knowledge (and hence wealth) creation; to accumulate knowledge in a culture; and to protect a distinctive identity. But those rights must be balanced in order to achieve these three aims. Listening to the radio, buying a branded product, taking a medicine and storing food in a fridge are all possible because inventions and creations have been incentivised through the IP system.

¹ *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights*, Cornish W. and Llewelyn D., 2003.

² *Letter to Isaac McPherson*, Jefferson T., 13 August 1813.

IP rights provide incentives to create knowledge

I.4 Ideas are expensive to produce but cheap to copy. The fixed costs of producing knowledge are high. Hollywood blockbusters can cost hundreds of millions of dollars to make and R&D for drugs can cost billions of pounds. At the same time, the marginal costs of production, both for drugs and for digital files, are very low. Without protection, others will free ride on the creator's initial investment and sell the invention or creation at a much lower cost. If the innovator knows that someone else can do this easily, there will be no financial incentive to innovate in the first instance. Clearly, wealth generation is only one motivation for creativity. For example, Wilfred Owen's poetry written during the First World War was motivated by a desire to communicate his experience of war. But without protection there would be no economic incentive to fund innovation or creativity.

I.5 IP rights create legal barriers to accessing or using knowledge or information by granting exclusive rights to inventors and creators. These exclusive rights prevent others from free riding on investment and enable the rights owner to exploit their knowledge or creativity on the market – thus creating incentives to innovate.

IP rights help to develop public knowledge

I.6 As every creator 'stands on the shoulders of giants', it follows that the more knowledge that is available, the more others can develop and progress. Much of the value from the inventions and creativity protected by IP can only be realised if that knowledge is widely accessible to others. To secure an IP right, the idea must be made public, thereby adding to the common stock of knowledge available for progress.

I.7 Largely for this reason, IP rights are more limited than physical property rights. Patent applications are required to 'lay open' the details of an invention as a condition of grant and the requirement of disclosure enables others to improve upon existing inventions. After the patent protection ends, the invention becomes public. For example, Aspirin was patented in 1899 by the pharmaceutical company Bayer and became a proprietary drug for treating headaches. The structure of the molecule was published along with the patent, but only the company owning the patent had the right to manufacture the drug. The patent expired in 1917 and its formula is now publicly and freely available, allowing research, manufacture or sale of Aspirin by anyone. If IP rights do not sufficiently secure the ownership of the invention, either the investment will not be made or alternative tools, such as trade secrets, will be used. In either case, the public stock of knowledge available for future inventors and creators is diminished.

The costs of IP and the need for balance

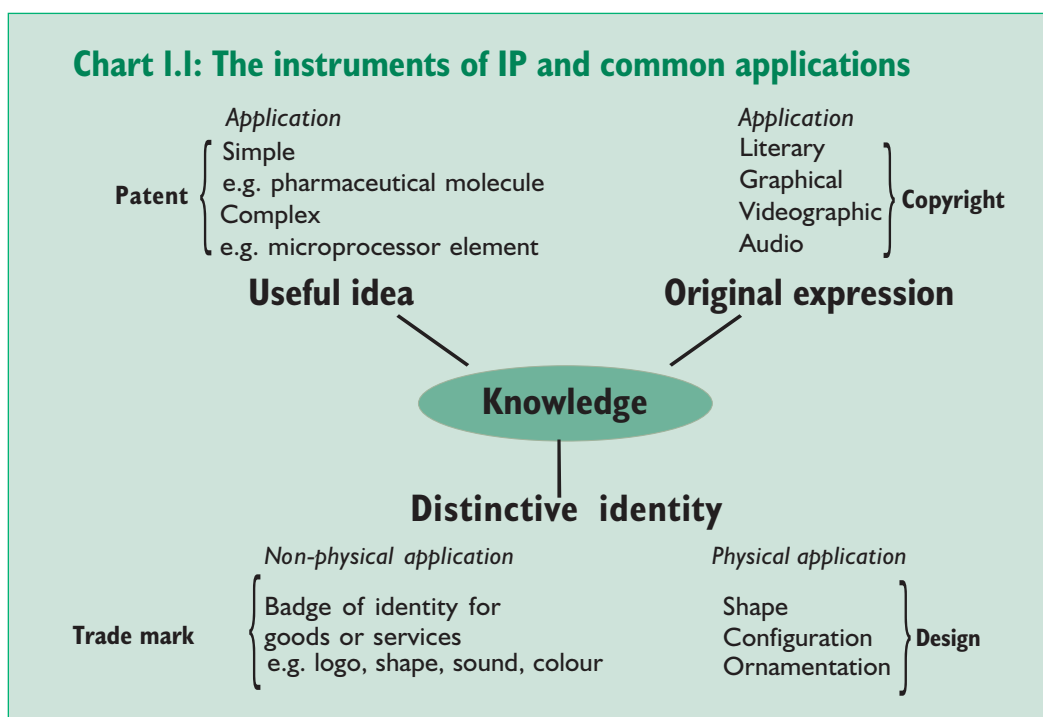
IP rights entail a trade-off

I.8 The very essence of IP rights entails a trade-off. On the one hand, IP rights provide economic incentives to innovate, but on the other, the exclusive rights that they confer to achieve this allow monopoly prices and associated welfare losses and prevent access by other innovators. In the short run, this information is largely privatised. In the long run, information protected by IP rights falls into the public domain and enables follow-on innovation. So there is a trade-off between incentives on one side and costs to consumers and limited access for follow-on innovators on the other. It is therefore crucial to have the right balance in the system.

I.9 Achieving this balance is made more difficult by the vocabulary used to discuss IP policy and practice. Copyright infringement through unauthorised copying and distribution of music and video across the Internet is likened to stealing by some, and to sharing by others. Those who seek to prevent others from using a patented invention without permission are branded 'trolls'. Those who copy and distribute material illegally are called 'pirates'. And the problem of 'orphan' works, which arises where copyright owners are untraceable, perhaps provokes an easy sympathy.

WHAT ARE THE FORMS OF INTELLECTUAL PROPERTY?

I.10 Several different forms of IP rights have evolved to protect different applications of knowledge. The four most common are patents, copyright, designs and trade marks; Chart 1.1 summarises the applications to which different rights apply. In practice the situation is more complex, encompassing different forms of a right (e.g. unregistered and registered designs), and some other rights that are of their own kind (e.g. semi-conductor rights). These rights are described in more detail below.



Patents protect useful ideas

I.11 A patent is a set of exclusive rights granted by the state to a person for a fixed period of time (twenty years in the UK) in exchange for the regulated, public disclosure of certain details of an invention. The exclusive right granted to a patentee is a negative right that prevents others from making, using, selling, offering to sell or importing the claimed invention. However, the right itself does not give the patentee the right to make, use or sell the invention, and the patentee must still comply with other laws and regulations. For example, a patent on a drug does not give the right to sell that drug in the UK without a licence from the Medicines and Healthcare Products Regulatory Agency or the European Commission. Products eligible for patent protection must:

- be novel; the invention must never have been made public in any way, anywhere in the world, before the priority date (normally the date on which an application for a patent is filed);
- involve an inventive step; an invention involves an inventive step if, when compared with what is already known, it would not be obvious to someone skilled in the relevant art;
- be capable of industrial application; an invention must be capable of being made or used in some kind of industry; and

- not be 'excluded'; an invention is not patentable if it is: a discovery; a scientific theory or mathematical method; an aesthetic creation such as a literary, dramatic or artistic work; a scheme or method for performing a mental act, games or business methods; the presentation of information; or a computer program; but these things are only excluded when the claim relates to them 'as such'.

1.12 The requirements that an invention must meet in order to be patentable aim to achieve the balance between access and incentive described above. For example, a mathematical theory might be useful and capable of industrial application, as in recent advances in number theory for cryptography, but it would be unpatentable because of the potential benefits that might accrue from the basic 'building blocks' of research being publicly available.

History of patents

1.13 Patents have evolved over many years. The earliest known English patent for an invention was granted by Henry VI to John of Utynam in 1449. The patent gave John a twenty year monopoly for a method of making stained glass, required for the windows of Eton College. Under the Tudors it became common practice for the Crown to grant monopolies for trades and manufacturers, including patents for invention. Public disclosure for patents became a general requirement in the eighteenth century, and the Patent Act 1902 instituted a limited examination into the novelty of the invention before a patent was granted. The principal piece of domestic legislation currently governing patents is the Patents Act 1977.

Copyright protects original expression

1.14 Where a work is protected by copyright it cannot legally be reproduced, distributed, communicated to the public, lent, rented out or publicly performed without the consent of the owner. Copyright subsists in a wide range of creative or artistic forms or 'works', including poems, plays and other literary works, movies, choreographic works, musical compositions, audio recordings, paintings, drawings, sculptures, software, radio and television broadcasts.

1.15 There is no official register for copyright in the UK. Copyright comes into effect automatically and without any necessary process as soon as something that can be protected is created and 'fixed' in some way, e.g. on paper, on film, as a sound recording, or as an electronic record on the Internet. Copyright law covers the way in which the work is expressed, rather than the idea behind the work. So Dan Brown's *The Da Vinci Code* was recently found not to have infringed the copyright of an earlier book which contained many of the theories found in *The Da Vinci Code*. Drawing on ideas of other copyrighted works does not infringe those copyrights.

1.16 Exceptions to copyright exist to rectify two problems. The first is transaction costs. There are uses of copyright protected material for which it would be too costly and too time consuming to clear the rights, for example in a book review. Second, there are issues of equity. Copyright prevents the copying and communication of literary works. In the absence of exceptions, copying a text into Braille would be infringing copyright. To deal with such cases 'fair dealing' legislation exists, which creates a space in which it is not illegal to infringe copyright. Exemptions include: news reporting and criticism; copying for blind users; copying for non-commercial private research under library privilege; copying for preservation; and copying and communication for education.

History of copyright

1.17 Copyright was first established in the Statute of Anne in 1710, which declared that copyright comes into existence with the act of composition by an author³ and is accorded to the author. The author could then transfer their right to a publisher for fourteen years, which could be extended for another fourteen years should the author still be alive. In 1774, the House of Lords ruled in *Donaldson v. Beckett* that perpetual copyright was illegal: they

³ *The Reading Nation in the Romantic Period*, St Clair W., 2004.

concluded that no natural law of copyright existed and that copyright was a purely statutory right created for the utilitarian purpose of encouraging literary efforts.⁴ However, throughout the nineteenth and twentieth centuries, copyright was extended and the scope of protection was broadened under pressure from publishers and as a result of international harmonisation. The principal piece of domestic legislation currently governing copyright is the Copyright, Designs and Patents Act 1988.

Trade marks protect distinctive identity **1.18** A trade mark is a badge of origin for goods or services; it can be a word, name, logo, colour, sound or shape. Once registered it gives the right to prevent others from using the same or similar marks on the same or similar products. By providing a distinctive identity for a product or service, trade marks lower the search costs for consumers by providing them with information about the nature and quality of the product; this also gives brands an incentive to build up good reputations and to develop brand loyalty.

1.19 Trade marks lose protection when they cease being used or become generic, i.e. when a brand name comes to stand for a general class of items. For example ‘escalator’ and ‘gramophone’ were both marks that were afforded protection. In Austria, Sony no longer has exclusive rights to the term ‘Walkman’, and in Australia ‘Linux’ is no longer eligible for protection. Firms are keen for their trade marks not to become generic: Google recently wrote to media outlets warning against inappropriate use of its trade mark for fear of losing protection for its brand.

1.20 Marking of goods for various purposes, including distinguishing them from those of other traders, dates back to ancient times. In the nineteenth century people began to think of marks, which had become distinctive to a trader’s goods and so attracted valuable goodwill, as a type of property. The Trade Marks Act 1905 gave the first statutory definition of a ‘trade mark’. The principal legislation governing UK trade marks is the Trade Marks Act 1994.⁵

Designs protect graphical identifications **1.21** A registered design protects the appearance of the whole or part of a product, including its shape, configuration and ornamentation. Such protection lasts up to a maximum of 25 years. To qualify for registration, a design must be new and have individual character, which means that the overall impression it produces on an informed user of the design must differ from the overall impression produced on such a user by any design which has already been made available to the public. Examples include floral or other decorative patterns, or the shape of a product.

History of trade marks **1.22** Design law was originally introduced with the Designing and Printing of Linen Act in 1787. This gave the owner two months’ exclusivity in the printing of designs on linen and other fabrics. The Copyright and Design Act 1839 increased protection to every new or original design and introduced a system of registration. Since then, the boundaries of design protection have been gradually extended. In the UK registered designs are governed by the Registered Designs Act 1949 and unregistered designs by Part 3 of the Copyright, Designs and Patents Act 1988. In addition, a Community Design right (both registered and unregistered) was introduced by Council Regulation 6/2002 on the Community Design. The Community regime has begun to supplant the domestic design right as a way of protecting designs.

⁴ (1774) 4 EURR 2407 Law Professors’ Amici Brief in “MPAA v. 2600” Case Brief Amicus Curiae in Support of Defendants-Appellants, Supporting Reversal; Universal v. Reimerdes (Jan. 26, 2001) see Understanding the Copyright Clause, Patterson L.R., *Journal of the Copyright Society*, 2000.

⁵ In 1995 the European Community introduced Community Trade Marks with (EC) Regulation No. 40/94 on the Community Trade Mark.

Sui generis rights protect specific types of inventions **I.23** The rights described protect a broad range of innovations and creations. For some applications, such as plant varieties, semi-conductor topographies and databases, separate, specific rights, known as sui generis, or of their own kind rights, have been developed which better suit the attributes of those applications and the needs of the industry.

WHO USES INTELLECTUAL PROPERTY?

I.24 In short, everyone uses IP. The Review's Call for Evidence elicited over 500 responses from industry, academia, creators, inventors, consumer groups and members of the public.

I.25 Industries such as pharmaceuticals, biotechnology and high-tech rely heavily on patent protection to produce commercially viable products. Universities may patent inventions created in laboratories, and license technology to commercial companies. IP forms a link between those who invent and those who wish to bring new products to market.

I.26 The creative industries use IP to protect against the misuse of the expression of ideas and works of art. In particular, there has recently been a great deal of attention given to the downloading of music, and to a lesser extent films, and to protecting artists against copyright infringement. There are many other owners and users of copyright who gain permission from the artist to use works in films, television programmes and so on. A rise in user-led innovation, which allows users to both use and create artistic products, has driven a rise in creative outputs.

I.27 Consumers benefit from IP not only from the stream of innovative products and inventions and creativity that would not otherwise be created by firms, but also from the rights that protect the identities of well known goods and services. Trade marks act as signposts of quality, preventing other firms passing off one make of good as being the same as another.

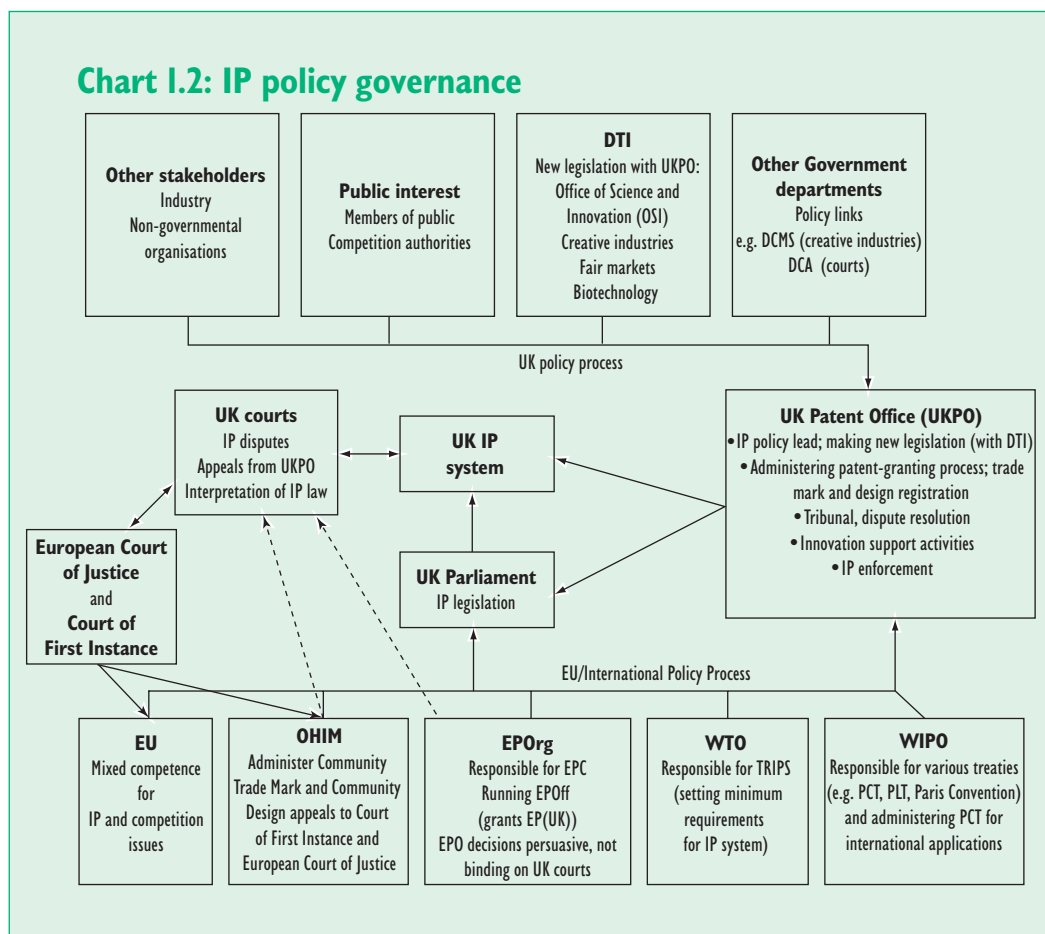
I.28 Increasingly, firms are using overlapping IP rights to protect their products. For example, new bands, whose artistic output will be protected by copyright, will often trade mark their name so that when their works fall out of copyright protection, their brand will still entitle their estates to some remuneration.

HOW IS INTELLECTUAL PROPERTY GOVERNED?

I.29 A web of UK, EU and international bodies manage the framework for the IP rights described above, and the operations associated with those rights (e.g. examining the novelty of a patent claim). The following sections outline the various UK, European and international bodies responsible for developing IP policy.

IP governance in the UK

I.30 The current UK IP policy governance map is complex, with policy divided between UK processes and EU/international processes. Within the different IP rights of patents, copyright, trade marks and designs, some aspects are purely within national competence, some purely within EU competence and some are a mixture of the two. Chart 1.2 shows the current UK IP governance map.



The Patent Office I.31 The UK Patent Office is an Executive Agency of the Department of Trade and Industry (DTI), and since 1991 has been a Trading Fund. The Patent Office is responsible for all the main IP instruments, and not just for patents as its name implies. The principal functions of the Patent Office are:

- **award:** granting UK patents as well as registering UK trade marks and designs;
- **awareness:** responsibility for raising awareness of IP-related issues among businesses and consumers;
- **policy:** advising ministers on IP policy;
- **tribunal function:** Patent Office has a role in deciding disputes in respect of patents, trade marks and both registered and unregistered design rights; and
- **enforcement:** leading the development of the UK IP crime strategy.

I.32 The function and organisation of the Patent Office is described in greater detail in Chapter 6.

IP governance in Europe

I.33 Much domestic legislation over the past 30 years has been driven by UK compliance with EU and international obligations, such as Patents Acts in 1977 and 2004, to bring the UK into line with the European Patent Convention.

The European Patent Organisation **I.34** The European Patent Organisation was created in 1977 to grant patents in Europe under the European Patent Convention of 1973. The European Patent Organisation has two organs: the Administrative Council, which acts as the legislative body; and the European Patent Office (EPO) in Munich, which acts as the executive body. The Administrative Council is made up of members of the contracting states and is responsible for overseeing the work of the Office, ratifying the budget and approving the actions of the President of the Office. The EPO grants European patents for the Member States of the European Patent Convention. The EPO provides a single patent grant procedure, but not yet a single patent from the point of view of enforcement. Hence the patents granted are not European Community patents or even Europe-wide patents, but a bundle of national patents.

European Community **I.35** The UK's IP laws have now been harmonised to a substantial degree by EU Directives. Indeed, the substantive law of registered designs and registered trade marks is now almost entirely determined at the Community level.⁶ In relation to copyright, the harmonisation is nowhere near as complete, nevertheless the term of copyright⁷ and most exclusive rights are harmonised⁸ as is the maximum scope of the exceptions⁹ as well as many other aspects of copyright law. The Community has not been so active in the area of patent law, although it has harmonised the treatment of biotechnological inventions¹⁰ and tried to do the same for computer implemented inventions.¹¹ In recent years it has also set minimum standards in relation to the civil enforcement of IP rights¹² and is presently trying to do the same for criminal enforcement.

International IP governance

WIPO **I.36** The World Intellectual Property Organization (WIPO) began in 1893 as BIRPI (Bureaux Internationaux Réunis pour la Protection de la Propriété Intellectuelle), or the International Office for the Protection of IP. It brought together the early conventions on patents and copyright harmonisation, namely the Paris Convention for the Protection of Industrial Property (1883) and the Berne Convention for the Protection of Literary and Artistic Works (1886).¹³ It was reconstituted in 1974 as a UN agency. WIPO serves as a body for negotiating and managing the various international IP treaties. It now administers a number of important treaties in addition to Paris and Berne. Of these other treaties, the UK is a party to the (Rome) International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisation (1961)¹⁴ and has agreed to become a party to the WIPO Copyright Treaty (WCT) and the WIPO Performance and Phonograms Treaty (WPPT). The effect of these conventions and treaties is to require the UK to provide national treatment (meaning the same treatment for foreigners and nationals) and certain minimum standards to nationals of other contracting states. These standards include:

⁶ Directive 89/104/EC to approximate the laws of trade marks effectively harmonised substantive trade mark law, leaving only minor matters and procedural matters to Member States. Similarly, Directive 98/71/EC on the legal protection of designs did much the same for designs.

⁷ Directive 93/98/EEC harmonising the term of protection of copyright.

⁸ See Directive 92/100/EEC on rental and lending right and certain related rights as well as Directive 2001/29/EC on copyright in the information society.

⁹ Article 5 of Directive 2001/29/EC.

¹⁰ Directive 98/44/EC on the legal protection of biotechnological inventions.

¹¹ The proposal was eventually defeated by the European Parliament in July 2005.

¹² Directive 2004/48/EC on the enforcement of intellectual property rights.

¹³ The UK is also a party to the UNESCO Universal Copyright Convention (last revised 1971).

¹⁴ The UK is also party to the less significant Convention for the Protection of Producers of Phonograms Against Unauthorised Duplication of their Phonograms (1971).

- the minimum term of copyright and related rights;
- the minimum rights that must be granted to authors, performers, broadcasts and phonogram producers; and
- the maximum scope of the exceptions that are permitted in relation to certain rights.

I.37 In addition, WIPO plays a key role in the administration of the Patents Cooperation Treaty system, the Madrid Agreement and Protocol for trade marks and the Hague Agreement for designs. These treaties provide a mechanism for making a single application for protection of patents, trade marks and designs. Although in each case the application leads to a bundle of national rights.

I.38 The UK makes representations to WIPO through the Patent Office. The objectives of WIPO are to:

- promote the protection of IP throughout the world through cooperation among Member States and, where appropriate, in collaboration with any other international organisation; and
- ensure administrative cooperation among the unions.¹⁵

WTO I.39 World Trade Organization (WTO) involvement in IP is through the Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS), which was agreed at the Uruguay Round of the WTO negotiations. It came into effect in 1995 with the overall objective of reducing “distortions and impediments to international trade, promotion of effective and adequate protection of IP rights and ensuring that measures and procedures to protect IP rights do not themselves become barriers to legitimate trade”. Its principal areas of competence are:

- standards – TRIPS sets out minimum standards in relation to the subject matter that must be covered by each type of IP right as well as the minimum term for trade marks and patents; it also sets out the maximum scope of permissible exceptions. It requires all countries to come up to compliance with substantive elements of Berne and Paris, with exception to terms of Berne on moral rights;
- enforcement – certain general principals of enforcement are laid down for all countries so that rights holders can effectively enforce their rights; and
- dispute settlement – the agreement makes disputes between WTO members around TRIPS obligations part of the WTO dispute settlement procedures. Between TRIPS coming into effect in 1995 and 2004, 24 disputes were brought to the TRIPS council.

OTHER METHODS TO INCENTIVISE INNOVATION

I.40 While this report principally deals with IP rights, they are only one method of spurring innovation. As Table 1.1 below indicates, other commercial strategies like confidentiality agreements and being first to market are often perceived to be more important. The examples given below are important not only in their own right, but also because they illustrate the balance that IP strikes (as described earlier in the chapter) between private incentives and public accessibility.

¹⁵ Article 3 Convention Establishing the World Intellectual Property Organization.

Table I.1: Enterprises rating different methods for protecting innovation as being of ‘high’ importance

	Percentage of respondents		
	Size of enterprise: employees		
	10–250	250+	All 10+
Formal			
Confidentiality agreements	11	22	11
Trade marks	6	16	6
Copyright	6	10	6
Patents	5	13	5
Registration of design	4	11	4
Strategic			
Lead-time advantage on competitors	9	17	10
Secrecy	8	19	9
Complexity of design	5	9	5

Source: First findings from the UK Innovation Survey, 2005.

Secrecy I.41 The main mechanism used as an alternative to formal IP is the trade secret. Examples of knowledge protected by trade secrets include: a formula; practice; process; pattern; or compilation of information which is protected so that the holder can gain economic benefits derived from the secrecy of the information. Unlike patents, designs or copyright, trade secrets are protected without any disclosure. In addition, reasonable efforts must be taken to keep the information a secret, such as Non-Disclosure Agreements for new employees. The most famous example of a trade secret is Coca-Cola, which has not patented its recipe. While there are provisions to protect the owner if the secret is uncovered by improper or unlawful means, the state provides little protection if the trade secret is exposed through reverse engineering or independent duplication.¹⁶

Patronage I.42 Under patronage a private or public body pays an individual to ‘think interesting thoughts’, in the hope that some of these ideas will have a practical or artistic application. Patronage has been used since ancient times. For example, Dionysius supported scientists while they developed military technology, including the catapult, and patronised Archimedes while he worked on his theory of buoyancy. Contemporary patronage usually takes the form of a research grant, with money available from the state or from private foundations; for example, the Gates Foundation has invested in pharmaceuticals to combat the spread of HIV/AIDS.

Prizes I.43 Prizes have also been used to provide an incentive for innovation and can be provided ex-ante, for example the Longitude Prize set in 1714 by the English Parliament, or ex-post, for example the Nobel Prizes. Both patronage and prizes can interact with IP rights (for example, a patron might require the rights to an invention before granting the prize), but often they are independent and serve to provide knowledge for public benefit.

¹⁶ *Innovation and Incentives*, Scotchmer S., 2004, cites a survey of IP Owners Association member firms (Survey Results from the 2003 Intellectual Property Owners Association Survey on Strategic Management of Intellectual Property; Cockburn I., and Henderson R., 2003.) which showed that 80 per cent believe competitive advantage would be eroded without trade-secrecy compared with only 66 per cent without patents and 33 per cent without copyright.

Open source I.44 A recent and radical approach to knowledge accumulation rejects the proprietisation of knowledge. The approach of ‘open source’ is for creators to allow open access to their products, ideas and inventions, enabling information to be freely shared and developed. This keeps transaction costs low and has allowed user-driven innovation to flourish. Examples of open source projects include the Linux operating system and the Firefox Internet browser. The incentive mechanism for contributors is reputation. However, open source has some serious limitations; for example, the incentive mechanism is usually financially weaker than using IP in its conventional commercial form and hence contributors often rely on supplementary sources of income. When the definition is stretched to applications other than software development, there is the potential for a number of new applications for generating ideas outside of an ‘IP’ framework.¹⁷ For example, Science Commons has extended this general approach to foster the availability and distributed processing of scientific data.¹⁸

I.45 For commercial and industrial applications, IP has grown to eclipse all but the trade secret as a wealth creation mechanism.¹⁹ The condition of disclosure means that IP brings a greater amount of information that might enable future innovation into the public domain than the trade secret would. The monopolies that IP rights grant allow rights holders to charge high prices, but those rights provide firms with the incentive to supply what consumers demand. If IP rights are balanced, coherent and flexible, the system will support greater investment in R&D and will allow the access to knowledge that will stimulate future innovation.

CONCLUSION

I.46 This chapter explained what IP is and why it exists. Chapter 2 describes the economic and technological changes that have created opportunities and challenges for innovation and creativity and looks at how the IP framework has responded.

¹⁷ *Wide Open*, Mulgan G. and Steinberg T., 2005.

¹⁸ www.sciencecommons.org.

¹⁹ *Innovation and Incentives*, Scotchmer S., 2004.

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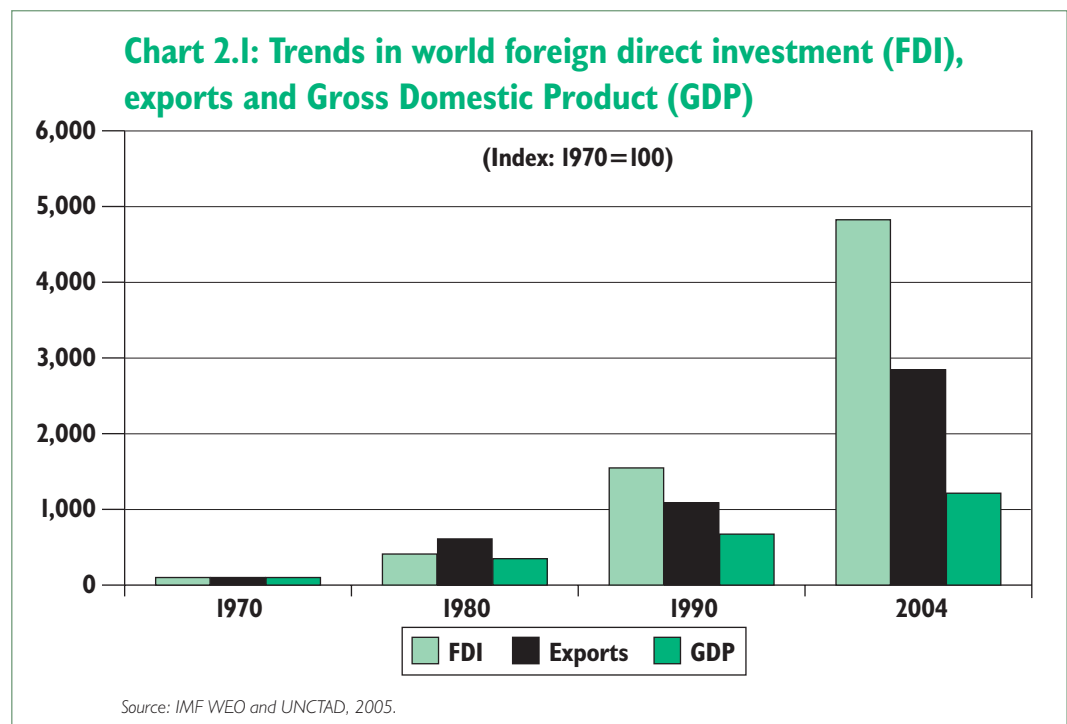
CHALLENGES AND OPPORTUNITIES

2.1 The UK Intellectual Property (IP) framework has developed in recent years against a backdrop of profound change including rapid globalisation and technological change. Both have presented significant economic opportunities and significant challenges to the IP system. As a result of these changes IP rights have become increasingly important in promoting innovation, but many of the environmental challenges facing the IP system have yet to be addressed.

2.2 This chapter summarises the changing context for those using IP rights and the implications of those changes. It then sets out the policy responses that have been made to address those challenges, and where problems still remain.

GLOBALISATION

Greater trade **2.3** Globalisation is a term used to indicate the growing economic interdependence of countries throughout the world. The trend towards global trade and outsourcing, as indicated by rising trade and capital flows (see Chart 2.1 below), is both a feature and a driver of continuing globalisation. From 1980 to 2002, trade in goods increased from \$130 billion to \$6,400 billion.¹



Larger markets and increased competition **2.4** The increase in global trade has created larger markets for UK-based firms. For example, income and population growth have increased the size of the world market by a factor of four since 1950.² These wider markets also bring the challenge of increased competition with innovative international firms driving productivity growth in many sectors.

¹ *Development and Globalisation: Facts and Figures*, United Nations Conference on Trade and Development, 2004.

² *Intellectual Property in a Global Economy*, Boldrin M. and Levine D., 2004.

2.5 Larger markets and fiercer competition present both opportunities and challenges for UK businesses. There are greater rewards for the most innovative firms to compete in ever-larger markets. And there are greater pressures on firms to innovate to survive or compete in increasingly competitive global markets. Innovation is therefore key to rising to the challenges and seizing the opportunities of globalisation.

2.6 As a consequence, the role of IP in incentivising that innovation has never been more important. But, just as globalisation presents challenges to business, so it also presents new challenges for the IP system itself. Globalisation:

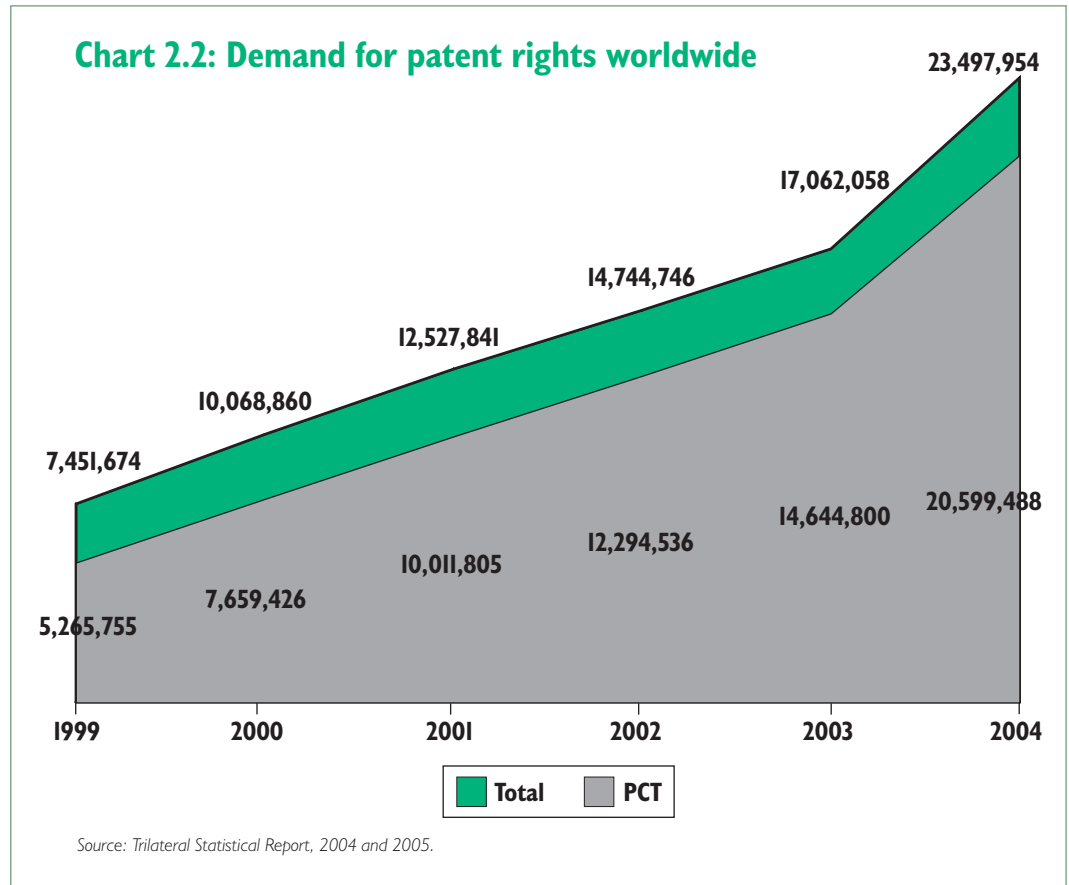
- may shift the optimal balance in IP rights – the optimal length of IP protection from an economic perspective would be just long enough for the innovator to recoup his initial investment. Any longer, and the monopoly prices that IP allows are an unnecessary inefficiency. As the size of the market increases, more products can be sold in the same amount of time. This has led some economists to argue that terms of protection should be reduced in order to maintain a balance between consumers and producers;³
- generates new enforcement risks – the increase in legitimate trade has been accompanied by an increase in counterfeiting and other forms of illegal trade. Customs officers in the EU seized 100 million counterfeit and pirated items such as CDs, luxury clothing and perfume in 2004, a tenfold increase on 1998 figures;⁴ and
- raises the problem of jurisdiction – the harmonisation of national IP laws has lagged behind the integration of markets. While technology allows firms to market products globally, licensing the IP rights separately in every national jurisdiction imposes significant additional costs on business in applying for, licensing and enforcing IP rights.

IP policy responses to globalisation

Patents 2.7 Notwithstanding these changes, in the UK and internationally patent law generally remains at the individual country level, so a patent granted in one country does not automatically apply internationally. The problems this causes were first considered in the late nineteenth century, which ultimately led to the signing of the Paris Convention. However, greater strides were made in the twentieth century: not only was the Convention amended a number of times, but in 1970 the Patents Cooperation Treaty (PCT) was adopted. The effect of this treaty was that a single patent application could be made, which in effect notifies signatory countries of the applicant's intent to file nationally. As Chart 2.2 suggests, this has proved popular, but it still requires the applicant to prosecute the application separately at each national office during the so-called 'national phase'.

³ *Intellectual Property and the Scale of the Market*, Boldrin M. and Levine D., 2004.

⁴ *Counterfeiting and piracy: Frequently Asked Questions*, European Commission Press Releases, 2005.



2.8 For over 30 years, there has been the ambition to create a unitary ‘Community Patent’ for Europe to reduce costs for business. There have been many failed attempts to broker agreement. The most recent attempt failed over the issue of the legal status of translation of the claims of the patent. The ‘London Agreement’ contains proposals that would simplify the translation requirements of the current regime, but it has not yet been ratified by sufficient Member States to take effect.

2.9 Separately, the European Patent Litigation Agreement (EPLA) is being discussed as an integrated judicial system with uniform rules of procedure and a common appeal court for patent litigation throughout Europe. This was first suggested in 1999 but continues to face difficulties.

2.10 Some international differences are the result of continuing disagreements over the optimal policy. For example, the USA provides patent protection for business methods as a spur to innovation in enterprise. In contrast, policy makers within the EU have to date seen business method patents as unnecessary, and even inimical to business innovation.

Copyright 2.11 For copyright, as with patents, the rights exist individually in each country. However, various Conventions have set minimum standards of protection that must be afforded to creators. The original, and still most important convention, is the Berne Convention, which gives protection to the authors of works. It now has 162 signatories, including the UK. The adoption of the World Intellectual Property Organization (WIPO) Copyright Treaty in 1996 created further minimum levels of protection for authors. This, in combination with the Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS), means that authors enjoy a very high level of protection worldwide. The owners of related rights (e.g. performers, producers of sound recordings and broadcasters) are also protected by international treaties, namely the Rome Convention and the WIPO Performances and Phonograms Treaty (WPPT).

2.12 At the EU level, there have been substantial moves towards harmonisation of copyright and related rights. Most notably, in 1995 the term of protection was harmonised. Nevertheless, differences remain between the Member States in, for example, what constitutes a film or the standard of originality.

Trade marks and designs **2.13** As noted in Chapter 1, within the EU, trade mark law has been harmonised by the Trade Marks Directive,⁵ and a Community Trade Mark (CTM) has been introduced.⁶ Internationally, UK firms benefit from the Madrid Protocol⁷ which provides a semi-integrated mechanism for obtaining trade marks globally. Similarly, the law of registered designs has also been harmonised across the Community⁸ and in 2002 unregistered and registered Community Designs were introduced.⁹ In relation to designs there is also a treaty, the Hague Agreement, which enables a designer to obtain global protection more easily,¹⁰ Both the Community Design and the Community Trade Mark provide a relatively cheap and effective mechanism for achieving protection throughout the Community.

WTO / TRIPS **2.14** The most significant recent developments in IP policy have centred on the World Trade Organization (WTO) with the signing of TRIPS in 1994. Looking to reduce barriers to trade, the signatories set out a timetable for all WTO signatories to reach minimum standards covering all IP rights. This includes undisclosed information and minimum standards for enforcement, and remedies to be available for the infringement of rights.

Piracy and counterfeiting **2.15** In addition to simplifying the process of obtaining rights, international efforts have also sought to tackle piracy and counterfeiting. The laws relating to the criminal infringement of copyright and trade marks have both been tightened over recent years. Recently the Enforcement Directive¹¹ came into force, strengthening civil sanctions, and a second directive dealing with criminal sanctions has been proposed by the European Commission and is currently being negotiated.

TECHNOLOGICAL CHANGE

2.16 Rapid technological change over the last thirty years has provided an enormous number of new and innovative goods and services. This has simultaneously provoked many challenges for UK policy, not least concerning IP. This section describes three substantial technological shifts that have affected the IP system, and how policy has altered as a result. First, the digitisation of information and the ability to store it electronically has made it far easier to copy, distribute and reverse engineer products. Second, the innovation process has become more networked and complex, with greater collaboration between firms, and with high-tech projects often requiring the combination of thousands of individual IP rights. Third, new technologies such as genetics, software and databases require IP protection but do not fit easily into existing categories.

⁵ Directive 89/104/EEC to approximate the laws of the Member States relating to trade marks.

⁶ Council Regulation (EC) No. 40/94 on the Community Trade Mark.

⁷ The Protocol relating to the Madrid Agreement which was adopted in 1989. The UK has never been a party to the Madrid Agreement itself.

⁸ Directive 98/71/EC on the legal protection of designs.

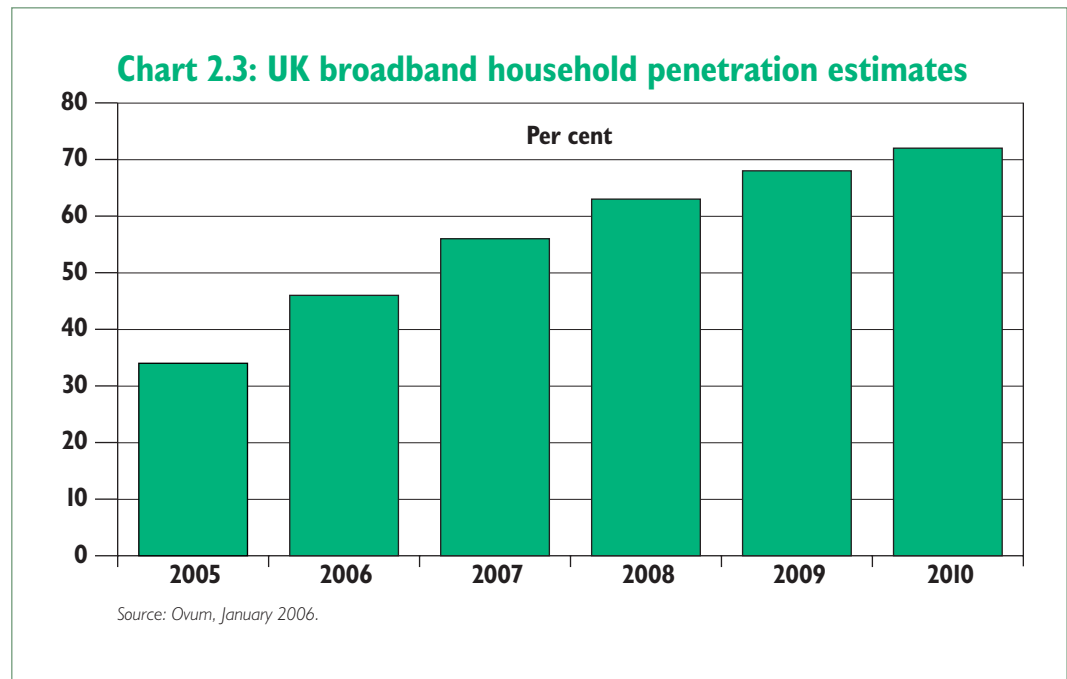
⁹ Council Regulation (EC) No. 6/2002 on the Community Design.

¹⁰ Although the UK is not a party to the Agreement, the EU is in the process of ratifying it and when it does so it will give British businesses the right to use the mechanism.

¹¹ Directive 2004/48/EC on the enforcement of IP rights.

Digitisation

2.17 Digital technology is increasingly common in UK households. The ownership of home computers rose from 21 per cent of households in the UK in 1991 to 58 per cent in 2003.¹² The capability of digital communications has also developed rapidly. In April 2003, 8 per cent of British households had a broadband Internet connection, which had risen to 31 per cent by July 2005. The number of subscribers is expected to pass 12 million by 2008, as shown in Chart 2.3 below, by which time the UK is expected to have the largest number of broadband subscribers in Europe.¹³



Unauthorised copying **2.18** As Chart 2.4 illustrates, high-speed digital networks are expanding the digital distribution for films, music and games, but the ability to copy and distribute information at virtually zero cost has also made it much easier to copy that information without permission from the copyright owner. ‘Piracy’ of protected material has always been a concern for rights holders. However, the unprecedented technological advances of the last decade or so mean that it has become an even more pressing threat. Downloading music and films from the Internet is now the most common legal offence committed by young people aged between 10 and 25 in the UK.¹⁴ Up to 80 per cent of music downloads are not paid for¹⁵ even though most consumers recognise it to be illegal.¹⁶ According to a report commissioned by the British Phonographic Industry (BPI), file-sharing cost the music industry £414 million in lost sales in 2005,¹⁷ on total retail sales of £1.87 billion.¹⁸ These losses have risen steeply from £278 million in 2003.

¹² Office of National Statistics.

¹³ *Screen Digest Research: European Piracy Fact Sheet, 2004* (accessed at <http://www.mpaa.org/piracy.asp>).

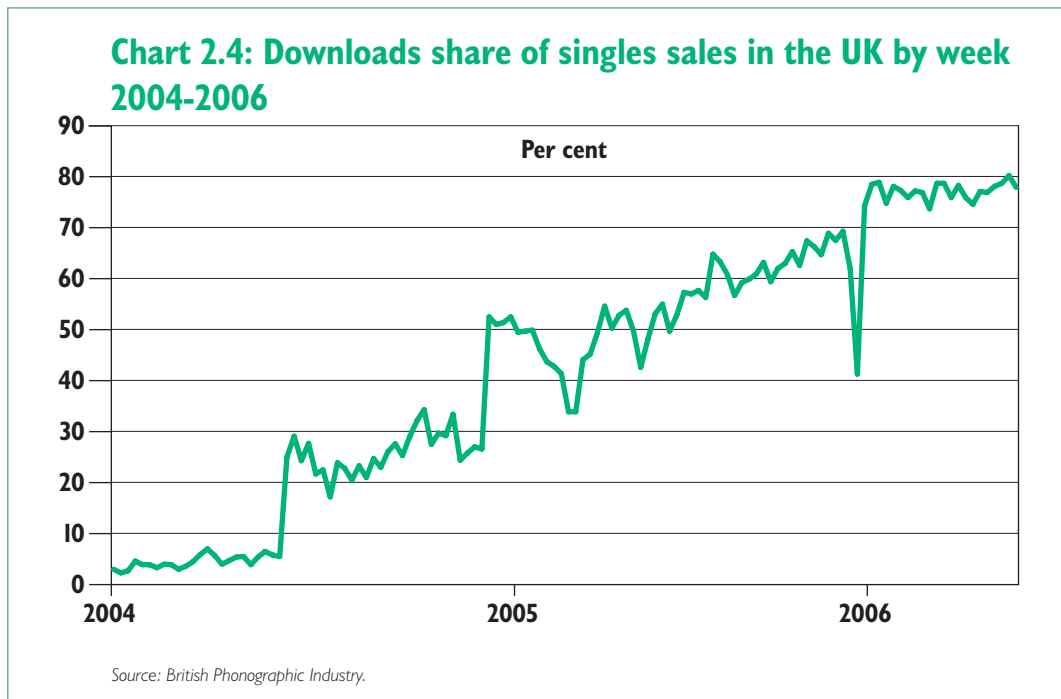
¹⁴ *Fraud and Technology Crimes*, Home Office, 2006 – <http://www.homeoffice.gov.uk/rds/pdfs06/rdsolr0906.pdf>.

¹⁵ *Observer Music Monthly* (UK Downloaders, July 2005).

¹⁶ OTX presentation, January 2006: 63 per cent of downloaders recognised that downloading was illegal, 19 per cent were not sure.

¹⁷ TNS, 2006, commissioned by BPI.

¹⁸ DCMS data, 2006.



2.19 In response to this ever-greater ease of copying files, firms have developed technological protection systems that use encryption to restrict access to the film or music file. This prevents users from copying DVDs to their personal computers, and is also commonly used to disable the fast-forward button during the initial minutes of a DVD film. The use of Technical Protection Measures (one type of Digital Rights Management) has been partially successful at reinstating technical impediments to copying media, but it has faced consumer opposition and software tools to ‘crack’ the protection are widely available on the internet.

Reverse engineering

2.20 Reverse engineering is the process of discovering the technological principles of an application or device through analysis of its structure, function and operation. It has historically been difficult, but it is becoming easier for two reasons:¹⁹

- as engineering techniques become more computerised, more of the design relies upon pre-programmed libraries of components. Therefore, recognisable blocks of code or groups of circuit elements often occur in many designs developed using the same computer program. These are easier to recognise and interpret than a customised product; and
- artificial intelligence techniques for pattern recognition have advanced to the point where these blocks of code and other structures within a product can be recognised automatically.

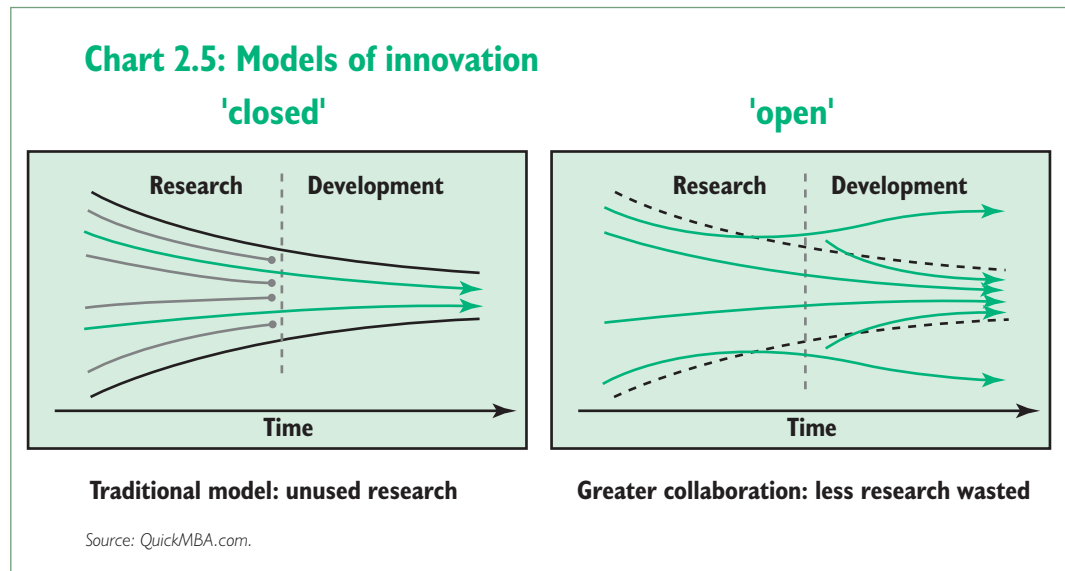
2.21 Reverse engineering is often a necessity for reliable computer software design and thus has become more important in recent years with the increased development of software. But these changes also make it easier to copy and appropriate the IP within software and other applications, which costs firms sales.

¹⁹ Reverse Engineering, Musker D., *Protecting and Exploiting Intellectual Property in Electronics*, 1998.

Networked innovation

Collaboration has increased

2.22 Technological change has also enabled innovation to become increasingly collaborative. In traditional models of innovation, firms undertook most of their research and development in-house. IP was occasionally sought for new inventions, but often the inventions were kept secret. In this ‘closed’ model, if a firm could not utilise an innovation in an end product it was lost.²⁰



2.23 Increasingly firms are adopting an ‘open’ approach to innovation, licensing useful technologies from (‘in-licensing’) and to (‘out-licensing’) other firms,²¹ as shown in Chart 2.5 above. This model means that firms capture the value of ideas even if they do not use them in an end product, which in turn increases the incentives to innovate. IP allows this sharing by conferring property rights and enabling a market to form. Firms are increasingly licensing IP as they focus on more specialised components. This approach can be seen in the telecommunications industry, where a typical mobile phone now contains thousands of patented inventions and requires collaboration between hundreds of companies. Some firms, such as ARM in Cambridge, do not produce any physical product and are entirely funded by income from licensing. As Chart 2.6 shows, pharmaceutical companies are spending increasing proportions of their R&D budgets on licensing and this is projected to increase.

Licensing is costly

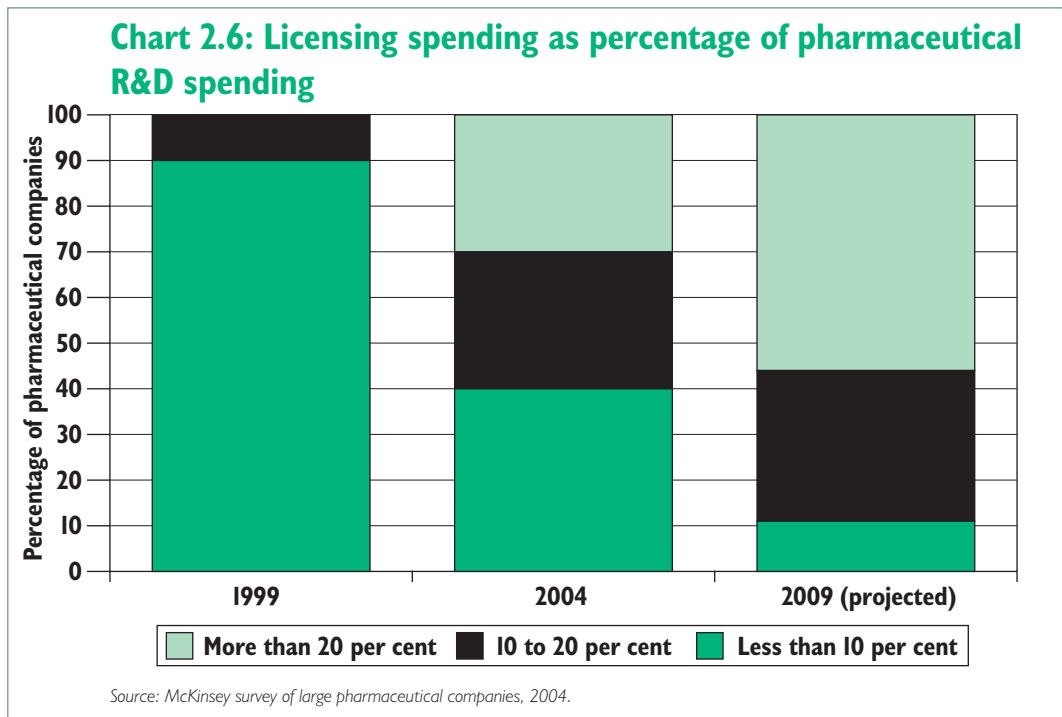
2.24 Efficient licensing ensures liquidity in the market for ideas. However, licensing patents can be complicated and costly. It is estimated that 15 per cent of patents granted in the UK are ‘sleeping’: the owner is willing to license but is prevented by the associated legal costs.²² The Institute of Patentees and Inventors report that around 95 per cent of attempts to licence IP by individuals or SMEs result in failure.²³ Large corporations can utilise greater in-house IP knowledge and the bargaining power of a large IP portfolio when completing licensing negotiations, generally leading to a greater success rate.

²⁰ “Open Innovation” Myths, Realities, and Opportunities, Chesbrough H., 2006.

²¹ Open Innovation: The New Imperative for Creating and Profiting from Technology, Chesbrough H., 2002.

²² IPR at the Crossroads – Economic Value of IPR for Business in the Internal Market, Nooteboom E., 2006.

²³ Call for Evidence submission, Institute of Patentees and Inventors.



Patent pools reduce licensing costs **2.25** In response to the growing need to licence technology and the associated transaction costs, firms have used patent pools as a mechanism to manage large numbers of rights together. The case study below illustrates how this has worked for one technology.

Box 2.1: Case Study – RFID patent pool^a

A patent pool has been constructed by a consortium of twenty providers of the new technology of radio frequency identification (RFID). The pool is intended to reduce the confusion over patent royalties, reduce risks for end users and provide a convenient way for rights holders to manage their IP. The consortium charges one royalty fee and divides the revenue among the patent holders according to the rights held. This is likely to keep the cost of RFID equipment down, which will encourage adoption by consumers. To join the pool, a company or individual must hold patents deemed essential to the relevant standard.

^a RFID Vendors to Launch Patent Pool, Roberti M, *RFID Journal*, 2005.

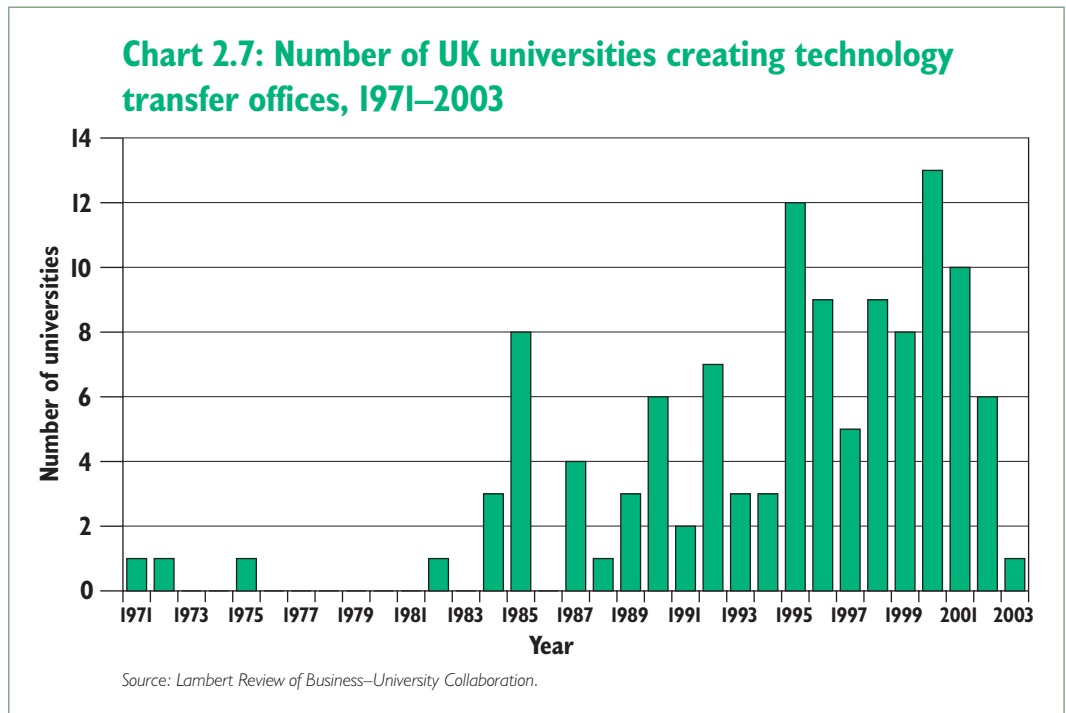
2.26 Worldwide revenues from patent licensing increased from \$15 billion in 1990 to \$110 billion in 2000.²⁴ The BBC reports that £230 million is spent a year on the acquisition of IP rights from programme contributors in BBC-produced programmes alone²⁵ and IBM generates between \$1.5 billion and \$2 billion in revenue per year by licensing its non-core IP.²⁶

²⁴ *Intellectual Property – A Power Tool for Economic Growth*, WIPO, 2003.

²⁵ Call for Evidence submission, BBC.

²⁶ *Identifying and Managing Intellectual Property Risk and the Use of Insurance as a Risk Management Tool*, Cauthorn K., Fordham Annual Conference, 2006.

Business– university collaboration **2.27** Collaboration between universities and businesses has increased markedly over the last twenty years. Chart 2.7 shows that many UK universities created technology transfer offices only in the late 1990s;²⁷ by 2003, 80 per cent had at least one dedicated person; and staff numbers continue to rise by almost 25 per cent each year. IP licensing rates and income have increased: UK universities earned licensing income worth £22.4 million in 2002, an increase of 21 per cent on the previous year, as the levels of technology transfer activity, funding and staffing grew.²⁸



Consumers are engaged in innovation **2.28** Digital technology has changed not only the types of products consumers can buy, but also their role in the value chain. The traditional assumptions of the role of consumers in innovation is that they can choose between products but have little say over design or creation of those products other than through market demand.

2.29 As the costs and barriers to sharing and changing content have fallen, users have grouped together into networks. These networks enable previously passive consumers to become adaptors and innovators themselves.²⁹ The broad spectrum of consumers in society means that this type of consumer-led innovation can be extremely creative. A balanced IP framework must encourage user innovation while protecting the investment of firms.³⁰

²⁷ Lambert Review of Business–University Collaboration, HM Treasury, 2003.

²⁸ Licensing Survey, Association of University Technology Managers (AUTM), 2003.

²⁹ Creating Selves: Intellectual Property and the Narration of Culture, Gibson J., 2006.

³⁰ The User Innovation Revolution, Leadbeater C., 2006.

Box 2.2: Case Study – The Sims collaboration

The Sims game from Electronic Arts was launched in 2000 and quickly developed into an online community, with players swapping tools, software and artefacts to put into their online houses. Hundreds of websites now display hundreds of thousands of collectible items that are available to the millions of players. Electronic Arts estimates that 90 per cent of the content of the game is not created by the game’s original authors but by a large innovative sector of the playing community.

A game’s official release is the moment when the innovation initiative passes from the in-house development team to the community of player-developers. Ideas flow back and forth, among the players and between the players and the company.

New technologies

2.30 The IP system, with four core rights, covers an enormous variety of innovation and creative expression. Nevertheless, new technologies do not always fit comfortably within the existing classes of IP protection. For example, computer programs are written as an original expression but they are also intended to be industrial applications, so they do not fit squarely within either the boundaries of copyright or patent law. Databases are collections of facts, which have traditionally not been covered by copyright law. Nevertheless the construction of databases often requires substantial resources and so there would be no incentive to invest without legal or technical ways to prevent others from copying the information. Finally, with regard to the legitimacy of patents on genes, the line between what is created and what is discovered has been hotly contested. Almost 20 per cent of human gene DNA sequences are patented; 4,382 out of the 23,688 known human genes.³¹

IP policy responses to technological change

2.31 In response to the changes in recent years, a number of actions have been taken at UK and international levels.

2.32 In 2003, as part of the implementation of the Information Society Directive,³² certain types of on-line copyright infringement were criminalised.³³ The maximum sentence for committing the offence is two years imprisonment, which contrasts with infringements in the ‘physical world’ where the maximum penalty is ten years imprisonment.

2.33 The Lambert Review of Business–University Collaboration led to five model Research Agreements being developed. These agreements were launched in February 2005 and have already been used successfully by a number of organisations, saving time and money and adding to certainty. For example, GlaxoSmithKline and the University of Hertfordshire concluded a successful negotiation in just two days and GlaxoSmithKline has already put in place 27 agreements. The agreements have also proved useful for SMEs.³⁴

³¹ Intellectual Property Landscape of the Human Genome, Jensen K. and Murray F., *Science*, 14 October 2005.

³² Directive 2001/29/EC on copyright in the information society.

³³ See sections 107(2A) and 198(1A) of the Copyright, Designs and Patents Act 1988 (CDPA).

³⁴ *Innovating for Success: The Intellectual Property Review and Economic Competitiveness*, Lord Sainsbury, 2006.

2.34 Regarding reverse engineering for software development, there are specific exemptions covering such activity in UK law.³⁵ In the main, the Information Society Directive³⁶ prohibits any circumvention of technical protections such as encryption, even in some instances, where they prevent uses permitted by fair dealing exceptions.

2.35 Currently, only if computer programs have a 'technical effect' can they be patented in Europe. However, there is little authoritative definition of this phrase, and its scope is widely contested. This has led to some computer programs being patentable in one country, such as the USA, but not patentable in the Member States of the EU. Recent attempts to agree a Directive to harmonise the law relating to software patents was rejected by the European Parliament in response to fears about the negative implications that a US-style system for software patents would have on innovation.

2.36 To protect the investment in databases, the EU established a new type of right specific to databases,³⁷ but the value of providing the right is still widely disputed by users of the system.

2.37 In the EU, a protracted debate provoking strong and divergent views led to a directive on the protection of biotechnological inventions.³⁸ Controversy still surrounds the granting of patents on biotechnological inventions. In part this is because of confusion about the effect of patent protection on future innovation and concern about the patentability of technology involved. While some Member States have severely restricted the grant of protection for biotechnological inventions on moral grounds, the UK has established a clear policy and practice which has fostered a strong domestic biotechnology industry, particularly around stem-cell research.

Box 2.3: Case Study – Biotechnology patent disputes – Harvard Oncomouse

The Harvard Oncomouse is an example of a disputed biotechnology patent. The mouse had been genetically modified to contain a cancer-causing gene. The patent was filed and granted by the United States Patent and Trademark Office (USPTO). It was filed in Europe in 1985 and initially rejected in 1989 as, among other reasons, the European Patent Convention (EPC) excludes patentability of animals.^a The patent was then granted in 1992 on appeal as it was decided that only animal *varieties* were excluded, not animals themselves. It was then opposed by several parties, the proceedings eventually concluding in 2003 to allow the patent in an amended form.^b In Canada, the Supreme Court rejected the patent in 2002, ruling that higher life forms are not patentable.^c

^a *Harvard/Oncomouse* (1990) EPOR 4.

^b *Harvard/Oncomouse* (2003) OJ/EPO 473.

^c See: *Commissioner of Patents v. President and Fellows of Harvard College* [2002] 4 S.C.R. 45.

³⁵ Sections 50A to 50C of the CDPA.

³⁶ See Article 7 of Directive 2001/29/EC.

³⁷ Directive 96/9/EC on the legal protection of databases.

³⁸ Directive 98/44/EC on the legal protection of biotechnological inventions.

INCREASING IMPORTANCE OF IP

Use of IP has increased **2.38** In today's knowledge economy, IP has never been more important for securing Britain's prosperity and has never been more challenged by the changing context of innovation: it is estimated that 70 per cent of a typical company's value lies in its intangible assets, up from around 40 per cent in the early 1980s;³⁹ and the number of patent applications have more than doubled at the EPO in the last ten years.

IP valuation remains difficult **2.39** While the number of registered IP rights has increased, the valuation of IP remains largely subjective and a specialist field. Traditional accounting methods only allow the inclusion of IP on the balance sheet when it has been bought rather than developed in-house. Proposals to update International Accounting Standards to reflect the value of intangible assets are currently under discussion.

Consumer awareness is low **2.40** Despite IP's increasingly central importance to the UK economy, consumer knowledge of IP is low. A MORI poll on IP and UK public attitudes⁴⁰ showed that awareness of the phrase 'Intellectual Property' is generally low, with many respondents having to guess what 'Intellectual Property' meant. Participants were more knowledgeable about IP that is observable, such as trade marks, than more abstract forms of IP, such as patents.

2.41 When briefed as to what IP rights were, participants in the MORI survey felt that they were often used exploitatively by companies and in an anticompetitive manner. IP crimes such as piracy and buying counterfeit goods were seen as 'victimless' with no guilt associated to buying fake goods at low prices. Fear of buying potentially harmful goods, such as fake pharmaceuticals, was stronger: they saw the enforcement of standards and the protection of consumer rights as the most important aspects of IP policy.

CONCLUSION

2.42 Globalisation and technological change are profoundly changing the world economy. Knowledge capital is more important than ever, and so too is IP. While the changing context has provided new business opportunities, it has also created new challenges, both for businesses that rely on IP and the IP system itself. The following chapter will examine in greater detail how well the system has performed amid the challenges of the modern economy.

³⁹ *Identifying and Managing Intellectual Property Risk and the Use of Insurance as a Risk Management Tool*, Cauthorn K., Fordham Annual Conference, 2006.

⁴⁰ *Intellectual Property: Public Attitudes*, MORI, 2000.

3

PERFORMANCE

3.1 The first chapter laid out the shape of the Intellectual Property (IP) system. The previous chapter showed how global and technological changes have created significant new challenges for the IP system. This chapter will assess the aggregate effectiveness of the system that we have, and will identify areas where problems exist.

Satisfied users are a good indication of success

3.2 The goal of this Review is to ensure that the UK has a productive and equitable IP system that serves the needs of its users and makes the rewards of innovation accessible to all. This chapter will consider how well the system operates in practice.

3.3 There are few standard measures that can be used to quantify the performance of the IP system, but a number of qualitative indicators have informed the Review's conceptual framework for judging performance. These indicators have been constructed from the large number of responses to the Review's Call for Evidence, as well as interviews, case studies and international comparisons.

THE PERFORMANCE FRAMEWORK

3.4 There are three components that together fashion an IP system that fosters productivity and ensures equitable outcomes for industry and consumers:

- (1) the **instruments** of IP, namely patents, copyright, designs, trade marks and sui generis rights, ought to be balanced, coherent and flexible;
- (2) the **operations**, i.e. the award, use and enforcement of those IP rights, must be efficiently administered; and
- (3) the national and international organisations responsible for the **governance** of policy and operations must be clear and well run.

3.5 The performance of the first two components is discussed in more detail below. The governance of policy and operations is discussed in Chapter 6.

Instruments

Balance 3.6 On the one hand, IP rights provide economic incentives to innovate, but on the other hand, the exclusive rights they confer to achieve this allow monopoly prices and associated welfare losses. So there is a trade-off between incentives on one side and costs to consumers and limited access for follow-on innovators on the other. It is therefore crucial to strike the right balance in the system.

Coherence 3.7 IP rights available within the UK must be both internally and externally coherent. They must cover the myriad ways in which knowledge is applied and ideas protected. They must also be integrated with other national and international systems of rights, particularly in light of globalisation. Moreover, there should be certainty and consistency in rights. Investment in knowledge-based industries should be grounded in a predictable legal framework for the protection of that knowledge. Finally, rights should be intelligible to the general public not just to IP specialists.

Flexibility 3.8 The previous chapter examined the impact that globalisation and technological change have had on the IP system. It is vital that in both the rights and the exceptions to those rights, which limit the control of the rights owner, the IP system is robust and flexible enough to cope with technological and environmental changes and so to continue to facilitate innovation and continue to retain public support.

Operations

Award 3.9 The way in which IP rights are awarded must be affordable, transparent, swift, consistent and accessible to all users. Awarded rights must not be so broad as to stymie innovation by preventing others from engaging in similar areas of research, nor so narrow as to provide no practical protection from competitors.

Use 3.10 It should be as easy as possible to buy, sell, license, securitise (grouping rights together into a tradable asset) and observe IP rights, both within the UK and for UK firms abroad. Moreover, competition authorities must have the ability to curb any abuse of monopoly power stemming from IP rights.

Enforcement 3.11 IP rights are only useful if rights owners are able to enforce their rights, whether on their own, through the civil courts or through law enforcement agencies such as trading standards or the police. IP crime must carry penalties proportionate to the harm caused and the risk of being caught. The costs of dispute resolution should be reduced by greater availability and use of alternative dispute resolution.

Governance

3.12 It is vital that the organisations responsible for administering, enforcing and setting policy for IP are well run and effectively integrated. Without adequately functioning bodies, the IP system will not function in the way users expect.

PATENTS

Balance 3.13 Patents granted in the UK provide the proprietor with an exclusive right for twenty years. There are a number of features of patent laws to allow wider access to the information protected by the patent. Applications are normally published eighteen months after being filed,¹ theoretically enabling others to have access to all the technical information about the invention. Applicants have an incentive to make the disclosure of technical information as limited as possible, but in the UK the process of dialogue between applicants and examiners to achieve clarity about the invention appears to work well. Similarly academic researchers are protected by an exception covering experimental use that enables researchers to examine, test and build upon inventions. However, many respondents to the Call for Evidence noted that the scope of the exception is unclear in light of the increasingly commercial nature of transactions between universities and businesses. Overall, the balance of patents appears to be broadly satisfactory.

¹ Applications claiming priority will be published earlier. Furthermore, patents which include information that might affect national security are not published.

Coherence 3.14 Responses to the Call for Evidence confirm that, in general, the UK patent system is clearly defined, applied consistently and aligned with other IP rights. The patentability of software remains contested, with applications required to prove a ‘technical effect’, but this does not appear to have had a significant negative effect on industry innovation. The harmonisation of international patent systems lags behind other forms of IP, not least in Europe, as discussed in the previous chapter. This continues to impede the operational integration of the award and enforcement of patents and to increase business costs.

Flexibility 3.15 In the face of enormous technological and economic changes, the rights granted by a patent have changed remarkably little over the past twenty years. Users of the system confirm that patents have nevertheless been a flexible tool able to absorb new technologies and provide protection for new and emerging industries. For some technologies, such as pharmaceuticals, additional specific rights (such as supplementary protection certificates) have been developed to address particular regulatory issues. However, the absence of a new right for every new technology has been a strength of the system and has prevented a spiralling complexity of rights and boundary conditions of those rights.

How efficiently do patents operate?

Award 3.16 Many submissions to the Call for Evidence highlighted the expense of gaining patent protection, and, in particular, high translation costs and professional fees for patent agents in Europe and internationally. The official fees charged by the UK Patent Office for processing an application are lower than those of many other national patent offices, but costs are driven up by the expense of legal fees and advisory services. There are a number of routes to obtaining patent protection in the UK and internationally, which has created a complex system and significant confusion outside specialist practitioners. Approximately 70 per cent of businesses surveyed by the Confederation of British Industry (CBI) were unaware that patent protection in the UK did not secure their invention in other countries.²

3.17 The speed of the patent award process is hampered at both the US Patent and Trademark Office (USPTO) and the European Patent Office by large backlogs that impose delays of up to three years on applications. The UK Patent Office is unusual in having almost no waiting list for patents, but nevertheless due to the nature of the granting process, few patents are awarded in less than eighteen months. This is not a problem for many industries, but in the high-tech and internet, sectors where business cycles are comparatively short, a long grant time can impose the cost of uncertainty on competitors as to whether a particular invention is proprietary or not.

3.18 Finally, regarding the quality of patents awarded, respondents were generally satisfied with the rigour of both the UK Patent Office and the European Patent Office in their examination procedure. One study estimated that between 83 per cent and 98 per cent of patent applications were granted in the USA.³ In contrast, only about two-thirds of applications are granted at the UK and European Patent Offices. Several users noted that the quality of examination, particularly for new technologies such as biotechnology where prior art may not be well documented, could be improved by introducing mechanisms for experts in industry and academia to observe and oppose patents at the pre-grant stage to ensure that granted patents are not overly broad in their application.

² CBI China Survey.

³ Continuing Patent Applications and Performance at the US Patent and Trademark Office, Quillen C., Webster O. and Eichman R., *Federal Circuit Bar Journal*, 12, 35, 2002.

Box 3.1: Broad patents can stunt competition

Blackboard, a US maker of online learning management systems, recently took the academic community by surprise when it announced it had been granted a broad patent in the USA. The patent covers 44 claims related to learning management systems and implicated infringement by many other products on the market. On the same day that it publicly disclosed its patent, Blackboard started a patent infringement suit in a Texas court against Desire2Learn.^a Many companies that have been working on educational software are now concerned that Blackboard will either sue for infringement or enforce complex and expensive licensing agreements.

^a Patent battle over teaching tools, BBC website <http://news.bbc.co.uk/1/hi/technology/4790485.stm>, 2006

Use 3.19 Patents prevent rivals copying proprietary technology. However, research suggests that this only tends to be the case for firms where there are a very small number of patents per product, for example in pharmaceuticals. Cohen et al. show that 65 per cent of firms in complex technologies use patents as a trading strategy to licence a technology (while only 12 per cent use patents as a fence). In simple technologies, 28 per cent of firms use patents as a trading strategy to licence a technology, while 46 per cent use patents to fence off an area to competitors and provide more intellectual ‘space’ to innovate.⁴ This strategy can be problematic in areas where thousands of patents are used in the design of new products, especially in the electronics and software industries. The US litigation between RIM and NTP over technology used in BlackBerry devices illustrated that where the process involves the automatic use of ‘injunctive relief’ (a court order to shut down production and use of the application containing the contested patent) individual patents held by small firms become very powerful even if they only play a small part in the whole application. UK courts have appeared pragmatic in this area, judging cases on their individual merits. While injunctive relief is available, judges are also willing to award specified damages rather than stop production as the means of recompense.

3.20 For many years, patent legislation has provided for the renewal of a patent for a reduced fee in exchange for the condition that the patentee must licence the technology for a reasonable fee on request from a third party. This is not well advertised or widely used at present, and firms appear largely unaware of its existence. Another mechanism for fostering the use of patented technology has been the Lambert Model Agreements, which were designed to facilitate university–business technology transfer. These have worked well and are shortly to be extended to Europe.

Enforcement 3.21 A key aspect of enforcing rights is the existence of credible legal sanctions. However, costs can be prohibitive, particularly for small firms. A firm challenging a patent can expect to pay £750,000 for a simple case, largely due to the costs of the adversarial system. Liability for the other side’s costs could double this to £1.5 million. Defending a European patent can mean multiple actions in several jurisdictions, as each European patent is a series of separate national patents subject to national jurisdictions. As well as increasing legal costs, it increases uncertainty, with different jurisdictions on occasion coming to different decisions on the same case.

⁴ Protecting Their Intellectual Assets: Appropriability Conditions and Why US Manufacturing Firms Patent (or Not), Cohen W., Nelson R. and Walsh J., *Management Science*, 2002.

3.22 The high cost of litigation means that most cases settle out of court. In the USA, which has even higher costs, only 1.5 per cent of all patents are ever litigated, and 0.1 per cent of all patents are litigated to trial.⁵ A series of interviews with small European firms found that many small firms could not afford the high litigation costs necessary to defend their patents.⁶ Moreover, the lack of cases going to trial means there is a paucity of patent case law, increasing the general uncertainty around the application of statute.

COPYRIGHT

Balance 3.23 There has been much academic and popular debate around the optimal length of copyright. A balanced copyright system would be one in which the length of protection equals the necessary incentive to produce a creative work. Given the variety of incentives that stimulate artistic endeavour, and the number of different classes of work that copyright protects, everything from paintings to musical scores, it is not possible to arrive at any definitive optimal length. Nevertheless, future increases, or decreases, to the length of copyright should certainly be dependent on economic evidence that such a change would be positive. In any case, as a result of the international treaties to which the UK is a signatory and the responsibility of the European Commission for this area of policy, the UK can make no unilateral change to the length of copyright and is bound by strong minimum standards.

Coherence 3.24 The UK copyright system is heavily connected with international treaties that have achieved a high level of harmonisation across the world. This has some positive aspects. For example, there is a requirement in the Berne Convention that there should be no mandatory registration of work for copyright to come into force. This greatly reduces administrative costs. Conversely, as a result of the centralised nature of policy control, small adjustments to the system can take many years.

3.25 Copyright protects many different types of subject matter, from literary, dramatic, musical, artistic and cinematographic works to computer programmes, databases, sound recordings and broadcasts. Copyright protecting different classes of work is subject to different domestic and international treaties. Although this reduces the coherence in the copyright system, coherence across all types of copyright may restrict the balance in the system as not all copyright works are deemed eligible for the same style of protection. For example, the term of protection for typographical arrangement, that is, the arrangement of words on a page, is currently 25 years, compared with the life of creator plus 70 years for literary works. The term of protection is intended to reflect the creative effort required, which would not be reflected in a blanket harmonisation of term.

Flexibility 3.26 Copyright in the UK presently suffers from a marked lack of public legitimacy. It is perceived to be overly restrictive, with little guilt or sanction associated with infringement. While the law is complex, this is not principally a problem of coherence, but of a lack of flexibility to accommodate certain uses of protected material that a large proportion of the population regards as legitimate and which do not damage the interests of rights holders.

⁵ Probabilistic Patents, Lemley M. and Shapiro C., *Journal of Economic Perspectives*, 2005.

⁶ Innovation Needs Patent Reform, Kingston W., *Research Policy*, 2001.

3.27 UK copyright law provides a number of ‘exceptions’ to the broad rights granted to the owner of a copyright work to enable ‘reasonable’ use to be made of the work freely and without permission. While the public are generally unaware of these exceptions (some of which fall under the rubric of ‘fair dealing’), perhaps the best-known example is the rule of thumb that an individual may photocopy an excerpt from a book of not more than one chapter, or 5 per cent (whichever is the least), without infringing copyright. While the exceptions are restricted to particular acts, the USA has a similar doctrine of ‘fair use’ which is more flexible in its application.

3.28 As discussed in the previous chapter, advances in digital copying technology and the expectations of consumers have outstripped the liberties granted by copyright law. A good example of this is consumers copying music from CDs onto their MP3 players. Many do this unaware that they are infringing copyright. Music Ally, a research and analysis consultancy, estimates that by the first quarter of 2006, 1 billion iTunes files and 50 million iPods had been sold, equating to twenty iTunes per iPod. Given that iPods can store upward of 1,000 songs, there is a question as to where most of the music on iPods is coming from.

3.29 The fact that the letter of the law is rarely enforced only adds to the public sense of illegitimacy surrounding copyright law. Yet copyright is essential for protecting the investment that UK creative industries make in artists, performers and designers. If uses such as transferring music from CDs to an MP3 player for personal use are seen to be illegal, it becomes more difficult to justify sanctions against copyright infringement that genuinely cost industry sales, such as from freely downloading music and films using the Internet.

3.30 Another issue affecting the flexibility of copyright is the use of old material where the copyright owner is not known and cannot be found. In the absence of permission, any use is infringement, and therefore many potential users will not use material for fear of legal recriminations. Many submissions to the Call for Evidence highlighted this as a large problem, noting that a large amount of content protected by copyright is not commercially available. The existence of such a large volume of old work protected but unavailable (estimates of up to 98 per cent of published work under copyright) means that a great amount of intellectual capital is wasted. Firms and individuals are unable to restore, rework or revive these ‘orphan’ works to create new commercial and creative capital.

How efficiently does copyright operate?

Award 3.31 Copyright is not formally awarded, but automatically exists in a work once it is created. As noted above, the absence of any registration makes the award of copyright very efficient and accessible, but as there is no register of who owns the copyright, it can be difficult for third parties to reuse old works.

Use 3.32 Copyright licences for commercial work are either managed under contract directly between the user and the rights holder, or alternatively by ‘collecting societies’ which act as intermediaries between copyright owners in particular industries and users. For example, the Educational Recording Agency collects licence revenue from schools and distributes it as royalty payments to publishers. Licences can be as specific as granting unlimited private use of CD (with “unauthorised copying, lending, hiring, public performance and broadcast of the recording” being prohibited⁷), or as broad as the Phonographic Performance Limited (PPL) broadcasting licence, which saves radio stations from having to negotiate individual licences. The system of licensing effectively reduces the transaction costs of every copyright holder separately arranging for their work to be used and paid for in each instance. But it is also marked by a lack of competition, with, for example, one collecting society setting a royalty rate for a blanket commercial radio licence for playing music.

⁷ Similar wording can be found printed around the edge of most commercially sold CDs.

3.33 ‘Creative Commons’ licences provide an alternative operating model that has been particularly popular for non-commercial online licensing of digital media. The date of creation and the permissions that the copyright holder grants to others using the work are contained within an easily comprehensible licence, which is available online and is machine-readable so that it can be automatically processed.

Enforcement 3.34 While criminal and civil legal sanctions against copyright infringement are tough, infringement is extremely common. Approximately 3.5 million adults in the UK bought a total of 35–40 million counterfeit CDs in 2005.⁸ Copyright infringement has increased as the capabilities of technology and digital networks have grown, and piracy is now a significant drag on the performance of UK creative industries. Total losses to the film industry in 2005 are estimated at £719 million on industry box office and video sales of £3.5 billion.⁹ Enforcement through the civil courts is costly, and cases are difficult to prove. Trading Standards, the police and the Serious Organised Crime Agency are all aware of the problem, but it remains one of many competing priorities.

TRADE MARKS

Balance 3.35 Trade marks are badges of identity that may be used to brand a company, product or process. The balance inherent within trade marks is that other parties cannot use the mark to mislead consumers, but they can use the mark to point towards that particular brand. For example, comparative advertising, where one firm uses the other’s mark to publicise the superior features of its own product, is permitted, whereas claiming that one’s own products are genuine trade mark protected goods (counterfeiting) is illegal. The current system appears to be well balanced.

3.36 There is evidence that the value of firms is positively related to incidence and intensity of trade mark activity.¹⁰ Greenhalgh and Rogers also argue that a firm’s productivity is positively associated with its trade mark activity, and this is more pronounced in service sector firms than for manufacturing.¹¹ A study by Griffiths et al. indicates that a company’s stock of trade marks is associated with greater firm profits, controlling for other types of IP and tangible/intangible assets.¹² This suggests that trade marks are creating value for firms, and that the system is broadly working well for rights holders.

Coherence 3.37 There is high level of international similarity between trade mark systems, and a harmonised unitary ‘Community Trade Mark’ which protects across the whole of the European Community. Recent changes to both trade mark and design law¹³ have increased the number of the areas in which there is overlap (for example both now protect distinctive shapes and signs) but the acts of infringement and the duration of the rights remain distinct and accordingly the overlap is not seen as a significant practical problem by businesses.

⁸ *Music Piracy in Great Britain*, IPSOS, 2006.

⁹ IPSOS, 2005, from BVA tracking study. This is calculated by assuming that some proportion of pirated content would have been purchased from the content provider. The full value of content is therefore greater than £719 million.

¹⁰ *Trade Marks and Productivity in UK Firms*, Greenhalgh C. and Rogers M., Oxford Intellectual Property Research Centre Working Paper Series No 12, December 2005 <http://www.oiprc.ox.ac.uk/EJWP1205.html>.

¹¹ *Ibid.*

¹² *The Effects on Firm Profits of the Stock of Intellectual Property Rights*, Griffiths W., Jensen P. and Webster E., Melbourne Institute of Applied Economic and Social Research Working Paper No. 4/05, 2005.

¹³ Trade Marks Act 1994 and Council Regulation 6/2002 on the Community Design.

Flexibility 3.38 The recent increase in the classes of mark eligible for protection is a positive reflection of the responsiveness of policy to changing business marketing practices. The other positive indication of the flexibility of the trade mark system is that the protection granted to marks reflects popular usage. Trade marks are struck off the register and lose protection once they become generic or if they are not actively used. As such, the system works well to ensure that once a trade mark is no longer functioning as an identifier, it is no longer protected as such.

How efficiently do trade marks operate?

Award 3.39 Trade marks are affordable. However, they can take between six and nine months to be granted. There is currently no ‘fast-track’ route available for firms that require protection more quickly in order to start building up their brand.

Use 3.40 Brand owners in their responses to the Call for Evidence raised concerns that copycat packaging (especially from supermarkets) threatened their brands and was unfair competition, and that the hurdle of ‘consumer confusion’ required to prove trade mark infringement was too difficult to prove in court.

Enforcement 3.41 There are large problems with the counterfeiting of trade marks. Similar issues exist in relation to trade mark enforcement as to copyright, namely the fact that the police have many competing priorities and that litigation is costly.

REGISTERED AND UNREGISTERED DESIGN RIGHTS

Balance 3.42 There were no issues raised with the Review regarding the balance of designs.

Coherence 3.43 There are a number of different design systems that overlap; this overlapping can cause significant confusion within industry. The same design may be protected by seven distinct IP rights¹⁴ as well as the common law protection of ‘passing off’. It is particularly confusing that the Unregistered Design in the UK is different both in scope and in length from the Community Unregistered Design. For example, the Community Unregistered Design only lasts three years. In addition, the threshold for infringement of the UK Unregistered Design is far higher than for the Community Unregistered Design.

3.44 Despite the overlap between the different rights, the UK has a thriving design industry. The UK has a reputation as a centre for excellence in design: it is the top exporter of design worldwide and has the fourth largest designer fashion industry in the world.¹⁵ UK firms are frequent users of the Community Registered Design system, with 10 per cent of all applications from 2003 to 2005.¹⁶

Flexibility 3.45 As with trade marks, the recent increase in the classes of design eligible for protection is a positive reflection of the responsiveness of policy to changing business marketing practices.

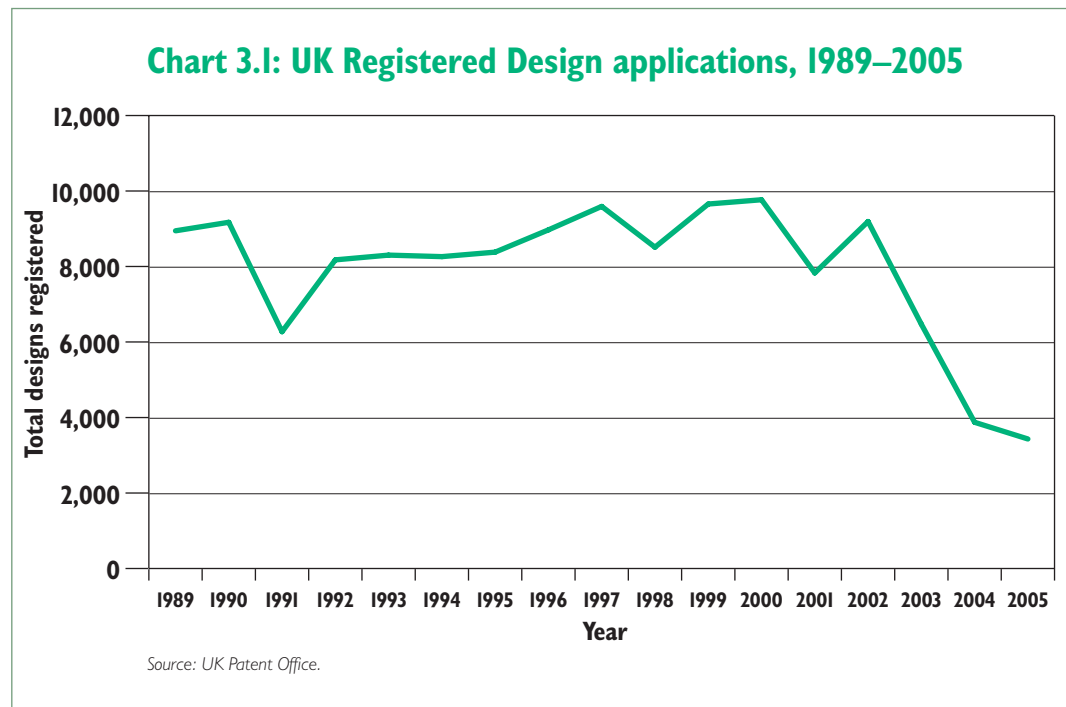
¹⁴ UK Registered Design, UK Unregistered Design, Community Registered Design, Community Unregistered Design, plus UK trade mark, Community Trade Mark and copyright.

¹⁵ *Mapping Document*, DCMS, 2001. Accessed at: <http://www.culture.gov.uk/creative/pdf/part1.pdf>.

¹⁶ *Statistics of Community Designs*, OHIM, 2006.

How efficiently does the design system operate?

Award 3.46 UK registered designs are awarded quickly and cheaply and are a popular method of protection, but as Chart 3.1 below indicates, following the 2003 launch of the Community Registered Design, the total number of designs registered in the UK has fallen from 9,000 in 2002 to less than 4,000 in 2005. However, this is not a problem and reflects the greater geographical coverage of the Community Registered Design. So far, there have been no calls from industry to disband the UK Registered Design.



Use 3.47 There were no issues raised with the Review regarding the use of designs.

Enforcement 3.48 In spite of the multitude of rights protecting designs, several submissions noted that in practice it is extremely difficult to stop designs being copied. The legal mechanisms to enforce design rights are complex. The common law protection of passing off, which may protect an established design to which goodwill has attached, cannot normally be used to stop somebody copying a new design. The uncertainty of the law and the limitations of passing off mean that small designers cannot afford to take the risks associated with legal action and, accordingly, competitors have no economic incentive to seek permission before using the design. Anti Copying in Design (ACID) estimate that many designers are forced out of business every year by legal costs or lost sales due to infringement.

SUI GENERIS RIGHTS

3.49 Sui generis rights protect specific sorts of innovation where the broader rights discussed above are inappropriate for some reason. For example, Supplementary Protection Certificates were introduced by the European Community to compensate for the increasing length of clinical trials that was reducing the amount of market time under patent protection for drugs. There were no major problems raised in the responses to the Call for Evidence regarding either the selection of instruments or the way in which those instruments operate.

Conclusions

3.50 This chapter has outlined a framework for a successful IP system, and has identified the key objectives of IP policy and operations to ensure that patents, copyright, trade marks and designs foster productivity and equity. Table 3.1 below summarises the performance of the aspects of the system that have been discussed. The chapter has outlined a number of problems, and the following chapters will analyse issues in the policy, operations and governance of IP in depth and make targeted, practical recommendations in response.

Table 3.1: IP performance scorecard

	Instruments			Operations		
	Balanced	Coherent	Flexible	Award	Use	Enforcement
Patents	✓	✓	✓	✗	~	✗
Copyright	~	✓	✗	~	✓	✗
Trade marks	✓	✓	✓	~	✓	✗
Designs	✓	✓	✓	✓	✓	✗

High performance
 Medium performance
 Low performance

4

INSTRUMENTS

4.1 This chapter is concerned with the instruments of Intellectual Property (IP); patents, copyright, trade marks and designs. It is split into three sections setting out the characteristics that the instruments should exhibit:

- **balance**; the instruments should ensure that the incentive to innovate is balanced against the ability of follow-on innovators to access knowledge;
- **coherence**; the instruments should be clear and consistent; the scope of rights should not change retrospectively in order to ensure trust in the system; and the international system should promote innovation in all countries; and
- **flexibility**; the instruments should be flexible in order to respond to the changing economic environment and the needs of rights holders and users.

4.2 Chapter 3 highlighted the impact of global and technological changes on the economy as whole, and in particular on businesses who use IP. This chapter makes recommendations to ensure that the instruments of the IP system are able to respond to these challenges. The instruments should embody the principles of balance, coherence and flexibility.

BALANCE

4.3 IP rights are a trade-off between incentives and access. On the one hand, IP rights provide economic incentives to innovate, but on the other hand, the exclusive rights they confer to achieve this allow monopoly prices and associated welfare losses. So there is a trade-off between incentives on one side and costs to consumers and limited access for follow-on innovators on the other. It is therefore crucial to strike the right balance in the system. This section focuses on the exceptions to rights, which enable follow-on innovators to build on protected ideas to develop new innovations.

Clarifying the patent research exception

4.4 Research exceptions grant researchers the freedom to conduct research on patented inventions for the purposes of understanding and improving existing products and processes without the need to get permission. This exception reduces the transaction costs involved in clearing rights for use of patents in experimentation and research. The number of patented materials required to conduct experiments is often so great that the transaction costs of obtaining licenses for all of them are prohibitive. In addition to the experimental use exception, there are exceptions for private use and non-commercial use.¹

Exceptions are unclear

4.5 It is not entirely clear what uses fall within the scope of the experimental use exception. Uses in relation to the subject matter of a patent are generally covered by the exception, while uses relating to different subject matter are not covered by the exception. Confusion arises because there is no definition of what is in relation to, and what is different from the subject matter. Some technologies, such as genes, may fall into both categories.

4.6 There is very little case law on what amounts to experimental use. This leads to uncertainty as to its scope. A paper by the Department of Trade and Industry (DTI) and the Intellectual Property Institute (IPI) found that the law on research exemption was widely seen as unclear and in need of clarification.² The paper also found that small research groups in particular lose out under the existing law, for fear of facing a costly lawsuit. The lack of clarity may dissuade researchers, who are fearful of infringing a patent and being sued as a

¹ Section 60(5)(a) of the Patents Act 1977.

² *Patents for Genetic Sequences: the Competitiveness of Current UK Law and Practices*, IPI on behalf of the DTI, 2004.

result. Evidence from the USA indicates that, under its research exception, on average one in six scientific research projects is stopped or never started as a result of the grant of IP rights.³ It is imperative that research is not similarly impeded in the UK.

4.7 In addition to uncertainty over the scope of the exception, there are also instances where licences have been sought and high fees have been demanded. In one study 19 per cent of academics reported access to research materials was refused when sought.⁴ As stated in Chapter 2, the number of patents granted has risen dramatically and in certain areas of technology, ‘patent thickets’ have developed. There is concern that follow-on innovation will be stifled by the cumulative royalty demands of patent holders or by fear of infringement.

Plant research 4.8 The experimental use exception is also relied upon in relation to plant patents. Many plants are created from samples of other plants. For plant breeders, all experimentation with a patented plant means reproducing it. This is an infringing act.⁵

4.9 Even if the second generation plant does not infringe the scope of the patent, the research that created that plant might be found to have infringed the patent. This can act as a powerful disincentive to experiment on patented plants. This was recognised in the Biotechnology Directive, which provided that compulsory licences should be available for those new plants that demonstrate a technical advance.⁶ However, the British Society of Plant Breeders reports, that this provision is “ineffective in the UK at least”, because to prove advance the product must actually be created, thereby infringing the patent. The IIP notes its concern that “the UK law on research exemption does not clearly allow plant breeders to make a cross with a variety with a patented gene sequence in it and to develop a new variety without that gene in it”.⁷ Germany and France have introduced an exception as part of their implementation of the Biotechnology Directive, which prevents breeders being sued for development of new varieties.

4.10 The requirement that research is “private” is problematic; it is no longer sufficient for universities because they are increasingly conducting research in collaboration with private organisations. Furthermore, there is concern that if only research that is “non-public” is exempt, then publicly funded research that is, as a condition of funding, disclosed may also not qualify for the research exception.

Box 4.1: Swiss research exception

The effects of a patent do not extend:

- (a) to acts undertaken in the private sphere for non-commercial purposes**
- (b) to acts undertaken for experimental and research purposes in order to obtain knowledge about the object of the invention, including its possible utilities; in particular all scientific research concerning the object of the invention is permitted**
- (c) to acts necessary to obtain a marketing authorisation for a medicament according to the provisions of the law of 15 December 2000 on therapeutic products.**
- (d) to the use of the invention for the purpose of teaching in teaching establishments**
- (e) to the use of biological material for the purposes of selection or the discovery and development of a plant variety**
- (f) to biological material obtained in the field of agriculture which was due to chance or which was technically unavoidable**

³ *Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge? An Empirical Test of the Anti-Commons Hypothesis*, Murray F. and Stern S., 2004.

⁴ *View from the Bench: Patents and Material Transfers*, Walsh J., Cho C. and Cohen W., *Science*, vol 309, 2005.

⁵ According to the Biotechnology Directive 98/44EC.

⁶ Article 12 of Directive 98/44/EC on the legal protection of biotechnological inventions.

⁷ *Patents for Genetic Sequences: the Competitiveness of Current UK Law and Practices*, IIP on behalf of the DTI, 2004.

4.11 The experimental use exception should be clarified to enable researchers to examine, learn from and improve upon inventions. The Swiss research exception, which was recently changed, provides a good example of a clearer exception.

4.12 The Review believes that clarifying the research exception along Swiss lines will foster research without damaging the interests of rights holders.

Recommendation 1: Amend section 60(5) of the Patents Act 1977 to clarify the research exception to facilitate experimentation, innovation and education.

Copyright exceptions for education

Copyright exceptions exist for educational purposes **4.13** As discussed in Chapter 3, one of the purposes of exceptions to copyright is to reduce burdensome transaction costs associated with having to negotiate licences. Thus, the exceptions enable educational establishments to provide high quality teaching without having to clear every individual use.

4.14 The existing exceptions to copyright⁸ enable teachers to copy printed material on an ad hoc basis and to show off-air recordings where no licensing arrangement is in place.⁹ The relevant licensing arrangements for off-air recordings are made by the Educational Recording Agency (ERA). The licences are similar to those issued to commercial radio stations by Phonographic Performance Limited (PPL) and Mechanical Copyright Protection Society/Performing Rights Society (MCPS/PRS). An educational institution buys a licence from the ERA and then does not need to clear the rights to copy a recording of a particular broadcast or to show the programme in a particular case, as long as it is within the terms of the licence. Similarly, for reprographic works, educational establishments have licences with the Copyright Licensing Agency that enable teachers to photocopy material on an ad hoc basis.

4.15 Currently, the education exceptions set out in the Copyright, Designs and Patents Act 1988 (CDPA) are too limited for the digital age, where information is no longer confined to textbooks but can be shared over electronic whiteboards and computer networks. The exceptions also do not apply to secure virtual learning environments (VLEs) or networked computers or ‘intelligent whiteboards’ within educational establishments. The Review agrees with the view presented by the Open University in its submission that educational exceptions should be defined by intent, category of use and activity and not by media or location.¹⁰

4.16 In the absence of copyright exceptions, rights to copy, show or otherwise use the work would have to be cleared with the right holder. However, even with the current exceptions, clearance is time consuming and expensive. A survey of educational institutions found that:

- 90 per cent of respondents had to chase rights holders for permission, and the average number of items chased per institution per annum was 97;
- 12.5 per cent of requests for permission to use material were never answered; and
- fees of up to £7.55 per article were charged in the print environment. For 300 students this results in a cost of £2,265.¹¹

⁸ Sections 32 to 36A of the Copyright, Designs and Patents Act 1988 (CDPA).

⁹ Section 35 of the CDPA.

¹⁰ Call for Evidence submission, Open University.

¹¹ *Clearing the Way: Copyright Clearance in UK Libraries*, Gadd E, 2001.

Educational exceptions should be clarified 4.17 In order therefore to ensure that educational establishments are able to take advantage of new technology to educate pupils regardless of their location, it is necessary to expand the existing copyright exceptions. At present an educational establishment can copy a broadcast work (e.g. a radio or television programme) and show it to its students without infringing copyright provided the activity is for a non-commercial educational purpose.¹² In 2003 the exception was modified so that educational establishments could allow students on the premises to see the programme in their own time.¹³ However, the exception does not extend to situations where students are not on the premises of the educational establishment. This means that distance learners are at a disadvantage compared with those based on campus and thus these constraints disproportionately impact on students with disabilities who may work from remote locations.

4.18 The exception should therefore be expanded so that copyright is not infringed where a copy of a broadcast (e.g. a television programme) is communicated to students who are not located within the educational establishment.¹⁴ It is the Review's view that such an exception is permitted under the Information Society Directive, provided that the education provided is not commercial and any source is indicated.¹⁵ It will also be necessary to ensure that access to such material should not be generally available to the public: accordingly, distance learning students will need to access the material securely via a VLE.

4.19 At present it is also not an infringement of copyright for a non-commercial educational establishment to make reprographic copies of passages from books or similar material, providing sufficient acknowledgements are made.¹⁶ However, the exception only applies where no licensing scheme covering this sort of activity is in place. As mentioned above, the Copyright Licensing Agency (CLA) presently provides such a licence and therefore this exception has a limited impact. However, neither the exception nor the CLA currently license short extracts being sent to distance learning students by email or in a VLE. This disadvantages such students and makes it difficult for educational establishments to provide students with short extracts of study material. Accordingly, the relevant copyright exception should be extended to allow passages from works to be made available to students by email or VLE without infringing copyright.¹⁷ However, right holders have a legitimate interest in this field and so such an exception should not have effect where a licensing scheme is in place.¹⁸

Recommendation 2: Enable educational provisions to cover distance learning and interactive whiteboards by 2008 by amending sections 35 and 36 of the CDPA.

Sound recording term

4.20 The European Commission is reviewing the length of copyright protection for sound recordings in 2007 as part of the review of the body of Community copyright law. Some members of the UK record industry have called for the Commission to increase retrospectively the term of copyright from the current 50 years to 95 years. That is, that the term of protection should be extended for existing works that are already in copyright as well as future works. This

¹²Section 35 of the CDPA.

¹³Section 35(1A) of the CDPA.

¹⁴This restriction is currently imposed by section 35(1A) of the CDPA.

¹⁵Article 5(3)(a) of Directive 2001/29/EC. However, the Review is of the view the new extended exception should continue not to apply where a licensing scheme is in place which covers such activities, in other words, section 35(2) of the Act should apply to the extended exception as well.

¹⁶Section 36 of the CDPA.

¹⁷Such use would also fall within Article 5(3)(a) of Directive 2001/29/EC.

¹⁸In other words, section 36(3) of the CDPA should apply to the extended exception as well.

extension would also apply to works that have fallen out of copyright, but which would still be in copyright if the longer term existed when they were created (the ‘retroactive’ revival of copyright).¹⁹

4.21 Some companies and trade bodies in the UK record industry have called for the UK Government to support their submission to the Commission that copyright term on sound recordings should be extended. The Review consulted widely and has considered this proposal in some detail, both for a retrospective change in copyright term and for a prospective change in term that would only affect future recordings rather than those already in existence. As part of its research into the question of term extension the Review commissioned an economic analysis from the Centre for Intellectual Property and Information Law (CIPIL) at Cambridge University.

4.22 A number of reasons were advanced in the Call for Evidence from some groups in favour of extending the term of protection:

- (1) parity with other countries; in the USA, sound recordings are protected for 95 years. In Australia and Brazil the term of protection is 70 years;
- (2) fairness; currently composers have copyright protection for life plus 70 years,²⁰ whereas performers and producers only have rights for 50 years.²¹ Such a disparity is unfair;
- (3) extension of term would increase the incentives to invest in new music; the ‘incentives argument’ claims that increasing term would encourage more investment, as there would be longer to recoup any initial outlay;
- (4) extension of term would increase number of works available; copyright provides incentives for rights holders to make works available to the public as it gives rights holders a financial incentive to keep work commercially available; and
- (5) maintain the positive trade balance; the UK has an extremely successful music industry. The UK industry has between a 10 per cent and 15 per cent share of the global market.²² In 2004, the UK sector showed a trade surplus of £83.4 million, earning £238.9 million in export incomes.²³

The Review has carefully considered each of these arguments in turn.

I. Extension achieves parity with other countries

Extension is not harmonisation

4.23 It is important to note that the term of protection is only one factor determining the royalties that artists and recording companies receive. The breadth of protection is also important. In the EU, the term of protection for sound recordings and performers’ rights is harmonised at 50 years.²⁴ During this period, rights holders receive royalties for almost all public performances of their work. In the USA, the term of protection is 95 years, but under the Bars and Grills Exception²⁵ around 70 per cent of eating and drinking establishments, and 45 per cent of shops, do not have to pay royalties to performers.²⁶ In the USA, performers only receive royalty payments when their music is played on digital radio,²⁷ while in the UK all

¹⁹ From this point forward, ‘retrospective’ will refer to both forms of backward changes to copyright.

²⁰ Section 12 of the CPDA.

²¹ Section 191 and section 13A of the CPDA.

²² Department for Culture, Media and Sport.

²³ Call for Evidence submission, British Phonographic Industry.

²⁴ Article 3 of Directive 93/98/EEC on harmonising the term of protection of copyright and certain related rights.

²⁵ Section 110(5) of the USA Copyright Act. A complaint was made by the European Community against the USA that this exception was contrary to Article 13 of TRIPS. A panel found in favour of the EC and the USA was ordered to pay annual damages of US\$1.2 million. This requirement has now lapsed.

²⁶ See WTO Panel Report WT/DS160R, Section 110(5) of the USA Copyright Act, 5 June 2002.

²⁷ Section 106(6) of the USA Copyright Act.

radio performances carry royalties.²⁸ If the system in the USA was the same as that in the EU, estimates suggest that European rights holders would receive royalties of \$25.5 million per annum for the broadcasting of their recordings in the USA.²⁹ It is therefore possible that the total royalties received in the EU is no less than, and may even be more than, those received in the USA.

4.24 The argument has also been put forward that the longer length of term in the USA encourages artists from the UK to sign to US recording companies, thereby remitting profits to the USA. However, the Review has seen no evidence of UK bands choosing to sign to US labels based on copyright term. If musicians are indeed signing to labels in the USA, there may well be other reasons for doing so, such as the size of the market. In fact, there is anecdotal evidence that bands from the USA are signing to UK labels to develop in a vibrant music scene. For example, the Scissor Sisters are signed to Polydor UK, and their first album sold 2.6 million copies in the UK, and only 130,000 in the USA. Orson, another American band, achieved a number one single with “No Tomorrow” and is signed to Mercury Records in the UK.

2. Performers and composers should have equal protection

Fairness applies to society as a whole

4.25 Performers argue that the incentives to perform are no less than those required to write lyrics or compose a score, and that the performance itself is a work of art. The distinctive voice and aesthetic of the performer adds value to the composition and is vital to making a song a commercial success.

4.26 But the fairness argument applies to society as a whole. Copyright can be viewed as a ‘contract’ between rights owners and society for the purpose of incentivising creativity. As MacCauley argued in 1841, “it is good that authors should be remunerated; and the least exceptionable way of remunerating them is by a monopoly. Yet monopoly is an evil. For the sake of the good we must submit to the evil; but the evil ought not to last a day longer than is necessary for the purpose of securing the good”.³⁰ If the exclusive right granted by copyright (or indeed any other form of IP right) lasts longer than it needs to, unnecessary costs will be imposed on consumers.

4.27 Economic evidence indicates that the length of protection for copyright works already far exceeds the incentives required to invest in new works. Boldrin and Levine³¹ estimate that the optimal length of copyright is at most seven years. Posner and Landes, eminent legal economists in the field, argue that the extra incentives to create as a result of term extension are likely to be very small beyond a term of 25 years.³²

4.28 Furthermore, it is not clear that extending term from 50 years to 70 or 95 years would remedy the unequal treatment of performers and producers from composers, who benefit from life plus 70 years protection.

4.29 This is because it is not clear that extension of term would benefit musicians and performers very much in practice. The CIPIL report that the Review commissioned states that: “most people seem to assume that any extended term would go to record companies rather than performers: either because the record company already owns the copyright or

²⁸ In relation to sound recordings this is a result of section 20 of the CDPA. In relation to performances, this is the combined effect of sections 182CA and 182D of that Act.

²⁹ TRIPS and the Fairness in Music Arbitration: The Repercussions, Owens R., *European Intellectual Property Review*, 2003.

³⁰ MacCauley, Thomas Babington, Speech to House of Commons on 5 February 1841.

³¹ *Growth and Intellectual Property*, Boldrin M. and Levine D., 2005.

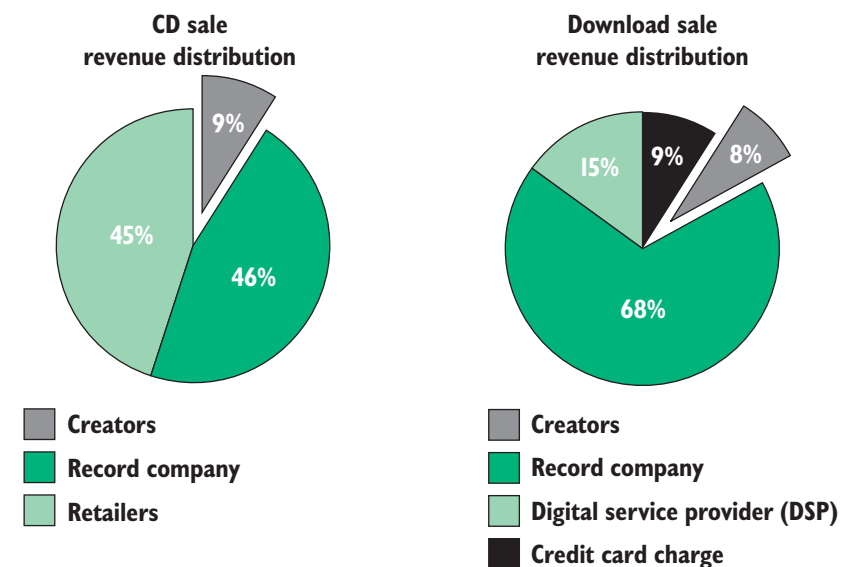
³² *The Economic Structure of Intellectual Property Law*, Landes W. and Posner R., 2003.

because the performer will, as a standard term of a recording agreement, have purported to assign any extended term that might be created to the copyright holder”.³³ The British Phonographic Industry (BPI) submitted a report by PricewaterhouseCoopers (PWC) to the Review.³⁴ Using the maximum revenues predicted in the PWC report, CIPIL estimated that the net present value (NPV) of a prospective change in term would be 1 per cent or lower for performers. The report noted that distribution of income would be highly skewed, with most income going to the relatively small number of highly successful artists whose work is still commercially available after 50 years.

Box 4.2: Artists would not necessarily benefit from extension

In theory, artists would receive payment for an increased period of time. The PWC report indicates that performers obtain 50 per cent of public performance income. However, the amount that performers receive from CD sales is set by a “greater variety of contractual arrangements between artists and record companies than ever before”.^a But, the ‘advance’ that creators receive is determined by contract and bands have to pay back the record company for initial investment. Eighty per cent of albums never recoup costs and so no royalties are paid to the creator.^b As shown in the charts below, on average creators receive a very low percentage of royalties from recordings. If the purpose of extension is to increase revenue to artists, given the low number of recordings still making money 50 years after release, it seems that a more sensible starting point would be to review the contractual arrangements for the percentages artists receive.

Chart 4.1: Revenue Distribution



It is worth noting that length of term of protection on sound recordings and performance rights is not the only source of revenue. Performers receive pecuniary benefits beyond the return on the sale of their creations, by using celebrity status to make money. For example, performers may choose to appear in advertising campaigns or to sell branded merchandise, and the value that they bring to the advertising campaign is derived from their creative works.

^aCall for Evidence submission, British Phonographic Industry.

^bwww.music-law.com/contractbasics.html.

³³ *Review of the Economic Evidence Relating to an Extension of Copyright in Sound Recordings*, Centre for Intellectual Property and Information Law, 2006.

³⁴ *The Impact of Copyright Extension for Sound Recordings in the UK*, PricewaterhouseCoopers, 2006.

3. Extension will increase the supply of new music

Extension will not increase incentives **4.30** Investment decisions are typically based on the expectations of future returns. Therefore, in order for the incentive argument to hold, it must be shown that prospective extension of copyright term for sound recordings would increase the incentives for record companies to invest in new acts.

4.31 In an amicus brief to the Supreme Court in the challenge to the Copyright Term Extension Act,³⁵ seventeen economists, including five Nobel Prize winners, estimate that extension for new works creates at most 1 per cent value for a twenty year prospective extension (using NPV calculation) and they conclude therefore that extension of term has negligible effect on investment decisions.³⁶ Furthermore, they noted that the then term of protection in the USA had nearly the same present value as perpetual copyright term. As such, many economists suggest that increasing copyright term beyond 50 years does not provide additional incentives to invest, as monies earned so far in the future fail to impact on current spending decisions.

4.32 The incentives argument is sometimes applied to artists as well as to record companies. That is, if musicians were to receive royalties for an additional period of time, they would have more incentives to make music. This seems highly unlikely given there are a large number of bands already creating music without any hope of a financial return. Dave Rowntree, drummer with Blur and The Ailerons, commented that: "I have never heard of a single one [band] deciding not to record a song because it will fall out of copyright in 'only' fifty years. The idea is laughable."³⁷

Most recordings do not sell for 50 years **4.33** Evidence suggests that most sound recordings sell in the ten years after release, and only a very small percentage continue to generate income, both from sales and royalty payments, for the entire duration of copyright. Before becoming a signatory to the Berne Convention the USA operated a system where copyright had to be applied for and renewed. Between 1923 and 1942, there were approximately 3,350,000 copyright registrations. Approximately 13 per cent of these were renewed. If current law had applied between 1923 and 1942, 3.35 million works would have been blocked to protect 77,000 commercially viable works.³⁸ In a system where all works receive protection for the maximum term, the vast majority of works remain in copyright despite not being economically viable for the rights holder. Without registration, it is difficult to get accurate estimates of the percentage of works protected in the UK by copyright that are commercially available. Box 4.3 below shows that the vast majority of income for sound recordings and books are generated within the first few years of issue. Therefore, extension would only raise revenue for a small minority of sound recordings, keeping the vast majority locked up.

³⁵ *Eldred v. Ashcroft* (2003) 537 USA 186.

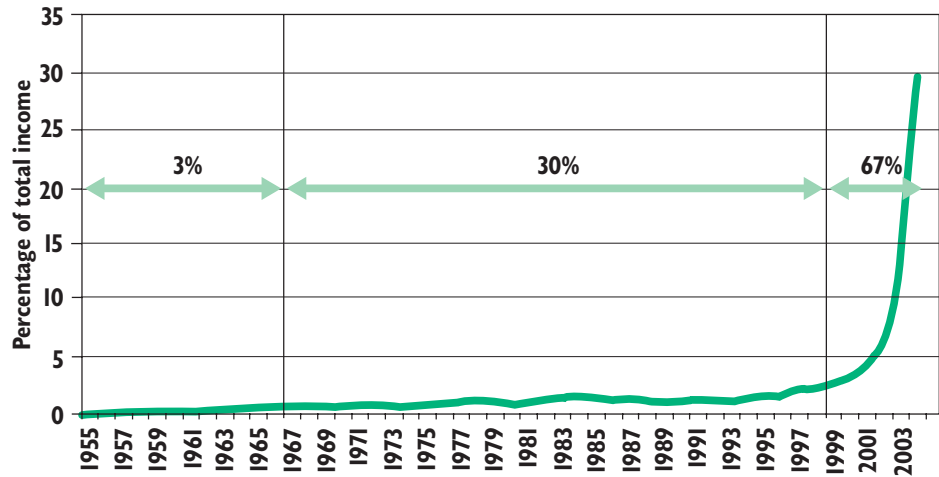
³⁶ *The Copyright Term Extension Act of 1998: An Economic Analysis*, Akerlof, G. et al., 2002.

³⁷ Call for Evidence submission, Dave Rowntree.

³⁸ Brief for Petitioners at 7, *Eldred v. Ashcroft*, (2003) 537 USA 186.

Box 4.3: The commercial life of most creative works is very short^a

Chart 4.2: Income by release year as percentage of total income, 2004

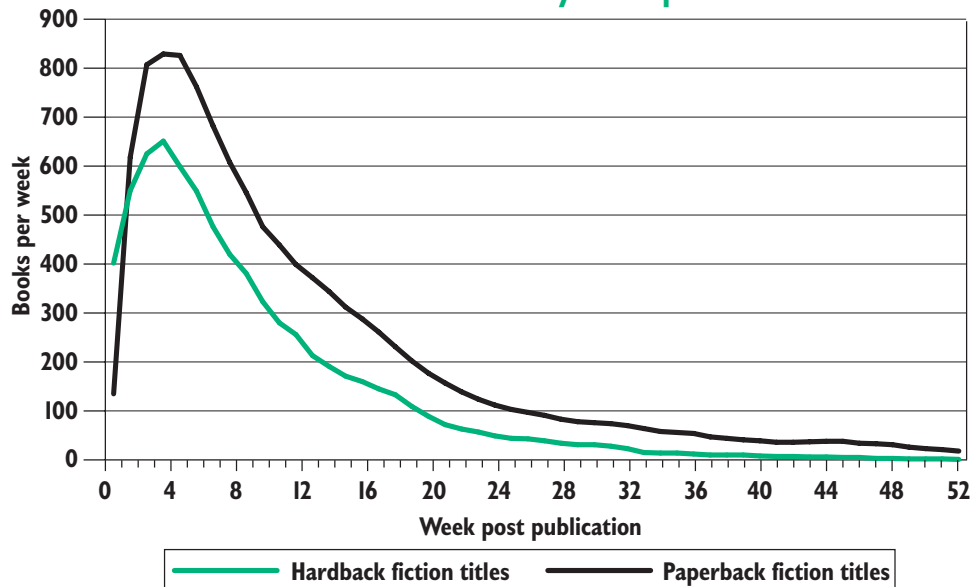


Source: Phonographic Performance Limited and PricewaterhouseCoopers.

Chart 4.2 indicates that the vast majority of income generated by sound recordings comes from those released since 1999. Therefore, the increased revenue from extension would be small, but would affect well-known artists.

A similar pattern appears for books as shown in Chart 4.3 below:

Chart 4.3: Sales of fiction in first year of publication



Source: Neilson Book Scan.

These sales shapes, and data from the USA Library of Congress, suggest that the majority of sales are from new releases, and that the majority of works do not have enduring commercial value. However, extension would impact all works – not just those that continue to be commercially successful.

^a The Copyright Term Extension Act of 1998: An Economic Analysis, Akerlof, G. et al., 2002.

4. More music would be available to consumers

Works in copyright are less available 4.34 Extension would impact on all recordings. It would keep works in copyright even when they are not generating any income for rights owners. One study found that parties without legal rights have made more historic US recordings available than have rights holders. Furthermore, rights holders reissue recent works while largely ignoring earlier music.³⁹ Of the sound recordings published between 1890 and 1964, an average of 14 per cent had been reissued by the copyright owner, and 22 per cent by other parties.⁴⁰ These statistics suggest that the costs of renewing copyright⁴¹ or reissuing copyrighted material are greater than the potential private return, but that these works may have enduring social and cultural value.

4.35 The lack of commercial availability impacts upon consumers and users, but it is also worth noting the impact this has for all creators and musicians. Chapter 2 noted the increasing prevalence of licensing and the complexity of rights clearance. If works are protected for a longer period of time, follow-on creators in the future would have to negotiate licences to use the work during that extended period. This has two potential implications: first, the estates and heirs of performers would potentially be able to block usage rights, which may affect future creativity and innovation; and second, this would make tracing rights holders more difficult. Thus extending term may have negative implications for all creators.

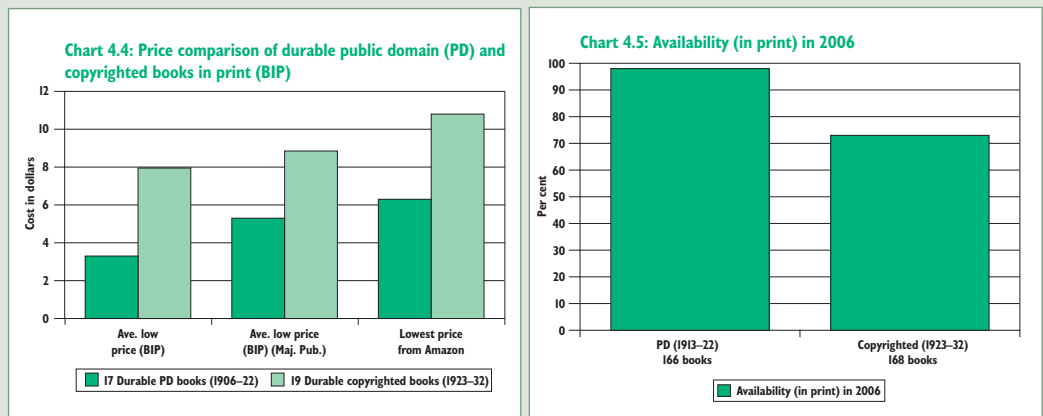
³⁹ *Survey of Reissues of U.S. Recordings*, Brooks T., Aug 2005.

⁴⁰ *Ibid.*

⁴¹ Which was a requirement of US law during the period that Brooks was studying.

Box 4.4: Comparison of price and availability of books in copyright and in the public domain

Evidence suggests that works that are protected by copyright are less available and more expensive than works in the public domain. A study by Paul Heald looked at the price and availability of ‘durable books’ – titles which retain their cultural and economic value and continue to sell many copies. Under copyright, these books are more expensive than those durable books that have passed into the public domain. Further study shows that works that are protected by copyright are less available than those works in the public domain. This suggests that extension would keep durable books at higher costs for a longer period of time, and would make all works, including the most popular works, less available for longer.



Source: Heald, Paul (2006). *Property Rights and the Efficient Exploitation of Copyrighted Works: An Empirical Analysis of Public Domain (1906–1922) and Proprietary (1923–1933) Fiction Best Sellers (working draft)*.

5. The UK’s trade balance would improve

Increasing term will damage the UK balance of trade **4.36** The argument that the balance of trade would improve makes two assumptions; first, that increasing term is necessary to receive longer terms in other countries; and second, that because the UK is a net exporter of music, more money will flow in from foreign markets. The CIPIIL report argues that this is not the case.

4.37 Firstly, the term of protection depends on where a recording is played, not on where it was produced; therefore term extension would only be beneficial to the balance of trade if UK copyright owners were able to benefit from longer terms in other countries. However, most countries outside Europe⁴², including the largest foreign markets for international repertoire – the US and Australia – do not apply a ‘comparison of terms’ to the protection granted to sound recordings. This means that the term of protection offered in a foreign country is not dependent on the country of origin of the sound recording. UK copyright owners already benefit from the longer term offered in the USA and Australia where royalties are collected from those countries, and the CIPIIL report notes that changes in British law would not now affect the term granted to British phonograms.

4.38 Secondly, the CIPIIL report show that the US market, which is worth \$12,153 million⁴³, comprises only 5 per cent of international repertoire. In comparison, the UK market, worth \$3,508.7 million includes 43 per cent of international repertoire. Thus whilst the UK music industry is extremely successful, the UK is a substantial importer of sound recordings, and

⁴² Comparison of terms is required under Article 7 of Directive 93/98/EEC.

⁴³ The Record Industry in Numbers, IFPI, '2005.

therefore the extra revenue from 43 per cent of international sound recordings sold would be remitted overseas. In combination, extension to UK sound term would cause little additional in-flows, but would increase remittances abroad. Therefore, as the CIPIL report concludes, “increasing copyright term at home from 50 to 70 or 95 years is likely to have a disproportionate, negative effect on the balance of trade.”

Extension would cost industry 4.39 Increasing the length of sound term increases the length of time during which royalties accrue. Once copyright in a sound recording ends, no royalties are due for that recording, and fewer licences are required to play those songs (copyright in the composition would continue, and therefore would continue to require a licence). PPL collects monies to remunerate rights holders whenever their sound recordings are played (see Chart 5.4 for more details). In 2005 PPL collected £86.5 million from venues, premises and broadcasters to remunerate rights holders.⁴⁴ The majority of this was collected from UK organisations and broadcasters. Because the cost of the licences reflects the royalties payable on the copyrights, as those copyrights expire, so the cost of the licences will fall. Term extension would keep the cost of sound recording licences higher for longer. Extension would increase costs for all businesses that play music, for example hairdressers, old people’s homes, local radio and internet service providers (ISPs). The impact of extension would therefore be felt throughout the economy.

4.40 In conclusion, the Review finds the arguments in favour of term extension unconvincing. The evidence suggests that extending the term of protection for sound recordings or performers’ rights prospectively would not increase the incentives to invest, would not increase the number of works created or made available, and would negatively impact upon consumers and industry. Furthermore, by increasing the period of protection, future creators would have to wait an additional length of time to build upon past works to create new products and those wishing to revive protected but forgotten material would be unable to do so for a longer period of time. The CIPIL report indicates that the overall impact of term extension on welfare would be a net loss in present value terms of 7.8 per cent of current revenue, approximately £155 million.

Recommendation 3: The European Commission should retain the length of protection on sound recordings and performers’ rights at 50 years.

Retrospective changes to sound recording term

4.41 As discussed above, changes to the length of IP protection can be made retrospectively or prospectively, and the Review has considered the evidence for both forms of extension. This section will consider retrospective changes to copyright.

4.42 Copyright is a contract between creators and society; once the work has been created, altering the length of term of protection changes the terms of that contract. This is not fair for consumers, as they would be forced to pay monopoly prices for longer than they had implicitly accepted. The same logic applies to all forms of IP rights.

4.43 The principal argument that is put forward to increase sound term retrospectively is that many recordings from the 1950s are beginning to fall out of copyright and that this will lead to a loss of revenue, therefore impacting on the incentives to invest in newer artists. As discussed earlier, investment decisions are made on the basis of expected future returns rather than those already received. Furthermore, if music companies have access to capital

⁴⁴PPL Annual Report and Financial Statement, 2006.

markets future investment decisions will be entirely unaffected by the length of protection of current works. Additional, anecdotal evidence suggests that some new successful bands are signed to relatively new record labels. For example Franz Ferdinand are with Domino Records, which was founded in 1993 and rarely re-releases records that predate itself, and the Kaiser Chiefs are signed to B-Unique, founded in 2004.

4.44 The PWC report estimated that at most the NPV of a twenty-year retrospective extension for revenue over the next 50 years would be around £156.1 million, and for a 45 year retrospective extension, £163 million. Using PWC's discount rate of 12 per cent, this equates to approximately £20 million per year. These figures represent **only a 1.8 per cent and 1.9 per cent respectively increase in the present value of revenue from existing recordings**; even at the upper bound, the increase in revenues from existing recordings are very small in present value terms. Correspondingly, PWC estimates that performers would also **gain 1.9 per cent** revenue in present value terms, and “the distribution of this income will be highly skewed with a relatively small number of performers of successful older works being the major gainers”.

Costs to consumers **4.45** If recording companies receive increased revenue from an extension of copyright term, that revenue must come from somewhere. The PWC report performs an analysis of the price differential of sound recordings in and out of copyright. The report concludes that there is no statistically significant difference between the average prices of recordings that are protected by copyright and in the public domain. PWC contend that if prices do not change between works in and out of copyright, then term extension will have no impact on consumers. Instead they suggest that those who make public domain recordings will benefit at the expense of the former rights holders.

4.46 However, PWC note that there are problems with the data, such as the small sample size. Many public domain recordings may not be available in the large retailers where the data was sourced. They also note that as there are not a large number of popular recordings currently in the public domain, relative to the number of recordings that will enter the public domain in the coming years, there is no certainty that this observed trend will continue. As sound recordings of enduring popularity enter the public domain, economic theory suggests that competition between many release companies will drive down the price, just as has occurred in the public domain book market for classic literature. Therefore, the review believes that most of the increased revenue from term extension would come directly from consumers who would pay higher (i.e. monopoly) prices for longer. Working on the maximum producer gains from sound term extension, the CIPIL report estimates that retrospective extension would cost consumers between £240 million and £480 million in net present value terms.⁴⁵

4.47 The additional revenue for producers is likely to come from the most popular recordings, which will have a correspondingly high cultural value. Given that a low number of sound recordings or performances retain any commercial value beyond 50 years, extending term to all these would lock up the majority of recordings that are not generating income, rendering them unavailable for consumers and future creators.

Recommendation 4: Policy makers should adopt the principle that the term and scope of protection for IP rights should not be altered retrospectively.

⁴⁵ *Review of the Economic Evidence Relating to an Extension of Copyright in Sound Recordings*, Centre for Intellectual Property and Information Law, 2006.

COHERENCE

4.48 The IP rights available within the UK must be both internally and externally coherent. They must cover myriad ways in which knowledge is applied and ideas protected, and must also be integrated with other national and international systems of rights, particularly in light of globalisation. Moreover, there should be certainty and consistency in rights. Investment in knowledge-based industries should be grounded in a predictable legal framework for the protection of that knowledge. Finally, rights can only be coherent if they are simple enough to be understood by the general public as well as by IP specialists. As discussed in Chapter 3, the performance of the UK IP system is regarded as generally good. This section therefore focuses on the role of IP in promoting international development; an aspect of policy development that has perhaps been rather neglected. This section makes recommendations to ensure that the international IP system is clear and comprehensible.

Role of Intellectual Property for development

4.49 Policy makers and development economists agree on the need to foster innovation and technology transfer to the developing world. Differences exist over the best means of achieving this goal. There is considerable disagreement over what sort of IP regime is in the best interests of developing countries.

4.50 Some commentators, for example Romer,⁴⁶ and Shapiro and Hassett⁴⁷ argue that ‘strong’ IP rights are in the interests of developing countries. They contend that strong IP protection creates the necessary incentives for firms, principally, if not exclusively, from the developed world, to invest in poorer countries, by enabling them to capture the value in ideas. This, they argue, is of benefit to poorer countries because indigenous firms will capture spill-over benefits from foreign firms. For example, their employees will learn non-IP protected skills, such as good management. This approach could be broadly characterised as emphasising the importance of market mechanisms (in the form of IP rights) as a means of stimulating developing countries to *innovate*.

4.51 However, other commentators, most notably the Commission on Intellectual Property Rights, commissioned by the Department for International Development, contend that ‘weak’ IP is in the best interests of developing countries. Countries with weak IP regimes are able to use technologies refined in developed countries in order to develop their own innovative capacity. This approach could be said to emphasise ‘extra-market’ mechanisms and place a strong emphasis on the need for developing countries to *imitate*. The economist Keith Maksus explains: “enforceable IP rights are neither necessary nor sufficient to establish robust inflows of technology”.⁴⁸

The case for ‘strong’ IP

4.52 There is a wealth of evidence showing a correlation between strong IP and high growth rates. One study of 80 countries between 1975 and 1994 showed that strong IP was correlated with high growth in rich and poor countries. Another study examining 95 countries from 1960 to 1988 found strong correlations, and that foreign direct investment (FDI) was encouraged in developing countries with strong IP protection.⁴⁹

4.53 However, the evidence from that study was not conclusive. It showed correlation between strong IP and high growth, not causation. The rapid growth rates experienced in South East Asia in the 1960s and 1970s were stimulated by very high levels of saving and

⁴⁶ Economic Growth, Romer P., in *Fortune Encyclopedia of Economics*, Henderson D., ed, 1993.

⁴⁷ *The Economic Value of IP*, Shapiro R. and Hassett K., 2005.

⁴⁸ *Encouraging International Technology Transfer*, Maksus, K., International Centre for Trade and Sustainable Development and United Nations Conference on Trade and Development, 2004.

⁴⁹ *The Economic Value of IP*, Shapiro R. and Hassett K., 2005.

investment. It might be the case that local investment and the desire to protect indigenous innovations prompted stronger IP protection.

4.54 Also, the studies cited measure Gross Domestic Product, not Gross National Product, in the developing countries they investigate.⁵⁰ This means that the studies include benefits that accrue to the shareholders of the foreign firms in addition to the benefits to nationals in developing countries. Although there are likely to be some multiplier effects, these results probably overstate the benefits to developing countries significantly.

The case for ‘weak’ IP **4.55** The development of today’s richer countries suggests that ‘weaker’ IP may be more suited to countries in development. In its formative stages of development the USA sought to develop by appropriating technology from Europe. George Washington suggested legislation to encourage “the introduction of new and useful inventions from abroad”. Between 1790 and 1836 the USA restricted patents to residents, hardly an approach to incentivise foreign capital inflows and ensure free markets. When Switzerland industrialised in the 1880s it did so without a patent system, allowing it to benefit from innovations developed elsewhere. Ultimately patents were only introduced under pressure from trading partners. Similarly, between 1960 and 1980 Asian economies emphasised the importance of reverse engineering and imitation. When South Korea adopted patents in 1961 their term was limited to only 12 years and they were not available for foodstuffs, pharmaceuticals or chemicals. Perhaps most strikingly, Italy only introduced a patent system in 1978.⁵¹

4.56 Patent rights are territorial. To gain protection, firms must register their rights in each country in which they seek protection. Therefore, it is not obvious that there is a link between the location of R&D and the patent regime in that country. For example, a company could undertake R&D in a country with no IP protection and quite easily register the invention somewhere else. Factors including the presence of skilled workers and low costs are more likely to impact on R&D location decisions than the strength of the IP system. Simply strengthening the IP system in developing countries would not necessarily facilitate foreign investment. Furthermore, there are costs associated with issuing and enforcing IP rights, both for consumers who face higher prices for goods and for stretched government finances in staffing IP offices with trained experts.

‘One size fits all’ is inappropriate **4.57** The economic evidence and, in particular, the history of currently developed countries suggest that a single one-size-fits-all approach is inappropriate. Stronger IP protection can ultimately reap rewards in terms of greater domestic innovation in developing countries and in developing countries with sufficient capacity to innovate. However, it has little impact on innovation in developing countries without the capacity to innovate, and it may impose additional costs.⁵² Given that different IP regimes are more appropriate at different stages of development, it would make sense to allow individual nations to choose when to strengthen their IP regimes, rather than to seek to enforce a certain perspective.

The international architecture **4.58** Chapter 3 outlined the international architecture for IP. The Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS) sets out minimum standards for IP which all World Trade Organisation (WTO) Member States must meet. These stipulations have proven very burdensome for some developing countries. For least developed countries (LDCs), which have not yet developed their own technology base, the best means of encouraging technology transfer is to utilise the freedoms and flexibilities that exist in TRIPS.

⁵⁰ *The Role of Intellectual Property Rights in Economic Growth*, Gould D.M. and Gruben W.C., *Journal of Development Economics*, March 1996.

⁵¹ *Integrating Intellectual Property Rights and Development Policy*, Commission on Intellectual Property Rights, 2002.

⁵² *The Role of Intellectual Property Rights in Technology Transfer and Economic Growth: Theory and Evidence*, Falvey R. and Foster N., United Nations Industrial Development Organization, 2006.

4.59 In addition to exploiting the potential for weaker IP regimes, where appropriate it is important that developing countries can see, and are able to use, the benefits that IP undoubtedly brings. For example, patent offices in developing countries could encourage rapid publication of patents and actively assist local firms and individuals to access patents and use them to assist local innovation. In a similar vein, there are opportunities to use IP rights to create value using the resources of developing countries, for example establishing protection for geographic identifications for coffee-growing areas.

4.60 There are ways in which developing countries could seek to increase the stock of public knowledge that an IP system facilitates. One way of achieving this would be to have rising patent renewal fees. This would encourage international firms who hold patents to allow them to lapse and fall into the public domain earlier, thus enabling other firms to use and adapt them. It is true that this would reduce the value of exclusive rights for patent holders, but for technology that has been patented in the developing world firms are likely to have already recouped most of the R&D costs from markets in developed countries in any case. This was the approach taken by South Korea and Taiwan to enable local businesses to move gradually up the technological curve, first by imitating developed technologies and later developing their own.

4.61 It is important that Governments and patent offices in developing countries are aware of the potential benefits available to them within the current international IP framework. Crucially, they should adapt their IP regimes in the manner most applicable to their circumstances. They should also take advantage of helpful aspects of the IP system, such as the requirement to provide public information about innovations, to foster technology transfer.

4.62 But patent offices in developing countries often lack resources and face large workloads. This can hinder the development of a strategic, coordinated approach to IP matters. The UK has forged strong relationships with foreign patent offices, for example in China, to assist them with application procedures and enforcement policies. The UK Patent Office (UKPO) also has good contacts with offices in developing countries. However, there is potential for further joint working.

Recommendation 5: UKPO should undertake joint working with African patent offices from mid-2007, with the aim of:

- helping them to take advantage of the flexibilities currently existing in the WTO/TRIPS architecture where appropriate; and
- encouraging them to make positive use of IP rights through dissemination of information in patents.

4.63 In the short term the provision of technical assistance to aid developing countries to take a more strategic approach to IP should help to facilitate the transfer of technologies. In the longer term it would be helpful for the international community to enable the least developed countries to 'strengthen' IP regimes as and when it suited them. Indeed, it has already been recognised that the least developed countries (in the WTO) may need longer to implement some of requirements of TRIPS than the present deadline of 2016.

Recommendation 6: Encourage the international community under the auspices of the WTO to review the TRIPS status of the least developed countries prior to 2016 and consider whether further extension for reaching TRIPS compliance would be appropriate.

4.64 There are also concerns that TRIPS may be too restrictive to meet the needs of developing countries in relation to access to pharmaceutical products. There have been particular problems with its provisions on compulsory licensing. A compulsory licence is an involuntary contract between a patent holder and a third party authorised by the Government. It entitles the licensee to make use of the patented material (in this case a drug) for a period during the lifetime of the patent. Compulsory licensing thereby enables Governments in the developing world to reduce the costs of providing medicines by introducing another provider into the market.

4.65 Conditions in TRIPS can hinder the effectiveness of compulsory licensing. TRIPS only allows licensees to provide drugs to their domestic market.⁵³ So, only a firm in a developing country could produce the drugs for sale in that country. But developing countries often lack sufficient manufacturing capacity to produce drugs. This renders compulsory licensing provisions of limited use.

4.66 In 2001 it was acknowledged in the Doha Declaration on TRIPS and Public Health that developing countries with “insufficient or no manufacturing capacities in the pharmaceutical sector could face difficulties in making effective use of compulsory licensing under the TRIPS Agreement”.⁵⁴ In 2003, to address this problem, a Decision of the General Council enabled developing countries to import drugs made under compulsory licences abroad until 2007. TRIPS has been amended to make this suspension permanent, but it needs to be ratified by two-thirds of the WTO members to come into effect. The Review urges the Government to take whatever steps it can to ensure that this amendment comes into effect before the temporary suspension elapses in December 2007. It also believes that the Government should look favourably on any future proposals to amend TRIPS that may be necessary to address the public health crisis in developing countries.

Recommendation 7: Government should encourage WTO members to ratify the amendments to TRIPS to make importation of drugs easier and cheaper.

FLEXIBILITY

4.67 Globalisation and technical changes have had significant impact on the IP system. It is vital that in both the rights and the ‘exceptions’ to those rights, which limit the control of the rights owner, the IP system is robust and able to cope with technological and environmental changes so it can continue to facilitate innovation and ensure public support.

Fair dealing and exceptions to copyright

4.68 Copyright arises automatically for written, recorded and other creative works. There are exceptions for a number of uses that would be unlikely to occur in a pure free market. For example, if a documentary maker films a scene in a building where a number of photographs are permanently displayed, he would have to seek permission from each of the copyright owners (if there were no exception). The transaction costs of these permissions would be prohibitive and would probably prevent the documentary from being made.⁵⁵ In addition, a number of uses consistent with basic rights, for example copying a book into Braille, would infringe copyright in the absence of an exception. These two arguments provide the rationale

⁵³ Article 31(f).

⁵⁴ Paragraph 6 of Doha Declaration.

⁵⁵ Excuse and Justification in the Law of Fair Use: Transaction Costs Have Always Been Only Part of the Story, Gordon, W.J., *Journal of the Copyright Society of the USA*, 149, 2003.

for ‘fair dealing’ or ‘fair use’ exceptions. There is concern that, at present, the UK exceptions, are too narrow and that this is stunting new creators from producing work and generating new value.

Exceptions can create value **4.69** The USA has a more flexible ‘fair use’ exception than the UK and outlines four tests which the use of a work must meet in order not to infringe copyright.⁵⁶ This broader approach to copyright exceptions has opened up a commercial space for others to create value. For example, Google’s ability to ‘cache’ websites, effectively copying content without having to seek permission first, has been ruled as a fair use of other people’s copyrighted material. Judge Robert C. Jones of District Nevada Court ruled: “The automated, non-volitional conduct by Google in response to a user’s request does not constitute direct infringement under the Copyright Act”.⁵⁷ In the UK, such provisions were only introduced in 2002.⁵⁸ Google explain in their response to the Call for Evidence: “The existence of a general fair use exception that can adapt to new technical environments may explain why the search engines first developed in the USA, where users were able to rely on flexible copyright exceptions, and not in the UK, where such uses would have been considered infringement”.⁵⁹

4.70 ‘Fair uses’ of copyright can create economic value without damaging the interests of copyright owners. As well as being more flexible, the exception can be interpreted more broadly. The film *West Side Story*, which grossed \$43.7 million (\$39.9 million when adjusted for inflation), may be considered a reworking of *Romeo and Juliet*, which is out of copyright. This figure indicates that works which build on others can be extremely valuable, and also are not necessarily substitutes for the original work – indeed, it is not the case that *West Side Story* has made *Romeo and Juliet* less popular or less commercially successful.

4.71 Finally, it should be noted that not all creators are opposed to their work being used to create economic value for someone else. Creative Commons licences use licensing to limit copyright protection and facilitate others using the work.⁶⁰ Fifty million such licenses have been issued, two-thirds of which allow for derivative works, and a quarter of which allow their work to be used for any purpose.

Allowing private copying will improve clarity **4.72** There is currently no provision in UK law for private copying. In many European states, such as Germany and France, as well as in the USA, a private copying exception exists. The lack of a private copying exception in the UK makes it illegal, for example, to copy music from a CD that one has purchased onto a computer or MP3 player that one has also legitimately purchased. Much of the British public is unaware or unconcerned that their actions are prohibited under the law. In June 2006 the BPI announced that “we believe that we now need to make a clear and public distinction between copying for your own use and copying for dissemination to third parties and make it unequivocally clear to the consumer that if they copy their CDs for their own private use in order to move the music from format to format we will not pursue them.”⁶¹

⁵⁶ Under section 107 of the USA Copyright Act.

⁵⁷ Reported in http://www.theregister.co.uk/2006/01/27/google_cache_copyright_breach_ruling/.

⁵⁸ By the Electronic Communications (EC Directive) Regulations 2002 (SI 2002/2013).

⁵⁹ Call for Evidence submission, Google.

⁶⁰ Creative Commons is only a licence and relies on copyright; it is not a separate legal model.

⁶¹ Evidence from BPI to House of Commons Select Committee for Culture, Media and Sport Inquiry into New Media and the Creative Industries.

4.73 Format shifting music for personal use from CDs to another media is an entirely legitimate activity. It is essential to reflect this clearly in the law. Rapid technological change has altered the way that media is recorded, stored and played. As such, private copying should enable users to copy media on to different technologies for personal use.

4.74 Under the Information Society Directive, countries are able to enact a private copying exception provided that ‘fair compensation’ is given to rights holders.⁶² In France, Germany and many other countries levies are exacted on hardware and blank media. One of the main problems with levies is that they are blunt instruments: the amount is fixed and therefore does not reflect the number of times a device is used, nor can it compensate for each individual copy. It is also not clear that royalties are accurately remitted to rights holders as it is very difficult to determine whose music is being copied. The European Commission is reviewing the entire body of copyright law, and is specifically investigating whether levies work.

4.75 The Review believes it is possible to create a very limited private copying exception without a copyright levy.⁶³ If rightholders know in advance of a sale of a particular work that limited copying of that work can take place, the economic cost of the right to copy can be included in the sale price. The “fair compensation” required by the Directive can be included in the normal sale price. This means, however, that any private right to copy cannot be extended retrospectively as copies of works already sold would not include this “fair compensation”. Therefore, collecting societies may wish to consider making a single block licence available to allow consumers to format shift their back catalogues legitimately.

4.76 There should be some strict limits on the scope of any private copying exception. The Review recommends that the private copying should be limited to ‘format shifting’ (i.e. transferring a work from CD to an MP3 player or from a video tape to DVD) rather than simply allowing any copies to be made for private purposes. The exception would only allow one copy per ‘format’, but it would also have to recognise that transfer between formats may require intermediate steps (or formats) to be taken.⁶⁴

Recommendation 8: Introduce a limited private copying exception by 2008 for format shifting for works published after the date that the law comes into effect. There should be no accompanying levies for consumers.

Private copying for research should apply to all media

4.77 Many users in the Call for Evidence outlined problems in using material for genuine academic purposes. Fair dealing for the purposes of non-commercial research and private study, permitted by section 29 of the CDPA excludes copying sound recordings or film, which is inconsistent and adds to the cost of negotiating rights for sound recordings and films.

Recommendation 9: Allow private copying for research to cover all forms of content. This relates to the copying, not the distribution, of media.

⁶² Article 5(2)(a) and (b) of Directive 2001/29/EC.

⁶³ Recital 35 of the Directive 2001/29/EC states “in cases where rightholders have already received payment in some other form, for instance as part of a licence fee, no specific or separate payment may be due.... In certain situations where the prejudice to the rightholder would be minimal, *no obligation for payment may arise*” [Review’s emphasis].

⁶⁴ Further, as with other exceptions, where a work that is copied legitimately under the private copy exception is subsequently dealt with (e.g. it is sold, let or hired or communicated to the public) it would become an infringing copy. See, for example, section 70(2) and (3) of the CDPA.

Libraries require exceptions for the digital age

4.78 There are copyright exceptions which enable libraries to copy material for readers’ “private and non-commercial study”. It is up to individual librarians to determine whether the copy will be used for private and non-commercial study, which can be problematic. The Libraries and Archives Copyright Alliance reports that “InfoSoc means that not-for-profits and charities now do not fall under exception for copying for research”. The British Academy argues that the exception ought to cover all scholarly research, but that there may be an issue with NGOs that have a commercial wing. As such, it proposes that any use that does not conflict with normal exploitation of a work, i.e. the sale of the work, should be exempted.

4.79 The British Library response to the Call for Evidence, highlighted that the UK has far more stringent restrictions on copying for archiving and preservation than other countries. As Table 4.2 shows, library permissions in the UK are out of step with other countries in three areas: the number of copies allowed, the types of works that may be copied for preservation, and format shifting.

Table 4.1: What libraries are allowed to do

	Are there restrictions on the type of in-copyright work that can be copied by libraries for heritage and archive purposes?	Are there restrictions in statute on the numbers of copies that can be made by libraries?	In the digital environment are there restrictions on format shifting an original work for preservation?
Denmark	None	None ¹	None
France	Not covered in French law	Not covered in French law	Not covered in French law
Germany	None	None ²	–
Japan	None	None ¹	None
Spain ³	None	None	None
UK	Sound, film and broadcast excluded	One copy only	Permanent or semi-permanent format shifting not permitted in copyright law
USA	None	Three copies only	None

¹ Both respondents said that in reality this was limited by reasonableness.

² A German High Court ruling has interpreted the legislation to mean no more than seven copies.

³ This reflects Spain’s new copyright law, which is currently being ratified in the Spanish Congress.

Source: British Library.

4.80 In the digital world, opening a document on screen creates an additional copy of a work.⁶⁵ Other countries take an approach guided by the principle of ‘reasonableness’ which seems a far more sensible and flexible approach than the current UK approach.

Sound and film cannot be preserved by libraries **4.81** The CDPA provides exceptions to copyright on literary, dramatic or musical work for archivists in national libraries.⁶⁶ However, the exception does not include sound recordings, television shows or films.

4.82 This is problematic for works on unstable media, such as celluloid films. Of American feature films of the 1920s, fewer than 20 per cent survive; and for the 1910s the survival rate falls to half of that. This presents a problem for the British Library. It is cheaper to digitise films when they are still in a good condition than to wait until they are out of copyright to digitise and restore them. As the copyright term is long, many films and sound recordings will have degenerated completely before they can be copied freely. It costs \$40,000 to preserve a single colour film by copying it back on to film, compared with \$200 per hour of footage to digitise film.⁶⁷ The prohibitions on format shifting exacerbate this problem.

4.83 The inability of the British Library and the other depositary libraries and archives to make archive copies of sound recordings even for preservation raises real concerns for the protection of cultural heritage. Nelson Mandela’s *Rivonia* trial speech was recorded in 1964 on dictabelt. This format has fallen out use and the hardware is no longer available. The British Library is unable to copy this for preservation without clearing the rights, and there is a risk that the medium will deteriorate before copyright expires. As already extensively detailed, the rights clearance process for old material is extremely burdensome. Many sound recordings held in the Sound Archive are orphan works and therefore the Library is not able to copy the work legally. The costs to preserve sound increase as technology moves on, as shown in Chart 4.6. Therefore waiting until recordings are out of copyright will result in the loss of many recordings and will substantially increase the costs of preservation.

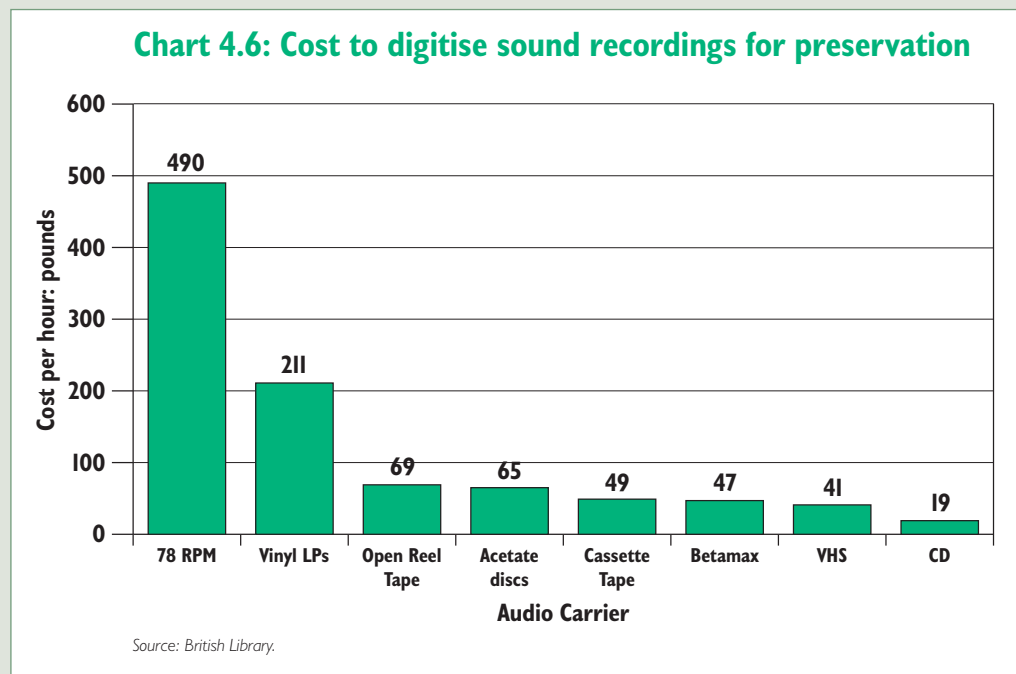
⁶⁵ See section 17(6) of the CDPA.

⁶⁶ Section 42 states: “The librarian or archivist of a prescribed library or archive may, if the prescribed conditions [i.e. for preservation] are complied with, make a copy from any item in the permanent collection of the library or archive ... without infringing the copyright in any literary, dramatic or musical work, in any illustrations accompanying such a work or, in the case of a published edition, in the typographical arrangement.”

⁶⁷ Brief of amici curiae the internet archive, *Eldred v. Ashcroft*; based on <http://www.loc.gov/film/plan.html>, and Experience of Internet Archive, interview with Brewster Kahle.

Box 4.5: Cost to digitise sound recordings for preservation

It is important to note in regard to sound, as well as other digital media, that the potential obsolescence of carrier formats and playback hardware, plus the increased need to reverse engineer formats, all generate higher costs.^a



^a Call for Evidence submission, British Library.

Prohibitions on format shifting limit the ability to archive

4.84 Given the costs of copying on the same medium, and the advances in technology which allow works to be viewed in a number of ways, the limitation on format shifting seems to constrict the potential that libraries have to preserve and share cultural goods. As also mentioned above, this is a particular issue for film and sound recordings. Format shifting provisions ought to apply to all items held within the library for the purposes of preservation.

Recommendation 10a: Amend section 42 of CDPA by 2008 to permit libraries to copy the master copy of all classes of work in permanent collection for archival purposes and to allow further copies to be made from the archived copy to mitigate against subsequent wear and tear.⁶⁸

Recommendation 10b: Enable libraries to format shift archival copies by 2008 to ensure records do not become obsolete.⁶⁹

Enabling transformative use will spur innovation

4.85 In the USA, the fair use exception allows ‘transformative works’. The purpose of this exception is to enable creators to rework material for a new purpose or with a new meaning. Such new works can create new value, and can even create new markets.

⁶⁸ The Review believes that amending section 42 of the Copyright, Designs and Patents Act 1988 to allow replacement copies of sound recordings and films is appropriate and permitted by Article 5(2)(c) of Directive 2001/29/EC, of the Information Society Directive.

⁶⁹ This would be permitted by Article 5(2)(c) of Directive 2001/29/EC, the Information Society Directive.

Box 4.6: The rise and fall of creativity in Hip Hop has, in part, been attributed to limited application of transformative use exception

Such an exception in US law enabled the Hip Hop industry to develop in the late 1970s and early 1980s, allowing producers to sample older works to create a new genre of music and to develop an entirely new market. In 1991, a decision against rapper Biz Markie's appropriation of a Gilbert and Sullivan song in the case *Grand Upright v. Warner*^a changed practices dramatically. In *Bridgeport Music Inc. v. Dimension Films*, it was ruled that samples which rise “to a level of legally cognizable appropriation”^b have to be licensed, but that *de minimis* sampling was still to be considered fair use. This was reversed in the appeal to this case, where the court ruled the three-note sample was not fair use and that musicians should “get a license or do not sample”.

Musicians now have to clear rights with the owner of the sound recording and the publisher and negotiate a license fee before using a sample. Chuck D argues that the narrowing of the transformative use exception means that the “whole collage element is out the window”. When asked about how the change in the IP framework had affected their work, The Beastie Boys commented that “we can't just go crazy and sample everything and anything like we did on *Paul's Boutique*. It's limiting in the sense that if we're going to grab a two-bar section of something now, we're going to have to think about how much we really need it”.^c Importantly for music, clearance is required for the performance and for the composition, although in the USA legal precedent suggests that obtaining clearance for the sound recording is sufficient.^d In the UK, however, this does not appear to be the case. A notable example of this was The Verve's single “Bitter Sweet Symphony”, which used an unlicensed sample from an orchestral version of The Rolling Stones' song “The Last Time”. The sample was derived from the song (not the performance) and was deemed to infringe copyright. As such, The Verve were ordered to pay 100 per cent royalties to Mick Jagger and Keith Richards.

^a 780 F. Supp. 182 (S.D.N.Y. 1991).

^b *Bridgeport Music Inc. v. Dimension Films*, 230 F. Supp.2d 830, 841 (M.D. Tenn. 2002).

^c <http://www.wired.com/wired/archive/12.11/beastie.html>

^d see *Newton v. Diamond and Others* (2003)349 Fd.3 591 (9th Cir. 2003).

4.86 Transforming works can create huge value and spur on innovation. “Good artists borrow; great artists steal.” So said Pablo Picasso, borrowing from Igor Stravinsky, or perhaps from T. S. Eliot.⁷⁰ Hip hop is not the first genre to ‘sample’ music: composers from Beethoven to Mozart to Bartok to Charles Ives have regularly recycled themes, motifs, and segments of prior works.⁷¹ Under the current copyright regime, these creators would need to clear permission and negotiate licences to avoid infringement suits.⁷² The barriers that new musicians have to overcome are extremely high, and the homogenisation of hip hop music is, critics argue, a direct response to the costs of clearing rights.

⁷⁰ ‘A good composer does not imitate; he steals’, Stravinsky I.; ‘Immature poets imitate; mature poets steal’, Eliot T.S.

⁷¹ From J.C. *Bach to Hip Hop: Musical Borrowing, Copyright and Cultural Context*, Arewa O., 84 *N.C.L. Rev.* 547, 630, 2006.

⁷² *Copyright's Paradox: Property in Expression/Freedom of Expression*, Netanel N., forthcoming.

4.87 The crucial point should be whether transformative use compromises the commercial interests of the original creator or offends the artistic integrity of the original creator. Judge Posner's decision in the 'Beanie Baby' case argued that in determining whether use can be considered 'fair use', the courts ought to consider the impact of the new work on the sales of the older work. There are now certain things that should be considered when assessing 'fair use':

- commercial interests: When the US Supreme Court ruled on *Campbell v. Acuff-Rose Music, Inc.*,⁷³ concerning 2Live Crew's "Pretty Woman" parody of the Roy Orbison song, the court argued that the new work did not impact on the commercial success or viability of the original work; and
- artistic integrity: The moral rights of the creator are inalienable, as such any work which builds on previous creation is subject to the moral rights of the original creator. Enabling transformative use would not negate existing moral rights, the right to be identified and the right to object to derogatory treatment. Creators would still be able to use defamation laws to prevent works that are offensive or damaging to the original creator from being made available.

4.88 At present it would not be possible to create a copyright exception for transformative use (but see the discussion of parody below) as it is not one of the exceptions set out as permitted in the Information Society Directive.⁷⁴ However, the Review recommends that the Government seeks to amend the Directive to permit an exception along such lines to be adopted in the UK.

Recommendation 11: Propose that Directive 2001/29/EC be amended to allow for an exception for creative, transformative or derivative works, within the parameters of the Berne Three-Step Test.⁷⁵

4.89 There is currently no exception in copyright to parody works. The BBC commented in its submission to the Call for Evidence that an exception to cover parody in the UK would:

“facilitate the broadcast and sale of programmes containing material included under, for example, fair dealing.”

4.90 As well as reducing transaction costs across Europe, an exception to enable parody can create value. Weird Al Yankovic has received 25 gold and platinum albums, four gold-certified home videos and two GRAMMYs® by parodying other songs, but he had to ask permission from rights holders. Furthermore, many works which are considered to have high value could be considered parodies, for example Tom Stoppard's *Rosencrantz and Guildenstern Are Dead*. The Information Society Directive specifically allows for “caricature, parody or pastiche”,⁷⁶ and the Review recommends such an exception should be introduced into UK law.

Recommendation 12: Create an exception to copyright for the purpose of caricature, parody or pastiche by 2008.

⁷³ 114 S.Ct. 1164 (1994).

⁷⁴ Article 5 of Directive 2001/29/EC.

⁷⁵ The Berne Three-Step Test outlines the maximum extent of exceptions to copyright. Under Article 13 of TRIPS, signatories such as the UK agree to “confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with the normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the rights holder”.

⁷⁶ Article 5(3)(k) of Directive 2001/29/EC.

Orphan works

4.91 The term ‘orphan work’ is used to describe a situation where the owner of a copyright work cannot be identified by someone else who wishes to use the work. Whenever someone wants to copy or use a work it is necessary to go through a number of steps. First, they must determine whether something is ‘in’ copyright. This is made difficult by the range of different terms and the fact that in many cases term is dependent on the death of the author. It is often extremely difficult to trace authors. When works stop being commercially available it becomes even more difficult to track down biographical information. Estimates suggest that only 2 per cent of all works that are protected by copyright are commercially available. In 1930, 10,027 books were published in the USA, but by 2001 all but 174 were out of print.⁷⁷ The British Library estimates 40 per cent of all print works are orphan works.

4.92 Even if users are able to find some information about the author, publisher or distributor this may not be sufficient to identify the rights holder. The author may have assigned copyright to a third party. Furthermore, copyright held by businesses can be lost through ‘abandonware’: when businesses go bankrupt or merge copyright ownership, information can be lost. The problem is made still more difficult in the UK, where there is no copyright registration system detailing ownership.

4.93 This is a large problem for many users, including those who wish to make copies for archiving or preservation and need to seek permission. The Chair of the Museum Copyright Group, Peter Wienard, believes that from the total collection of photographs of 70 institutions (around 19 million), the percentage of photographs where the author is known (other than for fine art photographs) is 10 per cent. In a British Library study to get permission to digitise 200 sound recordings, researchers were unable to identify the rights holders for almost half the recordings.⁷⁸

⁷⁷ *The Economic Structure of Intellectual Property Law*, Posner R. and Landes W., 2003. Source: American Library Annual and Book Trade Almanac for 1872–1957.

⁷⁸ Call for Evidence submission, British Library.

Box 4.7: Experiences of clearing rights for orphan works**The US experience**

- A report by the Carnegie Mellon University Libraries details a systematic study of the feasibility of obtaining permission to digitise and provide web-based access for its collection, during which it discovered that for 22 per cent of the books in the study, the publishers could not be found.
- At a rough estimate, the exercise cost \$200 per title for which permission was granted.
- Cornell University librarians estimated that obtaining permission to create a digital archive of 343 monographs cost the library \$50,000, and still it was not able to identify the owners of 58 per cent of the monographs.

The British Library experience

- The British Library is currently undergoing a protracted process of clearing over 4,000 hours of sound recordings as part of a British Library sound portal funded by the Joint Information Systems Committee.
- In the late 1980s, the Library made 220 oral history recordings of jazz musicians and promoters. The majority of the recordings were made by the British Library at the time, and as many permissions as possible were applied for and received by the Library from the interviewees, as well as some of the interviewers/sound recordists who were not Library employees.
- Between May 2005 and February 2006, 200 identifiable outstanding permissions, were applied for. Of these, only half had permissions granted and a quarter were orphan works.

4.94 One of the key problems with orphan works is that permission is needed in order to make any copy of certain work. As discussed earlier, permission is required for the purposes of restoring sound recordings and films that are degenerating for preservation. This is especially an issue for films, many of which are on unstable formats.

**Orphan works
can create value**

4.95 Many works that lie unused could create value. For example, the film *It's a Wonderful Life*⁷⁹ lost money in its first run and was ignored by its original copyright owners. When the owners failed to renew their copyright in 1970, it was broadcast on the Public Broadcasting Service channel in the USA. It is now a family classic, and worth millions in prime time advertising revenue. The book *The Secret Garden*, since copyright has expired, has been made into a movie, a musical, a cookbook, a CD-ROM version, and two sequels. For works still in copyright, if users are unable to locate and seek permission from owners, this value cannot be generated. For example, documentary makers often find it impossible to track down the rights owners of old pieces of film, many of which have multiple owners, all of whom are untraceable, and are not able to use older works to create new value.

⁷⁹ Dir. Capra F., 1946.

A number of solutions have been proposed to solve this problem **4.96** The US Copyright Office published a report on orphan works in January 2006⁸⁰ which examined the extent of the problem and outlined potential solutions. The system that they preferred is one of limited liability. This means that users of orphan works are still infringing copyright. However, if they have conducted a ‘reasonable search’ they cannot be sued for infringement if the owner subsequently emerges. The copyright owner will be eligible to receive remuneration from the user of the orphan work. The fee would represent a proportion of the value generated by any commercial uses of the work. The user would then have to negotiate a fee for any continued use of the work. For non-commercial uses of the work, the owner will be able to request that the work is no longer used and, if the user complies, no remuneration is necessary, but they will also be able to negotiate the terms for continued use.

4.97 Across the spectrum of the creative industries, there is recognition that solving the problem of orphan works is good for everyone. A solution is good for all those who are involved in archiving and cataloguing; for all those creators who use older works to create new value; for those whose work is restored and who may benefit from remuneration from a new source; and for consumers.

4.98 In a paper for the Gowers Review, the British Screen Advisory Committee outlined a proposal for an exception to copyright to permit the use of a genuine orphan works, with a number of provisions detailing the scope of the exception. This would operate very similarly to the US ‘light touch’ approach.⁸¹

4.99 Currently, such an exception would be incompatible the UK’s obligations under the Information Society Directive.⁸² There are currently discussions at the European level to introduce provisions to enable Member States to create a solution to the orphan works problem. The UK Government should work with Member States to amend the Directive to allow such an exception. Any such exception should permit the use of genuine orphan works, provided the user has performed a reasonable search and, where possible, gives attribution.

Recommendation 13: Propose a provision for orphan works to the European Commission, amending Directive 2001/29/EC.

Guidelines will reduce uncertainty and costs **4.100** One of the key components of any solution to the orphan works problem will be developing the parameters of a ‘reasonable search’. The British Library recommended that the requirement be ‘best endeavours’, but users may still need a guide as to what constitutes a thorough search to protect them from liability. As such, we recommend that the Patent Office works with groups of rights holders, collecting societies, libraries and archives to establish clear guidelines for ‘reasonable searches’.

⁸⁰ Available at: <http://www.copyright.gov/orphan/orphan-report-full.pdf>.

⁸¹ *Copyright and Orphan Works*, British Screen Advisory Council, 2006.

⁸² Directive 2001/29/EC. Article 5 of this Directive sets out the permissible exceptions to copyright and none of these seem to envisage a *commercial* orphan works exception.

4.101 The loci for ‘reasonable searches’ will vary by medium. For example, someone wishing to track down the rights holder of a piece of music must consult Catco, the UK record industry’s sound recordings database, and follow up on any biographical information held there. For a work of literature, one must search at the British Library, and for film at the National Film and Television Archive. Given that many searches require knowledge of the date of death of the artist and the subsequent owners, this would have to be reflected in the search parameters. A registration system of copyright would greatly facilitate such a search. However, compulsory registration is contrary to international treaty obligations.⁸³ It would be desirable for the UK Patent Office to host a voluntary register, where rights owners could deposit information as to their location and their named estate, or to provide a portal service for users to access existing private registration scheme.⁸⁴

Recommendation 14a: The Patent Office should issue clear guidance on the parameters of a ‘reasonable search’ for orphan works, in consultation with rights holders, collecting societies, rights owners and archives, when an orphan works exception comes into being.

Recommendation 14b: The Patent Office should establish a voluntary register of copyright, either on its own or through partnerships with database holders, by 2008.

Digital Rights Management

4.102 Digital rights management tools (DRMs) are sequences of digital code that restrict certain uses of copyrighted material. For example, they prevent consumers from transferring films stored on DVD to a computer hard drive. DRMs have two functions:

- accountant; currently it is difficult to track what music is played where, and therefore it is difficult for collecting societies to remunerate artists. DRM ‘watermarks’ can track usage electronically to report information back to collecting societies to ensure distribution of royalties is fair; and
- policeman; DRM can limit the access to content, for example, to prevent copying.

4.103 In June 2006, the All Party Internet Group (APIG) published a report on DRM. It stated that DRM will never be entirely effective, but can remove temptation for the ‘casual copier’. APIG notes that “because DRMs can almost invariably be circumvented, a legal framework is needed to prevent unauthorised copying at a commercial scale, and in the UK this is provided by the CDPA”.

⁸³ Article 5(2) of the Berne Convention for the Protection of Literary and Artistic Works.

⁸⁴ There are voluntary registers available, for example the UK Copyright Service. However, to ask users to check all the voluntary registers would increase transaction costs substantially.

Box 4.8: Issues with DRM technology

1. Technical protections can enable restrictions that go beyond protecting content to price discrimination in different EU markets:

- for example Apple iTunes charges 79p in the UK and 68p in the EU for a single music track, without the possibility of arbitrage.

2. DRMs can prevent uses permitted under fair dealing exceptions, and DRM tools do not necessarily expire when copyright expires:

- the Adobe eBook reader gives authors the ability to prevent readers from electronically copying an insubstantial part of text – despite such copying not being a copyright infringement; and
- the British Library’s submission to the Call for Evidence noted that the great majority of agreements relating to electronic licences undermined exceptions provided for in UK and international copyright law.

3. DRMs can damage users’ computers and can put limits on what users can and can’t do with the products:

- some DRMs load up proprietary software or devices which may harm users’ computers or necessitate upgrades. In 2005 one record company was threatened with legal action over anti-piracy protection on CDs that automatically installed ‘rootkit’ software that could damage hard drives and violated users’ privacy; and
- some CDs will only play on two devices before locking.

DRM trumps copyright law 4.104 DRMs can prevent activities permitted under the exceptions. For example, the Royal National Institute for the Blind (RNIB) note that Adobe eBooks usually have ‘accessibility’ settings disabled. This prevents the visually impaired exercising their rights to make copies in accordance with the exceptions introduced by the Copyright (Visually Impaired Persons) Act 2002.⁸⁵ Such exceptions ought to be respected by technology.

4.105 The Information Society Directive recognises that DRMs may be used to prevent legitimate copying and Article 6(4) requires Member States to ensure that technical measures do not preclude a person from benefiting from certain copyright exceptions. This obligation has been implemented in UK law.⁸⁶ If a person cannot exercise a permitted right due to a DRM, they must issue a ‘notice of complaint’ to the Secretary of State, who can then issue directions on how to ensure that the permitted act can be performed. As yet, no-one has filed a complete notice of complaint, yet both the Consumer Project on Technology (CPT), an IP research body, and the RNIB told the APIG committee that this process is “slow and cumbersome”.

Improve notice of complaint procedures 4.106 The Review recommends that the procedures in place for circumventing DRM to allow copying for uses deemed legitimate under copyright exceptions ought to be made easier, for example through a model email form available on the Patent Office website.

Recommendation 15: Make it easier for users to file notice of complaints procedures relating to Digital Rights Management tools by providing an accessible web interface on the Patent Office website by 2008.

⁸⁵ Section 31A of the CDPA.

⁸⁶ See section 296ZE of the CDPA.

4.107 DRMs can be legitimately employed, and where they are they should be robust. The Review believes there is a need for clearer guidance on DRM for users, and encourages the DTI to work with industry looking into labelling media. In the event that companies use DRMs to create market power, damage users' software or invade their privacy, the Review recommends that the Office of Fair Trading undertakes investigations. The Review also supports the DTI investigation into the EU single market, but notes that the key example of DRM being used to segregate markets, namely differential pricing on iTunes, may be a result of negotiations with collecting societies in varying countries and not simply an issue arising from the use of technical protection measures.

4.108 The Review will make further recommendations on the way policy is formulated in the Chapter 6 and notes that any future policy formulated on DRM ought to be consulted on widely, with the views of all stakeholders, including consumers, libraries and creators, taken into consideration.

Recommendation 16: DTI should investigate the possibility of providing consumer guidance on DRM systems through a labelling convention without imposing unnecessary regulatory burdens.

Clarify the UK position on new rights

There have been calls for new rights **4.109** There are concerns that a 'one size fits all' patent system may not provide the right incentives to innovate in new areas of technology, such as software and genetics. Many fast-paced industries create new products at high speed, so the time it takes to get patent protection is too long and the life span of the invention is too short for the costs to be recouped in the monopoly period. The boundaries between patentable and unpatentable business methods and computer programmes are very unclear.

Additional rights increase transaction costs **4.110** Additional layers of rights increase the problems with boundary conditions. At present, new bands are advised to trade mark their name, thus retaining perpetual rights over their name even when their recordings or compositions have passed into the public domain. Databases can still be protected by copyright as well as database rights. Where different IP rights overlap, exceptions that apply to one IP right may be barred by restrictions relating to another. Introducing additional layers of protection is likely to encourage firms to game the system in order to get as much protection for their products as possible. Creating more rights could unnecessarily strengthen protection for products that are already protected adequately by other forms of IP.

4.111 Additional layers of rights also have high costs. First, there will be significant costs in devising specialised systems to record and award the new rights; and new training and recruitment costs to administer and advise on the new right. Second, there could be high costs in challenging the new rights. It is vital that sui generis rights are properly targeted. It is difficult for government to try to predict the technologies of the future and second guess the investment requirements for such new technology. Four main issues were raised in the Call for Evidence: utility model patents; software patents; biotechnology and genetic patents; and business method patents.

4.112 The requirements for patentability are high, and the costs of protection are high. As such, some users of the IP system have called for the UK to introduce a 'utility patent'. This would be a second tier of patent protection for inventions which can be obtained quickly and at a lower cost, but which will have a shorter duration. In 2004, the European Commission Enterprise Policy Indicators showed that the countries with innovation as an area of strength

were Finland, Denmark, Sweden and Germany. Sweden has no second-tier system, while utility model systems in Finland and Denmark are relatively new, having been introduced in 1991 and 1992 respectively. Other countries that do have utility model patents, such as Italy and Spain, were defined as having weak innovation systems. There seems to be no correlation between the existence of a utility model patent and innovation. Rather, strong innovation seems to be caused by a high prevalence of innovative sectors, for example Finland and Germany have large electronic and transport industries respectively.

4.II3 While a utility model may reduce costs for some, there is a concern that it will increase the costs for other users and stunt future innovation. More patent protection can limit the ability of future inventors to create new products. Introducing a new layer of protection will increase boundary problems, and a new right could lead to an increase in litigation. The Review has therefore decided not to recommend the introduction of utility model patents. It makes a number of other recommendations in Chapter 5 to reduce the costs of acquiring patent protection.

There is little evidence that software patents increase incentives

4.II4 There have been calls in the UK to introduce pure computer software patents to ensure that innovation is properly protected and encouraged. In Europe, patents are not granted for computer programs as such,⁸⁷ but patents have been granted to computer-based innovations provided they have a technical effect. In the USA, pure computer software patents can be granted. The evidence on the success of pure computer software patents is mixed. The software industry in the USA grew exponentially without pure software patents, suggesting they are not necessary to promote innovation.⁸⁸ The evidence suggests software patents are used strategically; that is, to prevent competitors from developing in a similar field, rather than to incentivise innovation.

4.II5 In addition to the concerns that increased protection does not increase incentives, some have commented that pure software patents do not meet the criteria for patentability. The most profound problem with using patent law to protect software is that innovation in the field is usually accomplished in increments too small to be viewed as inventive steps.⁸⁹ Several submissions to the Call for Evidence, for example the Professional Contractors Group's submission, argued that software should not be patentable in principle. Where freelance businesses develop software, they rely on copyright to protect it. This protection is free and automatic. The copying of as little as 1.7 per cent of a program's code has in the past been found to be infringement of copyright.⁹⁰

4.II6 Introducing pure software patents could raise the costs for small software developers to mitigate against risks surrounding R&D, thereby inflating the capital needs of software development. Sun Microsystems argued that without exceptions that allowed for reverse engineering for interoperability, pure software patents could stifle competition.

4.II7 Last year, the European Parliament rejected the Computer Implemented Inventions Directive, but this issue has been raised again. The economic evidence suggests that such patents have done little to raise incentives to innovate, and other evidence suggests that the introduction of such patents will have a chilling effect on innovation. In the absence of such evidence, a new right for pure software patents should not be introduced, and so the scope of patentability should not be extended to cover computer programs as such.

⁸⁷ Section 1(2)(c) of the Patents Act 1977 and Article 52(2)(c) and (3) of the European Patent Convention.

⁸⁸ *Benson Revisited: the Case Against Patent Protection for Algorithms and Other Computer Program-Related Inventions*, Samuelson P., 1990. *The Patent Paradox Revisited: An Empirical Study of Patenting in the US Semi-conductor Industry*, Hall B. and Ziedonis R., *RAND Journal of Economics*, 2001, *Protecting Their Intellectual Assets: Appropriability Conditions and Why US Manufacturing Firms Patent (or Not)*, Cohen W., Nelson R. and Walsh J., *Management Science*, 2002.

⁸⁹ *A Manifesto Concerning the Legal Protection of Computer Programs*, Samuelson P. et al., 94 *Columbia Law Review*. 2308, 2344-46.

⁹⁰ Call for Evidence submission, Professional Contractors Group.

The USA is out of step with Europe on business method patents **4.118** The Review is concerned that business method patents fail to meet the criteria for patentability; namely that inventions are non-obvious and novel. In Europe, business methods are not patentable as such, while in the USA business models are patentable.⁹¹

4.119 There is some evidence from the USA that patents on business methods are not necessary for incentivising innovation, and that the costs to develop business methods are low and therefore the products ought not to qualify for a full term of patent protection. There are additional practical concerns with increasing business method patents. In a 2001 consultation, the Patent Office reported that SMEs were particularly concerned about business method patents potentially increasing the regulatory burden.

Gene patents may stunt downstream innovation **4.120** Concern was raised in some responses to the Call for Evidence regarding the patentability of genetic material. It is worth noting that the European Patent Convention and Patents Act 1977 explicitly excludes discoveries from patentable subject matter.

4.121 The proliferation of patents in this field has an anti-commons effect in the USA, where multiple owners each have a right to exclude others from a scarce resource and no-one has effective privilege.⁹² For example, the genetic research company Myriad has a patent on the breast-cancer-causing BRCA1 gene. This enabled the company to claim rights over all diagnostic screening tools. The owners of this patent exercised their exclusive rights by bringing infringement suits against organisations such as the Marie Curie Institute in Paris, which was conducting tests on breast cancer tissues, ordering that samples should be sent to the company's labs in Salt Lake City. The EPO struck this patent down.

4.122 The Review supports the current position on pure software patents, business method patents and gene patents, and recommends that changes to the current position should only be made in light of economic evidence that such changes would enhance innovation to offset the considerable costs.

Recommendation 17: Maintain policy of not extending patent rights beyond their present limits within the areas of software, business methods and genes.

CONCLUSION

4.123 This chapter has made a number of recommendations to ensure that the instruments of IP are balanced, coherent and flexible. Chapter 5 will analyse the operations of these instruments in the UK and make recommendations to ensure that the award, transaction and enforcement of IP is transparent, comprehensible and affordable.

⁹¹ Evidence from the Oxford Intellectual Property Research Centre and Olswang suggests that patents “may be obtained by claiming and new inventive, technical method of implementing a business method”. [The First Mover Monopoly, OIPRC].

⁹² Can Patents Deter innovation? The Anticommons in Biomedical Research, Heller M. and Eisenberg R., *Science*, vol. 28, 1 May 1998.

5

OPERATIONS

5.1 This chapter is concerned with the way in which the instruments of the Intellectual Property (IP) system operate. It is split into three sections, detailing how IP is awarded, used and enforced. As identified in Chapter 3 the ideal IP system should display the following characteristics:

- **award** of IP rights should be affordable, comprehensible, swift, predictable and transparent, with only high-quality rights granted;
- **use** of IP should allow ease of buying, selling, licensing, securitising and observing IP rights; and
- **enforcement** of IP should be swift, affordable and judicious.

5.2 The structure and operations of UK IP courts and of national and regional patent offices including the UK Patent Office, European Patent Office (EPO), Office for Harmonisation in the Internal Market (OHIM) and World Intellectual Property Organization (WIPO) have been discussed in chapter 1. This chapter reviews how the three strands of operations currently function, and identifies problems and makes recommendations on how to address them.

AWARD

5.3 The way in which IP rights are awarded must be affordable, transparent, swift, consistent and accessible to all users.

Work sharing

Patents are granted nationally

5.4 It is often necessary, especially in today's global economy, for inventors to seek patent protection in a range of countries where there is an existing or prospective market for the product or process. However, there is no 'international patent' that grants protection throughout the world and therefore patents must be obtained in each country where protection is sought. To facilitate and simplify the procedures, attempts have been made to harmonise national patent laws.

5.5 The Patents Cooperation Treaty (PCT) instituted a procedure where a single application is made which leads to a bundle of national patents. The PCT has two phases. The first phase, the 'international phase', is conducted centrally; the second phase, the 'national' (or 'regional') phase, is conducted by national patent offices (or regional patent offices such as the EPO).

There is considerable duplication of effort

5.6 During the 'national' or 'regional' phases, all patent applications are searched, examined and, if thought to be patentable, granted by each national office where patent protection is required. The initial phase of the PCT application results in an 'international search report' and a preliminary examination report on patentability, but most countries do not rely on these and conduct their own search and examination procedures. Accordingly, there is a substantial duplication of effort. In 2005, nearly 1,000 patent applications were filed directly in the UK from Japan and nearly 4,000 were filed from the USA. The processing of these applications may be further ahead in the country of first filing. By the time the UK Patent Office is ready to conduct a search of the prior art (information already in the public

domain),¹ it is likely that the Patent Office in the country of first filing has already conducted such a search. In 2005, the UK Patent Office examined nearly 5,000 patents that had already undergone search in at least one other jurisdiction.²

5.7 Parallel search is undesirable for a number of reasons:

- **cost** – patent applicants must pay fees to every national patent office to search and examine an application. Although the criteria for patentability and the prior art in the USA and Japan³ are slightly different from those in the UK, the material that will be searched by an examiner will be similar. Accordingly, conducting multiple searches is a waste of resources. In 2002, UK companies filed 2,060 PCT applications. If protection were sought throughout Europe, the USA and Japan, each of these patents would be searched and examined by the European Patent Office (EPO), Japanese Patent Office (JPO) and United States Patent and Trademark Office (USPTO). The total cost for the searches would be around £1,350.⁴ By contrast, the application and search fees in the UK are only £130;⁵
- **time delays** – this duplication of effort increases national patent offices' workloads and creates backlogs. The USA had a backlog of nearly half a million applications in 2005.⁶ This increases the amount of time taken to issue patent protection, which adds to costs for the applicant and adds to the time that follow-on innovators have to wait before they can access information contained in the patent and build on it themselves. The UK Patent Office does not have extensive delays and is able to start processing applications in most fields of technology soon after they are filed, but problems are still faced by British businesses and individuals when filing patents abroad. This can also cause a drain on resources in developing countries, many of whose patent offices are engaged largely in issuing IP protection for foreign inventors; and
- **lower quality** – in response to these spiralling backlogs many patent offices have set targets to speed up patent applications. However, this has led to fears that searches will be less thorough and that consequently patents granted could be subject to more legal challenges, leading to greater uncertainty.

5.8 One solution to this problem is to establish work sharing arrangements between the various patent offices around the world. Patent offices would share information on patent search (and possibly also examination results) where it is relevant to the application for a patent in another country. Further harmonisation of patent law, for example on patentable subject matter, would naturally expand the scope for work sharing.⁷

5.9 Any work sharing will require national offices to produce reliable searches and examinations upon which other offices will be able to base patent grants. The table below illustrates which areas of patent applications could be covered by work sharing arrangements between Japan, the USA and Europe.

¹ Under section 17 of the Patents Act 1977.

² UKPO Annual Report, 2006.

³ The USA and Japan are both 'relative novelty' countries meaning that use of a patent outside the USA or, as the case may be, Japan does not anticipate the invention. This contrasts with the EPO and UK, which both adopt 'absolute novelty' standards meaning use anywhere in the world will anticipate the invention.

⁴ Based on Patent Office data – EPO: application/filing £109, search £653 and designation fee £51, USPTO: application/filing £172, search £286, JPO: application/filing £79.

⁵ See Patents (Fees) Rules 1998 (SI 1998/1778), Part A of the Schedule.

⁶ http://news.com.com/Patent+Office+chief+endorses+legal+reform/2100-1028_3-5683954.html.

⁷ This may be possible as the Substantive Patent Law Treaty progresses.

Table 5.1: The scope for work sharing between Japan, the USA, and European Patent Convention (EPC) contracting states

		Japan	US	EPC	Potential for work sharing?
Patentability	Novelty	Yes	Yes	Yes	Yes
	Inventive step	Yes	Yes	Yes	
	Industrial application	Yes	Yes	Yes	
Continuation in part			Yes		
Early publication		Yes		Yes	
Grace period		6 months	12 months	6 months, limited disclosure	No
Patentable subject matter	Business method	Yes	Yes		
	Plant variety	Yes	Yes		
	Software	Yes	Yes		

Source: Japanese Patent Office.

5.10 The JPO has been active in looking at useful, long-term solutions to accelerate patent applications and reduce duplication of effort. Its solution is known as the ‘Patent Prosecution Highway’ (PPH) and involves mutual sharing of search and examination results between an Office of First Filing and an Office of Second Filing. The JPO explains how the proposed solution would work:

“On condition that patent application X is determined to be allowable in Country A, the corresponding patent application X in country B will be deemed as qualified for accelerated examination through a simple procedure.”⁸

5.11 Trilateral discussions between the EPO, JPO and USPTO have resulted in a pilot of the PPH being agreed between the JPO and USPTO.

Recommendation 18: The Government should encourage the EPO to pursue work sharing with the USPTO and JPO.

5.12 The UK has already contracted out some search and examination work to the Danish and Netherlands Patent Offices with high success rates. This is different from work sharing as it is simply using extra capacity at other national patent offices to perform searches on behalf of the UK Patent Office. Nevertheless, it demonstrates that one office can have confidence in and rely upon searches conducted by another office. The Patent Office has also been engaging directly with the USPTO, JPO and EPO to discuss work sharing. Examiner exchanges between offices have shown approximately an 80 per cent identical response to search⁹, which is a promising basis on which to build.

⁸ Patent Prosecution Highway: Solution to Timing of Work and Maximisation of Benefits of Exploitation of Other Offices’ Search Results, Japanese Patent Office, 2006.

⁹ Patent Office Information.

Recommendation 19: Patent Office should pursue work sharing arrangements with EPC member States, and trilaterally with the USA and Japan to reduce cross-national duplication of effort.

Community Patent

EPO patent applications result in a bundle of national patents

5.13 In 1973, the members of the EEC at that time and others, including Switzerland, created the European Patent Convention (EPC). The EPC provides a single standard for patentability across the contracting states¹⁰ and established the EPO. Under this regime, a patent application undergoes search and examination at the EPO. If the application is granted it leads to a bundle of national patents. Any infringement or revocation actions¹¹ are conducted in relation to each national patent.

5.14 While the EPO regime is preferable to a system of wholly independent national patents there are a number of problems:

- **parallel litigation** – once a patent has been granted by the EPO, each patent is subject to the laws and procedures of the states in which it applies. No verdict by one national court can bind the decision of another. This means that if a patent proprietor successfully proves in one country that this patent has been infringed the judgment does not bind, and does not even necessarily predict, the outcome in another state. One famous instance of divergent verdicts was the *Epilady* case where the UK and German courts reached opposite verdicts.¹² As well as being costly to litigate similar infringements in separate states, the current system increases uncertainty for patent proprietors;
- **renewal fees** – after the EPO has granted the patent, any further renewal fees are paid to national offices, rather than a single renewal fee being paid to the EPO. This unnecessarily adds to patent renewal costs. The approximate cost to renew a European patent, across only six countries,¹³ over ten years is £3,810 in renewal fees.¹⁴ In the USA, renewal fees to the tenth year are £1,830.¹⁵ In this estimate, the size of the market in terms of population would be approximately 377 million compared to a market of 298 million in the USA,¹⁶
- **translation costs** – at present, a European patent will only be valid if it is translated (or applied for) in the language of the relevant country.¹⁷ Therefore, a patent application filed in English would not have effect in France or Germany until it is translated into respectively French and German. The cost

¹⁰ It adopted much of the earlier Convention on the Unification of Certain Points of Substantive Law on Patents for Invention (Strasbourg Convention), which was another Council of Europe Convention.

¹¹ It is, however, possible to oppose the grant of a European patent centrally provided this is done with 9 months of grant.

¹² <http://www.publications.parliament.uk/pa/cm/199899/cmselect/cmtrdind/380/9051106.htm>. The cases are reported at *Improver v Remington* (1989) RPC 69 (UK); *Improver v Sicommerce/Remington* (1990) IIC 572 (Ger). Different reasoning was also given in the Netherlands, see *Beska & Remington/Improver* (1990) IIC 586 (Hague, CA) and (1990) IIC 589 (Hague, DC).

¹³ Renewal in all signatory states to the EPO would, of course, be far greater.

¹⁴ Based on an average patent which is issued in 6 states. Years 3-4 EPO renewal fees; years 5-10 member state renewal fees. Estimate source: Treasury analysis of Patent Office data.

¹⁵ Patent Office Data.

¹⁶ Based on UK, Germany, France, Spain, Italy and Switzerland estimated population.

¹⁷ The rights accruing on publication (under section 69 of the Patents Act 1977) presently only apply where an English translation of the specification is available: but see the Patents (Translations) Rules 2005 (SI 2005/687) which will remove this requirement if, and when, the London Agreement comes into effect.

of translations substantially increases the cost and introduces delays for the applicant, as well as lengthening the time it takes for other innovators to view the details of the patent.

5.15 A proposed solution is a unitary Community Patent (COMPAT). This would be a single right covering the whole community with single application and litigation procedures. The Review strongly believes COMPAT would resolve the issue of duplicated litigation and also make the levels of renewal fees more rational and cost effective. The Review recognises that difficulties remain surrounding translations. In particular the fact that a patent application filed and granted in some Community languages may be difficult for innovators in the United Kingdom to understand without paying for their own translations.¹⁸ However, it believes that these problems can be overcome and that, on balance, the advantages of such a system greatly outweigh the disadvantages in the long term. Accordingly, the Review supports a workable Community Patent. In the meantime, there are interim approaches such as EPLA and the London Agreement, which can deliver real benefits and work with the grain of an eventual COMPAT solution.

Recommendation 20: Continue to support and expedite the establishment of a single Community Patent through negotiations in Europe.

The London Agreement

Translation costs for European patents are high

5.16 Once the EPO has granted a patent it is necessary for a translation to be filed before the resulting national patent has effect in a particular country.¹⁹ The average length patent application, at 22 pages, costs approximately £950 to translate. Assuming this is translated into five different languages, the average number of foreign states for which protection is sought, it will cost £4,700. If it were translated into the languages of all states contracting to the EPC it would cost £20,200.²⁰

5.17 The problem caused by translation costs has been recognised for many years. In 2000, the signatory states of the EPO negotiated the London Agreement. This Agreement provides that an application filed in any of the official languages of the EPO (English, French or German) need not be translated into any other language to take effect in a country which has ratified the Agreement. The right to require that claims are translated at the time of grant into languages other than the official languages would be retained.

5.18 In order to come into force, the London Agreement must be ratified by eight contracting states, including France, Germany and the UK. It currently has eight signatories, including Germany and the UK, and requires ratification by the French to come into force. The London Agreement has been strongly supported by many responses to the Call for Evidence, including the Stockholm Network and Microsoft who note that translations of patents into each country's national language account for the biggest part of European patent costs.

¹⁸ The problem may be worse in other member States as it is likely that most applications would be filed in either English or German if COMPAT trends follow those of the EPO.

¹⁹ See the note above on the rights accruing on publication.

²⁰ *The London Agreement: European Patents and the Cost of Translations*, EPO, 2006.

5.19 Given the significant benefits of the London Agreement, the UK should continue to work with the French Government towards ratification.²¹ It should also encourage other EPC States to ratify the Agreement.

Recommendation 21: Government should support the London Agreement as an interim step towards COMPAT, and as an improvement in its own right.

Quality assurance

High quality patents should avoid impeding competition

5.20 Patent quality refers to how well the patent was prepared and examined and how well the patent meets patentability requirements. Patent quality is different from technical merit and patent value. The patent for a truly pioneering invention can be poorly prepared and examined and therefore of high technical merit but low quality. A patent for a commercially insignificant invention can be optimally prepared and examined and therefore of high quality but low value. It is crucial that patents awarded are not too broad in scope and meet the patentability criteria, otherwise innovation will be stunted.

5.21 If a high proportion of patents that are challenged are held to be valid, this suggests the granting office has granted a high quality patent. Conversely, high numbers of patents being declared invalid suggests poor quality patents have been awarded. Revocation proceedings determine whether the patent grant is valid, and can also therefore be used as an indication of patent quality. It is common practice for a declaration of invalidity to be included as a counter-claim to an infringement claim.²²

5.22 Legal proceedings that result in the removal of poor quality patents will improve the quality of the stock of patents. More importantly, the quality of new patents being awarded can be improved. This can be achieved by a stringent application of the novelty test and the inventive step test, by more observations being submitted, or by introducing pre-grant opposition procedures.

5.23 The UK Patent Office has generally shown that it grants patents of a good quality. In recognition of the quality of work at the UK Patent Office, the Office received “ISO 9001:2000” re-certification for its pre-grant patenting process in 2006 with the award extended to cover its commercial patent search services operation. ISO is the International Standard for quality management systems. The UK Patent Office is the first Patent Office in the world to attain and retain this award. However, there is still scope to improve the performance of the Office.

5.24 One important factor in maintaining quality of grant is ensuring that patents are examined properly for whether they involve an ‘inventive step’.²³ In recognition of this, this UK Patent Office ran a consultation on the inventive step requirement during the period of this Review.²⁴ The results of that consultation are yet to be published. The Review agrees with the Patent Office that it is important that the ‘inventive step’ is set at the correct level. If it is set too high, not enough patents will be granted for genuinely inventive products. It is also important for international coherence: if the UK Patent Office makes it too difficult to satisfy

²¹ It should be noted that the French Constitutional Court has ruled that the ratification of the London Agreement would not be contrary to the French Constitution: Decision 2006-541 – 28th September 2006.

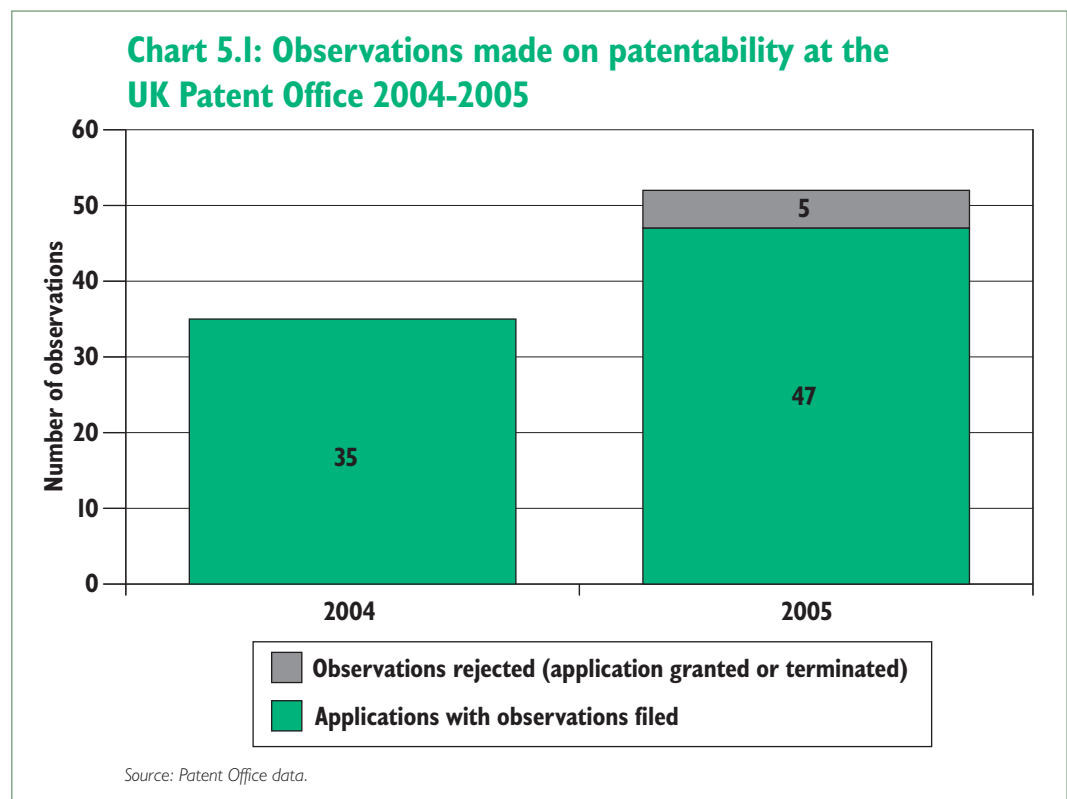
²² Of course, as so few patents are litigated, decisions in invalidity cases are not always indicative of the number of patents not reaching quality levels, particularly as it is likely that only the ‘lower’ quality patents reach litigation rather than settle earlier in the dispute.

²³ The requirement to have an inventive step is set out in section 3 of the Patents Act 1977, which states that something involves an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms the state of the art (also see EPC Article 56).

²⁴ The consultation document is available at: www.patent.gov.uk/consult-inventive.pdf.

the inventive step requirement, but the EPO has a lower standard, applicants will simply apply to the EPO ensuring their applications are treated more generously. If the inventive step is too low, too many non-innovative patents could be granted which prevent genuine innovators from obtaining IP rights.

5.25 Once a patent application has been published,²⁵ it is possible for observations on the patent to be filed by a third party.²⁶ Third parties place observations drawing attention to facts they believe have a material bearing on whether the patent should be granted, and what scope it should have. The examiner decides how to take account of observations. Observations are useful as they provide more information to the examiner. The observation procedures at the UKPO are rarely used: only about 1 in 200 applications which undergo substantive examination (where a patent examiner determines whether a patent meets the criteria for grant) have observations filed against them. There is limited incentive for companies to file observations against a competitor if they are aware of prior art, instead they may be able to force a licence post grant by exerting that prior art. Also, those who file observations are not involved in the observation process and are only informed of the outcome. The graph below shows the number of observations at the UK Patent Office in 2004 and 2005, with a slight increase in the last year.



5.26 Observations made under this procedure are known as ‘section 21’ observations. The process for making observations should be streamlined to encourage use. The Patent Office should undertake initiatives to make patents against which observations can be filed clearer and easier to view, and therefore make it easier to access the observations process. Awareness of the observation process should be raised through the Patent Office website. Online file inspection should allow easier access for the third party raising the observation to view the

²⁵ This is normally 18 months after the (declared) priority date: see rule 27 of the Patents Rules 1995.

²⁶ Section 21 of the Patents Act 1977.

discussion between the applicant and the examiner. This would make it easier for the third party to make points of clarification if necessary, assisting the patent examiner to make a better judgement.

Recommendation 22: Maintain a high quality of patents awarded by increasing the use of ‘section 21’ observations: streamlining procedures and raising awareness.

5.27 The EPO has patent oppositions *post*-grant. The oppositions allow a party to challenge the grant of a European patent within nine months of it being granted.²⁷ This procedure was introduced to allow for a single challenge to be made to the European patent rather than requiring revocation proceedings to be started in each country where the patent has effect. The opposition procedure at the EPO can take from three to four years and has on occasion taken as long as sixteen years. During the time the European patent is subject to opposition it leaves the extent of the patent proprietor’s rights in doubt. The Review does not therefore recommend patent opposition procedures, either pre-grant or post-grant, at the UK Patent Office, because they can add significant time delays to patent grants. The Review outlines a number of other recommendations to improve the quality of patents.

Community Patent Review could improve quality of patents granted

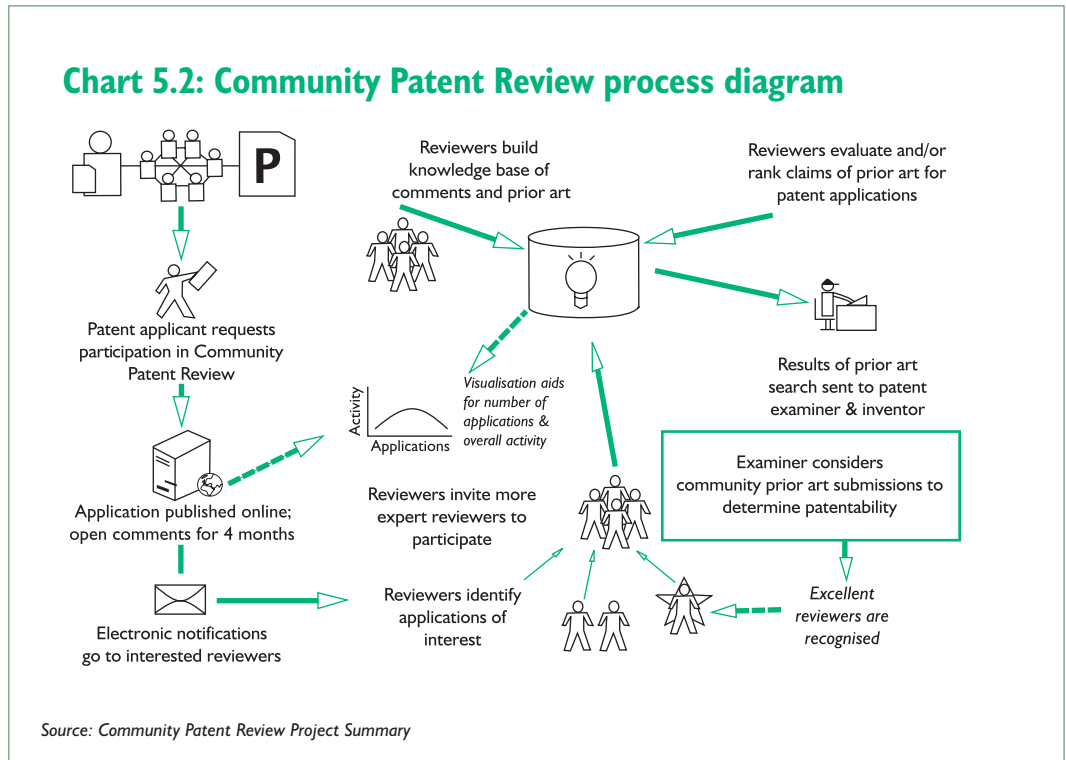
5.28 Professor Beth Noveck, Director of Institute for Information Law and Policy at the New York Law School, has recommended a system of Community Patent Review.²⁸ Her proposal is intended to harness the collective knowledge of experts through the Internet in order to help patent examiners find the right citations. The public is invited to submit prior art via a webpage, which can then be rated by the community. The rewards for submitting prior art are largely reputational.

5.29 The intention of Noveck’s project is to ensure that bad patent applications are not granted and to narrow claims in applications in order to narrow the scope of protection. The project should also accelerate the process of searching prior art at the patent offices and enhance the assumption of patent validity. Ultimately, it should improve the quality of the patents granted. The diagram below shows how the Community Patent Review process is designed.

²⁷ Part V of the EPC.

²⁸ *Peer to Patent: Collective Intelligence for our Intellectual Property System*, Noveck B., 2006.

Chart 5.2: Community Patent Review process diagram



5.30 The USPTO will launch a one-year pilot of ‘open review’ in early 2007 which will involve 250-400 patents.²⁹ Several large software firms have agreed to their patent applications being put through Community Review. This Review believes that the Community Review process could significantly enhance the quality of patents granted. Given the different context of the UK market, the Review believes that a pilot should be conducted in parallel in the UK in 2007.

Recommendation 23: The Patent Office should conduct a pilot of Beth Noveck’s Community Patent Review in 2007 in the UK to determine whether this would have a positive impact on the quality of the patent stock.

5.31 Many newer areas of science are moving exceptionally quickly, such that innovators and patent examiners may be unaware of much prior art of relevance to patent applications.

5.32 The training patent examiners receive in new areas of new technology should be increased to ensure that all patents granted are of a high quality. The Patent Office trialling of patent clustering techniques should be used to identify future technology hotspots and thus enable the training of patent examiners to be more pre-emptive in these areas. Increasing ties between research establishments and the Patent Office can help facilitate this. This stream of work as well as Community Patent Review can be taken forward through the Patent Office for the 21st Century programme.

Recommendation 24: The Patent Office should develop stronger links with universities and other research institutions, including through short placements, to ensure that IP examiners are aware of recent developments in technology.

²⁹ Community Patent Review project summary, accessed at <http://dotank.nyls.edu/communitypatent>.

Fast Track system for patents and trade marks

Patents and trade marks should be granted quickly 5.33 The processing time for applications for patents and trade marks is especially important in areas of fast-moving technology where product lifecycles are reducing. It currently takes between six and nine months from filing a trade mark application for it to be granted (including three months for opposition proceedings). For patents, the average time between the filing of a request for substantive examination to the patent being granted is eighteen months and the average time from the date of filing of an application to the patent being granted was 28 months in 2005.³⁰ This is significantly faster than the average time from filing to grant at the EPO, which was 46.2 months in 2004,³¹ but in a fast moving business environment there are clearly advantages in streamlining the system further.

5.34 Delays in grant time reduce the attractiveness of technologies to potential investors, which can be a particular problem for SMEs. Speed to market is the single biggest issue for successful, innovative companies. Consequently, providing timely protection for patents and trade marks is crucial.

Fast track services for patents exist 5.35 The Patent Office already provides a fast track service for accelerated examination, and combined patent search and examination (CSE) neither of which incur a greater fee. In 2005-06, a third of applications going through examination were for combined search and examination or accelerated examination not under the CSE process.³² Lack of use of this system may result from a lack of knowledge of the availability of the process or from strategic decisions by business in order to delay grant. Some businesses may prefer a slower process as this establishes their priority date over an idea, and gives them extra time to develop their product before deciding whether to incur the full costs of registration. Others will seek fast grants to provide certainty.

5.36 The EPO project BEST (Bringing Examination and Search Together) is similar to the CSE available at the UK Patent Office. This is intended to improve efficiency at the EPO and reduce backlogs. This has allowed applicants to have a single point of contact and thus improved end-to-end service. It was used for 124,000 searches and 30,500 examinations in 2004.³³

5.37 Clearly, to some extent there is a trade-off between awarding rights quickly and awarding rights of a high quality. For example, it can take up to two years for relevant prior art to appear on external search databases, so speeding up the grant process means prior art cannot be fully assessed before grant. For this reason standard grant procedures carry less risk of an unpublished parallel application emerging after grant. The current patent fast track system available should be improved to allow for a comprehensive, “accelerated grant” process. This should enable rights to come into effect more quickly.

Recommendation 25a: Introduce accelerated grant process for patents to complement the accelerated examination and combined patent search and examination procedures.

³⁰ Patent Office Data.

³¹ *European Patent Office Annual Report*, 2004.

³² Patent Office Data.

³³ *EPO Business Report*, 2004.

Trade mark registration **5.38** In today's fast moving business environment products are regularly launched within short timescales. The Patent Office recently consulted on ending the practice of refusing applications on the (relative) grounds³⁴ that the mark applied for conflicts with an earlier trade mark.³⁵ The Review supports the proposal of the Patent Office to end such refusals and to continue searches for the purpose of notifying applicants and others. The Review also notes that this will potentially make it possible to speed up the processing of trade mark applications. The Review proposes that a fast track system (in addition to the normal system) should be available to allow for trade marks to be examined and accepted within 10 days of the application being filed. Once the application is accepted it can be published and thereafter the 3-month opposition period would begin. This fast track system should be accompanied by a higher fee.

Recommendation 25b: Introduce fast track registration for trade marks.

USE

5.39 It should be as easy as possible to buy, sell, license, securitise and observe IP rights both in the UK, and for British firms abroad. Moreover, competition authorities must have the ability to curb any abuse of monopoly power stemming from IP rights.

Business advice

Businesses have limited knowledge of IP **5.40** Businesses negotiating the complexity of the IP system require advice concerning: application for IP; legal advice on how to defend IP; and advice on how to manage IP internationally. Legal advice in particular is expensive. While these costs fall on all businesses, they are particularly onerous for SMEs, as NESTA highlighted in its submission. Public provision of IP advice in the UK is currently patchy.

5.41 The Patent Office has run IP awareness initiatives for businesses. It also provides information to Companies House, which is passed to new companies when they register. While users have found this information beneficial, more can be done. Currently information provided to new businesses through Companies House focuses exclusively on the means of trade marking the company name. Providing generic information to all enterprises through Companies House is a cost-effective way of reaching business. The Patent Office could supplement this advice by providing a basic guide to the IP system. It could usefully include information about what types of IP rights exist, what kind of ideas they apply to, and how they can be obtained and used.

Recommendation 26: The Patent Office should provide comprehensive information on how to register and use IP rights for firms registering with Companies House.

5.42 In addition to providing information when a business is set up, it is important to increase awareness of IP for the existing businesses. One interesting example of advice provided to SMEs is the IP Genesis project in France, described in Box 5.1 below.

³⁴ See section 5 of the Trade Marks Act 1994.

³⁵ The Consultation is available at: <http://www.patent.gov.uk/consult-relative.pdf>; and the responses are published at <http://www.patent.gov.uk/response-relative.pdf>.

Box 5.1: Case study - French Patent Office IP Genesis

The project IP Genesis at the French Industrial Property Office offers a free IP audit to SMEs who are not using the IP system, especially the patent system. This encourages these SMEs to consider IP in a strategic fashion having received expert advice. The service was used by 464 French SMEs in 2005, the vast majority of which were for SMEs with between 1 and 20 employees. The level of satisfaction with the project was high and 51 per cent of participating firms subsequently applied for some form of registered IP protection.^a Clearly, the increase in the levels of IP is not a measure of success in itself, but indicates that the firms who had participated in the scheme had increased awareness of IP and how it might be applicable to their business.

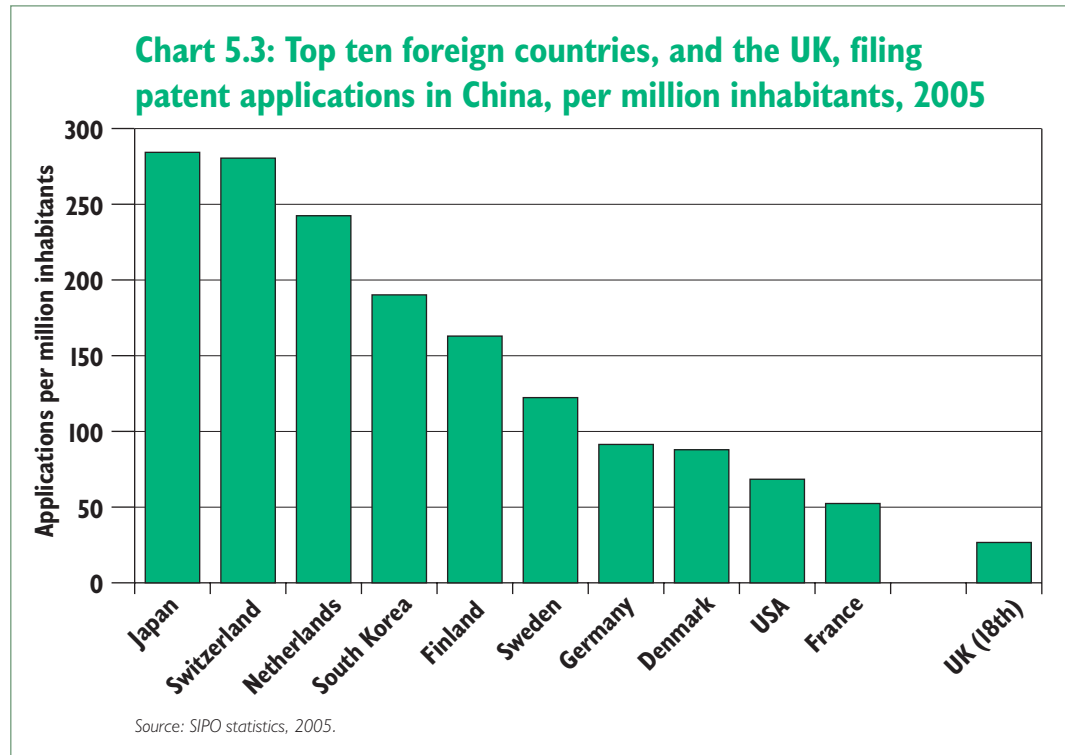
^a Pré-diagnostics propriété industrielle, INPI (French Industrial Property Office), 2006.

5.43 The Patent Office could ensure that the information it provides reaches business through greater collaboration with Business Link offices. Currently this relationship is fairly ad hoc. A more formal relationship could entail Business Link collecting and distributing best practice data alongside Patent Office information. In addition it should inform the Patent Office what businesses' questions are in relation to IP. This symbiotic relationship would enable the Patent Office to tailor information provision and specific advice programmes to emerging business needs.

Recommendation 27: Improve SME business IP support by establishing formal collaboration between the Patent Office and Business Link and by conducting a pilot replicating the French 'IP Genesis' scheme.

5.44 Businesses are particularly unaware of the international system of IP rights. The Confederation of British Industry (CBI) estimates that approximately 70 per cent of businesses are unaware that domestic IP does not provide protection abroad. Given this low knowledge of foreign IP regimes, it is unsurprising that UK firms take out little foreign IP. The UK ranks fifteenth in terms of triadic patent applications per million population. And in 2002, only 4.8 per cent of EPO applications came from the UK compared to 19.1 per cent from Germany, 27.3 per cent from the USA and 17.4 per cent from Japan.³⁶ Notwithstanding the fact that patent quality is more important than pure numbers, the level of UK applications seems inordinately lower than for other comparable economic areas. Improved business advice on patenting abroad should aim to increase international applications and subsequently increase presence of UK businesses in international markets. As well as filing a small amount of patents in Europe, the UK is lagging behind in Chinese patent applications, as Chart 5.3 shows.

³⁶ *Compendium of Patent Statistics*, OECD, 2005.



5.45 Currently, information is provided to UK firms expanding abroad by UK Trade and Investment, an agency of the DTI. Other countries, such as Japan, have links with key embassies abroad to ensure that either there is an IP expert at the embassy or there is a link between embassies to offer tailored advice. IP Australia has established a Marketing Department that provides IP guides, multimedia products, case studies and seminars.

Recommendation 28: DTI should investigate how best to provide practical IP advice to UK firms operating in foreign markets, in coordination with industry bodies, the Patent Office and UK Trade and Investment.

Knowledge transfer/licensing

Licensing is crucial to firms

5.46 As discussed in Chapter 2, licensing of IP is increasing. Licensing agreements are generally complex and there are no industry wide standard contracts. The time taken to negotiate licences varies depending on the relationship between the parties, for example whether the interaction is friendly or adversarial. Strained licensing negotiations last on average 3-5 years, and even mutually beneficial negotiations can last approximately 6 months. A delay in getting to market can threaten a company’s position, especially in areas of fast moving technology such as the computer industry. This was highlighted in several responses to the Call for Evidence. In addition to being slow, licensing can be costly.

5.47 The Lambert Review of Business-University collaboration³⁷ recommended model agreements between businesses and universities. These agreements, developed in consultation with stakeholders, reduce the transaction costs and provide a fair and transparent contractual arrangement for both parties.

³⁷ Accessed at: www.hm-treasury.gov.uk/media/DDE/65/lambert_review_final_450.pdf.

Model licences facilitate agreements 5.48 Since the introduction of the model agreements, the level and quality of business – university collaboration has improved.³⁸ The model licences should be extended to provide a selection of business-to-business model licences. These should help to reduce the time and costs of licensing. As an association of blacksmiths noted in its response to the call for evidence: “a set of standard available templates would help with licences.” Such licences would be particularly useful for SMEs.

5.49 The Patent Office should start to develop such licenses through Government-Industry working groups. Analysis of the current Lambert agreements and their strengths and weaknesses in practice should inform the new model agreements. In particular, one or more model licences should be developed to assist firms wishing to negotiate licences with partners at home and abroad.

Recommendation 29: The Patent Office should develop ‘Business-to-Business’ model IP licences through industry consultation, and assessment of the Lambert model licences.

Licence of right patents 5.50 One means of increasing the use of information contained in patents is through ‘licence of right’ patents. Under licence of right provisions the patent proprietor pays only half the patent renewal fee.³⁹ In exchange, a third party can apply for a licence as of right under terms agreed between the parties, or, failing agreement, by the comptroller, who is the Chief Executive of the Patent Office. Licences of right can increase liquidity in the market. However, the take up of these licences is low, at around 0.5 per cent of patent renewals, and has not increased in recent years. This is partly due to a lack of awareness, especially among small businesses, and partly due to the unattractiveness of negotiating licensing agreements. If a model licence was available for licences of right, this could make them significantly more appealing. In addition to providing a model licence, the Patent Office should publicise the patents available as licences of right. This would enable innovators to identify rapidly what patents relevant to their area of R&D are available as licences of right.

Recommendation 30a: The Patent Office should publish and maintain an open standards web database, linked to the EPO’s esp@cenet web database, containing all patents issued under licence of right.

Public domain visibility

5.51 After IP protection expires the ideas and their expressions fall into the public domain. In the public domain this knowledge can be used by follow-on innovators. A good example of an idea which was never developed whilst covered by patent protection, but subsequently became hugely profitable in the public domain, is Whittle’s jet engine. The Patent Office currently publishes both UK patents and European patents (UK) which have expired. These are available as a list of Patent numbers in the Patents and Designs Journal, published regularly online by the Patent Office. However, the current format is rather inaccessible.

5.52 The Patent Office should make the publication of inventions which are available for use more accessible. An easily accessible, open standards database should be provided that people can draw upon to identify inventions in the public domain. The inventions should be grouped by subject, with a brief description of the invention so that they can be easily identified. This should link to esp@cenet patent entries for maximum transparency.

³⁸ *Higher Education Business and Community Survey 2005*, HEFCE, 2005 accessed at <http://www.hefce.ac.uk>.

³⁹ Section 46 (3) (d) of the Patents Act 1977.

Recommendation 30b: The Patent Office should publish and maintain an open standards web database, linked to esp@cenet containing all expired patents.

Access to finance

5.53 As discussed in Chapter 2, despite the rising importance of intangible assets, current accounting standards in the EU and USA do not satisfactorily capture their value. According to the Intellectual Assets Centre, businesses are often undervalued by up to 80 per cent because they fail to take account of their intangible assets.⁴⁰ This is especially problematic in the case of IP that has been internally generated, rather than purchased or licensed for a fee. If intangible assets are not properly accounted for this will lead to sub-optimal investment decisions being taken by investors.

5.54 As a result of poor valuation of intellectual assets, companies encounter problems raising venture capital. Access to finance is especially problematic for SMEs. Best practice guidelines should be developed in order to reduce this reporting gap and the subsequent impact on businesses. The Review supports initiatives to amend accounting standards to take account of intellectual assets and in the meantime encourages firms' voluntary use of an IP report. An IP report would help to focus a firm on its IP and help to explain how a firm's IP relates to its strategy. However, this type of reporting is still in its infancy and is not a perfect solution to the problem.

Recommendation 31: DTI should consider whether guidance for firms on reporting of intangible assets could be improved, including the provision of model IP reports.

Professional representation comprises the bulk of costs **5.55** In terms of overall budget, Patent Office fees are generally insignificant (approximately £200 in total to grant a patent) compared to the fees charged by patent agents (approximately £300 per hour).⁴¹ The total cost of professional patent filing fees ranges from £1,000 to £6,000.⁴² These fees can be unaffordable to SMEs. The problem of fees from legal representation is exacerbated when applying for patents abroad as Table 5.2 shows.

⁴⁰ *Annual Review*, Intellectual Assets Centre, 04/05.

⁴¹ Call for Evidence submission, Federation of Small Businesses.

⁴² Patent filing fees for legal advice from Appleyard Lees Patent Attorneys, and Trevor Bayliss Brands plc.

Table 5.2: Typical legal and administrative costs of an international patent application

Timeline	Stage		International PCT patent application	UK patent application
Time "T"	Filing basic UK priority application		£1,500 – £7,500	£1,500 – £7,500
T + 12 months	International filing application		£3,500 – £4,000	–
T + 16 months	UK statement of inventorship		£600 – £1,500	£600 – £1,500
T + 17 months	Demand for international preliminary examination		£1,700	–
T + 2 years	Response to international preliminary report		£500 – £1,500	–
T + 2.5 years	Entry to National/Regional phase	USA	£1,500 – £2,000	–
		EPO	£2,000 – £5,000	–
		Japan	£4,000	–
		Other countries	£1,500 – £4,000 ¹	–
T + 3.5 years	Examination under National phase	USA	£2,000 – £5,000	–
		EPO	£0 – £2,000	–
		Japan	£2,000 – £5,000	–
		Other countries	£500 – £1,500	–
T + 4.5 years	Grant procedures	USA	£1,500	–
		EPO	£18,000 – £28,000 ¹	–
Minimum likely total cost (USA/EPO/Japan)			£38,800	
Maximum likely total cost (USA/EPO/Japan)			£68,700	

Source: Frank B. Dehn & Co. Patent and Trade Mark Attorneys, 2003.

¹Including translation fees.

5.56 In its submission to the Call for Evidence, the Federation of Small Businesses highlighted the prime difficulty for SMEs accessing registered IP rights as cost, mainly in the area of IP solicitors and firms of patent attorneys. The Review is not recommending creating two fee structures at the Patent Office to allow for cheaper fees for SMEs, on the basis that fees are already very cheap at £200.

5.57 R&D tax credits are available for SMEs (and now larger corporations) but these specifically do not cover IP applications. Several submissions have called for R&D tax credits to be extended to help pay for patent agents. The Review is not recommending extension of R&D tax credits to pay for the acquisition of IP because acquiring IP is not in itself R&D.

Other countries provide support for SMEs

5.58 There are schemes to support SMEs in other countries. For example, the Welsh Assembly Government provide grants at up to 50 per cent of costs (within maximum limits) to cover patent agent and Patent Office fees. Invest Northern Ireland also provide matched funding. Spanish initiatives provide soft or interest-free loans to help with national, European and international patent applications.⁴³ Enterprise Ireland in some cases will fund the procedure for obtaining patents in Ireland and abroad; the financial assistance may cover up to 100 per cent of the costs of the process of obtaining the patent. Some royalties from the product go back to Enterprise Ireland.⁴⁴

⁴³ WIPO Workshop on Small and Medium-Sized Enterprises (SMEs) and Industrial Property, WIPO, 2002.

⁴⁴ Ibid.

Box 5.2: Case study – The Foundation for Finnish Inventions

The Foundation for Finnish Inventions supports and helps private individuals and entrepreneurs to develop and exploit invention proposals. This can take the form of general counselling or invention specific advice, evaluation of the market potential and patentability, funding of patenting and guidance on product development and commercialisation. Grants or loans are provided which can cover up to 100 per cent of the costs. The average amount of funding provided per invention is €10,000.

5.59 Some matched funding schemes do exist in England, for example they are provided by SEEDA (South East of England Development Agency). European grants are available to regions such as Yorkshire and South Wales. However, there is no nationally coordinated approach.

5.60 The best source of information on the available funding in England is from Business Link. It would be useful to connect regional agencies together to provide one coherent source of what is available so that businesses can be directed to the relevant agencies by the Patent Office and other organisations.

RDA's and Business Links should provide a network of financial schemes

5.61 The connection between RDAs and Business Link in terms of funding provided should be improved. Better advice can then be provided to SMEs on where to find financial support within the boundaries of State Aid rules under Community law. This will complement measures in Scotland, Wales and Northern Ireland. These should be available to SMEs and lone inventors and should focus especially on linking with advice on obtaining IP abroad in order to expand UK firms' activity in international markets.

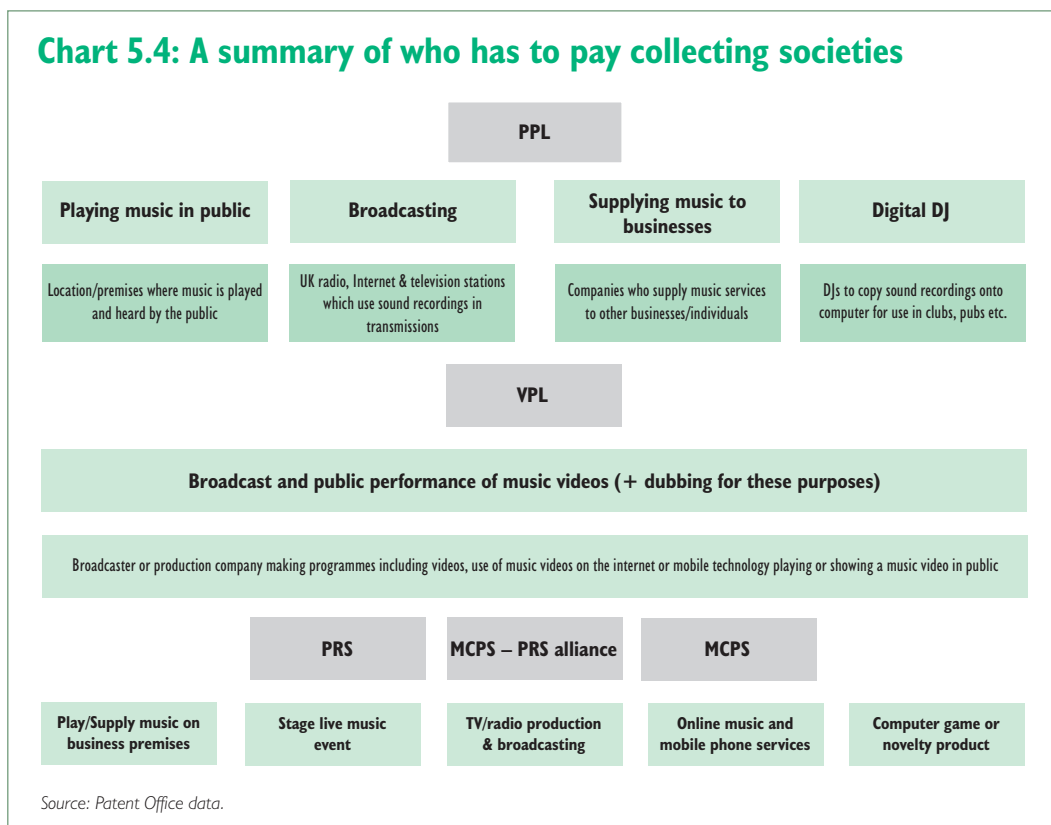
5.62 RDA best practice should also be shared to improve the support provided to SMEs and reduce the burden of patent agent fees. For example, SEEDA has introduced the services of an IP advisor in order to support clients. This service can provide advice at a reduced rate on matters such as IP audits, assistance with filing an application, pre-application advice and licensing. Such RDA best practice should be shared throughout the UK in order to maximise the support at reduced professional rates.

Recommendation 32: Form a working group with Patent Office, RDA and Business Link representation, to identify and promote best practice to maximise the use of effective schemes nationwide.

Collecting societies

5.63 Collecting societies licence rights to use copyright protected content to third parties. They exist to save licensees the time and cost of negotiating licences with each individual rights holder. There are several music rights organisations in the UK, the main ones being Mechanical Copyright Protection Society/Performing Rights Society (MCPS/PRS) and Phonographic Performance Limited (PPL) who collect royalties dependent on the type of music rights required. A broad range of people pay these collecting societies, including music and music video broadcasters, those who play music on business premises and those who provide music services to mobiles as illustrated in Chart 5.4.

Chart 5.4: A summary of who has to pay collecting societies



5.64 Owing to the multiplicity of collecting societies, businesses are often required to obtain several licences to cover all the rights required. For example, shop and bar owners have to seek multiple licenses to play music on their premises. In several other countries, including France, Germany and Japan, rights are administered jointly. This can create confusion for licensees, who have to purchase one licence from PPL for the rights in the sound recording and a second licence from PRS for the rights in the music and the lyrics. Encouraging a cross-licensing agreement between collecting societies could be highly beneficial to users. It could also benefit rights holders if the simpler process encourages licensees to take up more licences.

Collecting societies find it difficult to manage Creative Commons licences

5.65 Not all rights holders want to licence their work on a commercial basis. Creative Commons licences⁴⁵ arose to provide free licences. Creative Commons licences help the owner keep his copyright while inviting some uses of the work: a ‘some rights reserved’ copyright. The project began in the USA, but in recent years country specific licences (including England and Wales, and Scotland) and are now available. Using the Creative Commons website, options can be selected to limit how the work will be used and a model licence is created straightaway which should satisfy the owner’s requirements.

5.66 At present, Creative Commons licences are drafted in such a way that makes it difficult for collecting societies to manage Creative Commons licensed works. Collecting Societies in the UK generally hold an exclusive licence to collect royalties for the copyright works that they represent. Therefore, artists who are members of collecting societies are generally unable to license Creative Commons licensed individual works. This issue does not arise in the USA where, owing to antitrust regulations, collecting societies take a non-exclusive licence to their members’ works.

⁴⁵ See www.creativecommons.org.

EU licensing arrangements are complex

5.67 The absence of pan-European copyright licences increases the number of licences that need to be acquired because rights have to be negotiated for each state. This increases transaction costs. There are currently EU initiatives to encourage direct cross border licensing for online music rather than through bilateral agreements. Other forms of copyright such as licensing of live music performances do not generally encounter the same issues as they are used in a specific geographic area. The European Commission is currently considering ways of increasing the transparency of collecting society operations and introducing competition between existing European societies.⁴⁶

Recommendation 33: The Review invites the OFT to consider conducting a market survey into the UK collecting societies to ensure the needs of all stakeholders are being met.

Role of competition authorities

5.68 It is important that competition authorities scrutinise the behaviour of those seeking or holding IP rights. Authorities must ensure that agreements relating to the development and licensing of IP rights do not contain unnecessary restrictions on competition. And they must also ensure that businesses with market power do not use IP rights in abusive ways.⁴⁷

5.69 Where a rights holder has a dominant position in the market, imposing an obligation on them to grant a licence to competitors or third parties (even in return for a reasonable royalty) would deny the rights holder the ability to fully exploit their rights. The courts have recognised that such cases are exceptional and would only arise where the refusal by a dominant undertaking to grant a licence cannot be objectively justified and prevents the development of the market for which the licence is an indispensable input, to the detriment of consumers. This may only be the case if the undertaking which requests the licence intends to produce new goods or services not offered by the IP right owner, for which there is consumer demand.⁴⁸

5.70 It should be noted that the role of competition authorities in regulating IP markets should not extend to price regulation: patents are exclusive rights which enable owners to charge monopoly prices. However, there should be increased collaboration between the Patent Office, the Competition Commission and the Office of Fair Trading to establish an understanding of how healthy competition can flourish in the information market and how IP can both stimulate and occasionally stunt dynamic competition.

Recommendation 34: Increase cooperation between the UK Patent Office, the Office of Fair Trading and the Competition Commission to ensure that competition and IP policy together foster competitive and innovative markets for the benefit of consumers.

⁴⁶ *Study on a Community Initiative on the Cross-Border Collective Management of Copyright*, EU Commission, 2005.

⁴⁷ EC Article 82 and Chapter 2 prohibition under the Competition Act 1998 set out how IP right holders with market power can behave.

⁴⁸ See in particular, Joined Cases C-241/91 and C-242/P *Magill* [1995] ECR I-743, and Case C-418/01 *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG*, [2004] ECR I-5039.

ENFORCEMENT

5.71 This section is concerned with enforcement of all types of IP (copyright, trade marks, designs and patents) against infringement. IP rights, like any other rights, are only as good as their enforcement. Enforcement of IP rights should be swift, affordable and judicious. The section sets out four criteria that are necessary for the adequate enforcement of IP rights:

1. **awareness of rights** – the public must be aware of the rights that exist and find them reasonable and acceptable;
2. **penalties for infringement** – there must be adequate sanctions to prevent would-be infringers from violating IP rights. Penalties can take the form of legal sanctions, both criminal and civil, or non-legal sanctions, such as codes of practice adopted by bodies to impose penalties on infringers;
3. **pursuit of infringers** – it is crucial that those who ignore the law and the penalties that support it, are adequately pursued by the relevant authorities; and
4. **mechanisms to resolve conflict** – once an infringer is apprehended by the relevant authority the rights holder must have the means to enforce legal sanctions through the courts, or by some means outside of the courts. Chapter 6 will consider the reform of the courts. This chapter will examine the scope for Alternative Dispute Resolution (ADR), which takes place outside the courts, and European reforms.

Raising awareness of rights

Public knowledge of IP is low **5.72** As highlighted in Chapter 2, consumer awareness of IP in the UK is fairly low. In a MORI poll, most respondents had to guess what phrase ‘Intellectual Property’ meant.⁴⁹ Participants were more aware of elements of IP that are physically observable such as trade marks, rather than more abstract forms such as copyright and patents. It is more difficult for consumers to respect rights if they do not know what they are. Respect for IP rights is low and copying and counterfeiting are seen by many as ‘victimless’ crimes. Recent research carried out for the audiovisual industry by OTX, showed that video piracy was seen as a less severe crime than shoplifting and credit card fraud.⁵⁰

Public and private bodies are working to raise awareness **5.73** The Creative Industries Forum on IP, a cross-industry body brought together by DTI and DCMS, developed a scheme under the banner of the ‘CREATE’ principles to explain the value of IP in today’s economy. In conjunction with the Patent Office and the Department for Education and Skills (DfES), DCMS are presenting these principles to a range of audiences including policy makers and children, to communicate a positive message on IP. The Patent Office also developed a very successful resource for schools, the ‘Think kit’[®].

5.74 In a similar vein, three private sector initiatives stand out as good examples of ways in which public and industry awareness about IP can be increased:

- British Music Rights are acting as industry sponsors for the ‘Quickstart Music’ Programme, which is intended to bring together enterprise and copyright education in secondary schools. This programme involves setting up a mini-music enterprise, the students taking a product to market and accruing value from the exploitation of their copyright. This initiative will help to foster an appreciation of copyright in young people;

⁴⁹ *Intellectual Property: Public Attitudes*, MORI, 2000.

⁵⁰ Call for Evidence submission, Alliance Against IP Theft.

- Anti Copying in Design (ACID) has initiated a national IP rights education programme, the ‘Educate to Protect’ campaign, aimed at design schools, universities and SMEs. The programme is based on case studies and practical solutions aimed at advising designers on protecting and fully exploiting IP rights. This has been set up in response to many smaller designers experiencing copying of their designs and will help designers maximise profit from their IP rights; and
- the National Endowment for Science Technology and the Arts (NESTA) has developed and just launched a new module of its mentoring programme focused on the strategic importance and management of IP – ‘The IP Accelerator.’ The module is designed for small innovative businesses, including creative businesses. Following a successful pilot, NESTA intends to roll out the programme more widely.

5.75 The Review supports and commends education initiatives such as these undertaken by private and public sector bodies. Education initiatives should extend from school teaching through to industry, and to general consumer awareness, and should explain the exceptions to IP rights so that consumers understand the balance in the system.

IP crime affects all **5.76** In order to raise consumer respect for IP, awareness raising should not just focus on the damage IP crime does to rights holders. Consumers should be made aware of how their actions affect local business and other people’s lives.

5.77 Many individuals and organisations are harmed by IP infringement. For example the World Health Organization has estimated that up to a tenth of the world’s medicines are fake.⁵¹ Goods infringing trade marks, such as counterfeit cosmetics, can also be harmful to consumers. Links between IP crime and organised crime have been well documented.⁵² Legitimate traders can be forced out of business. A study in the UK on behalf of the British Anti-Counterfeiting Group estimated the number of jobs lost in the UK due to counterfeiting is in excess of 4,000.⁵³

5.78 Other countries have raised the profile of IP much more effectively than in the UK. In Japan levels of knowledge on IP are much higher on average than in the UK. The French IP website stresses the consumer safety aspect of counterfeit goods. The Review believes that the message will have more impact if it is presented in a balanced way, highlighting the rights as well as the responsibilities of consumers. The Consumer Direct website has highlighted counterfeit goods as an important consumer issue and provides advice to consumers.

Recommendation 35: The Patent Office should continue to raise public awareness, focussing in particular on the wider impacts of IP crime, and the exceptions to rights.

⁵¹ *Counterfeit Medicines: Some Frequently Asked Questions*, World Health Organization, 2005. http://www.wpro.who.int/media_centre/fact_sheets/fs_20050506.htm.

⁵² *Proving the connection*, Alliance Against IP Theft, 2006.

⁵³ See <http://news.bbc.co.uk/1/hi/business/3548928.stm>.

Fair and adequate penalties

Legal sanctions 5.79 The penalty for a copyright offence⁵⁴ depends on whether the infringement occurred online or not. In relation to those who commercially deal in infringing goods⁵⁵ or those who distribute goods other than in the course of business to an extent which prejudicially affects the rights holder⁵⁶ the maximum penalty is ten years imprisonment.⁵⁷ In contrast, those who commit online infringement by communicating the work to the public (whether commercial or otherwise) may be sentenced to up to two years imprisonment.⁵⁸ Finally, the commercial showing or playing in public of a work carries a maximum of six months imprisonment or a level five fine.⁵⁹

Table 5.3: A summary of the current penalties for online and physical copyright infringement

	Online infringement	Physical infringement	
Nature of offence	Communicating to the public by electronic transmission in the course of a business or to an extent prejudicially affecting the right holder	Making infringing copies for sale or hire	Distributing infringing copies in course of business or to extent that prejudicially affects rights holder, importing infringing copy into UK other than for private or domestic purposes
Summary sentence (in magistrates' courts)	Up to 3 months in prison and/or statutory maximum fine	Up to 6 months in prison and/or statutory maximum fine	Up to 6 months in prison and/or statutory maximum fine
Sentence on indictment (in Crown court)	Up to 2 years in prison and/or unlimited fine	Up to 10 years in prison and/or unlimited fine	Up to 10 years in prison and/or unlimited fine

Source: Copyright, Designs and Patent 1988 Act (CDPA) (as amended), Patent Office analysis.

5.80 Several submissions have called for a change in the law to increase online infringement penalties to the levels for physical infringement. The intention and impact of physical and online infringement are the same. Crimes committed in the online and physical world should not be subject to different sentences. Increasing the penalties for online infringement will therefore make the law more coherent.

5.81 The Review proposes that the penalty for online commercial infringement⁶⁰ should be increased to ten years imprisonment to bring parity with commercially dealing (but not showing) in pirated works. It proposes that the penalty for consumers infringing online⁶¹ to an extent that prejudicially affects the rights holder should also be extended to ten years, again to bring parity with physical infringement.

Recommendation 36: Match penalties for online and physical copyright infringement by amending section 107 of the CDPA by 2008.

⁵⁴ There are similar offences in relation to performers' rights in section 198 of the Copyright, Designs and Patents Act (CDPA) 1988. The arguments equally apply in relation to such offences.

⁵⁵ E.g. the offence in section 107(1)(a), (b) or (d)(iv) of the CDPA 1988.

⁵⁶ Section 107(1)(e) of the CDPA 1988.

⁵⁷ Section 107(4) of the CDPA 1988.

⁵⁸ Section 107(4A) of the CDPA 1988.

⁵⁹ Section 107(5) of the CDPA 1988.

⁶⁰ The offence under section 107(2A)(a) of the CDPA 1988.

⁶¹ The offence under section 107(2A)(b) of the CDPA 1988.

5.82 One instance of IP infringement which damages rights holders’ investment in IP is Copycat packaging. Copycat packaging is described in the box below.

Box 5.3: Copycat packaging

Original brand owners bear the costs of trying to prize copycat brands off the market – either through legal means, or by changing their own designs. The British Brands Group estimate a decline in sales of up to 20 per cent by the rights holder following the introduction of the copycat product. Kellogg’s spent £1,100,000 on national advertising campaign to say it does not make cereals for anyone else.

- Business Insights stated that “private label success is facilitated when consumers cannot tell a private label from a manufacturer brand due to similarity in packaging.”^a
- Similar packaging resulted in a significant 55 per cent increase in own label share compared to own labels in dissimilar packaging.
- Similar packaging suggests to consumers that the product is definitely or probably made by the same company, the practice results in 7.5 million shoppers being misled.^b
- A study by Kapferer showed that similar packaging generated direct correlations between perceptions of manufacture and perceptions of quality.^c
- Consumers Association Research in 1998 gave further insight into the connection between packaging and consumer assumptions about products

Supermarket product same or better for	Quality	Value
Copycats	43%	57%
Benchmark	30%	46%

Source: Call for Evidence Submission, British Brands Group.

^a *Fighting Private Label*, Business Insights, 2005.

^b Ibid.

^c *Stealing Brand Equity: Measuring Perceptual Confusion Between National Brands and ‘Copycat’ Own-Label Products*, Kapferer J-N., *Marketing and Research Today*, 1995.

5.83 If a shape or colour of a product has been successfully registered as a trade mark it would be possible to rely on infringement to stop the copycat. Regardless of whether or not the appearance of a product is registered, it may be possible to protect it under the common law tort of ‘passing off’. This requires:

- (a) a party must establish good will or reputation attached to the goods or services so that it is recognised by the public as distinctive specifically of its goods or services;
- (b) the party must demonstrate that there has been a misrepresentation by the other party leading or likely to lead the public to believe the goods or services offered by the other person are those of the party; and
- (c) the party must show that it has suffered damage.⁶²

5.84 However, the Review believes that passing off does not go far enough to protect many brands and designs from misappropriation for the following reasons:

- if copycats appear on the market before the defendant has built up goodwill in a certain appearance, the brand owner cannot rely on the law of passing off. This may prevent new entrants from adequately protecting the appearance of their products; and
- it is difficult to demonstrate consumer confusion in court and substantial evidence may be required to bring a successful passing off action.

5.85 This is often especially relevant to small designers who are at risk of their designs being copied before they are able to establish a reputation in the marketplace

Reducing unfair competition will protect investment

5.86 A number of submissions to the Call for Evidence called for a general ‘unfair competition’ law to be introduced. For example, the Law Society highlighted the German law which states that: “acts of unfair competition which are capable of impairing competition to the disadvantage of competitors, consumers or other participants in the market more than insignificantly are impermissible”. The new European Directive on Unfair Commercial Practices (UCP Directive)⁶³ is in the process of being transposed in to UK law, and will tackle practices that unfairly impact on consumers, including practices that mislead or confuse consumers.

5.87 The Local Authorities Coordinators of Regulatory Services (LACORS) have said that once this UCP Directive is in place they will act on behalf of consumers by pursuing businesses who act improperly. There are concerns, however, with this Directive as it relates to business to consumer interactions, and it may not provide sufficient legal sanctions for unfair ‘business to business’ anti-competitive practices.

5.88 The Government should monitor the success of these measures in combating unfair competition in cases relating to IP, and if after a suitable time, the measures are not adequately addressing these problems, the Government should to consult on appropriate changes.

Recommendation 37: Monitor success of current measures to combat unfair competition in cases relating to IP, and if changes are found to be ineffective, Government should consult on appropriate changes.

⁶²This comes from *Reckitts & Colman Products v Borden* (1990) RPC 341, HL (*The Jif Lemon Case*). There is also an extended form of passing off which was explained in *Erven Warnick v J. Townsend & Sons* (1980) RPC 31 (*The Advocaat Case*).

⁶³Directive 2005/29/EC on Unfair Commercial Practices.

Damages 5.89 As a complementary deterrent to IP infringement, changes to damages awarded have been suggested by several responses to the Call for Evidence. Damage awards should act as a disincentive to infringement: infringers should not be able to keep any profits from infringement, nor to pay any less in compensation than they would have paid if they had purchased or licensed the material legitimately. Some rights holders have suggested that the current system of damages falls some way short of the ‘effective, proportionate and dissuasive’ civil remedies that the EU Enforcement Directive requires and that damages should be increased to provide an effective and proportionate deterrent to IP infringement.

Recommendation 38: DCA should review the issues raised in its forthcoming consultation paper on damages and seek further evidence to ensure that an effective and dissuasive system of damages exists for civil IP cases and that it is operating effectively. It should bring forward any proposals for change by the end of 2007.

5.90 The Review does not recommend criminalising registered design infringement, particularly since neither the UK Patent Office nor the Community Office at the OHIM examine design applications on substantive grounds (i.e. to determine whether they meet the requirements for registration). It is also thought that proving design infringement (including unregistered design infringement) to a criminal level would be extremely difficult.

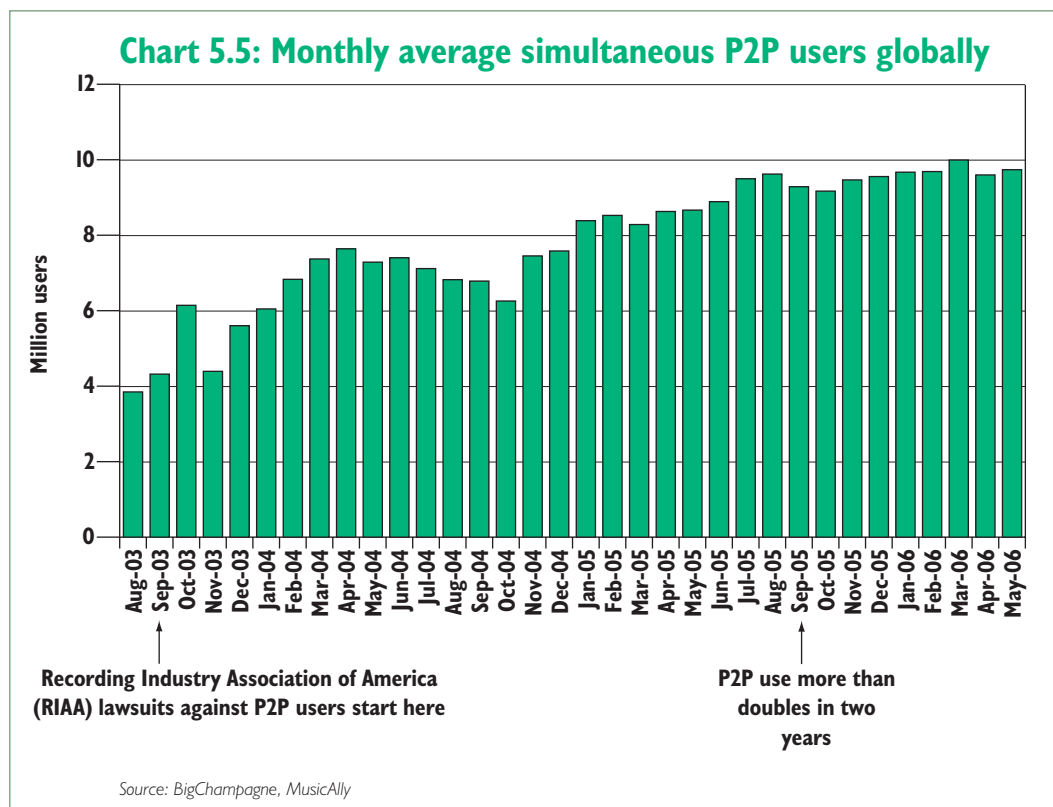
5.91 A number of respondents to the call for evidence called for camcording in cinemas to be criminalized. The Review believes that sufficient legislative responses already exist in civil remedies. Camcording in cinemas is a civil offence and making a copy of a copyright infringing good for sale or hire is already a criminal offence. Furthermore, the majority of pirated DVDs originate abroad. The International Federation of the Phonographic Industry (IFPI), state that the vast majority of pressed pirate discs come from South East Asia and the UK is not one of its priority countries for targeted action.⁶⁴

Non-legislative deterrents to infringement

5.92 As discussed in Chapter 2 peer-to-peer (P2P) downloading is threatening copyright protected material. Owing to various factors, including the multiplicity of potential infringers, the barriers to efficient and successful challenge and enforcement of copyright against P2P downloads remains significant. This jeopardises the value of rights held by content industries.

P2P filesharing 5.93 The entertainment industry has attempted to address the economic consequences of new technology by pursuing legal actions against individual infringers in an attempt to discourage other individuals from engaging in massive file transfers. However, as Chart 5.5 below shows, such lawsuits have not led to a significant reduction in P2P users.

⁶⁴ *The Recording Industry Commercial Piracy Report*, IFPI, 2004 (can be accessed at <http://www.ifpi.org/site-content/library/piracy2004.pdf>).



5.94 Current file-sharing models store the files on the personal computers of the users with Internet service providers (ISPs) as the intermediaries. ISPs currently have limited liability for traffic passing through their network due to certain ‘safe harbour’ provisions.⁶⁵

5.95 Stakeholders within the creative industries have proposed a ‘Value Recognition Right’. This is still being discussed within the industry and was insufficiently developed for the Review to take a view on.

5.96 A new act of secondary infringement has also been suggested which would make those who facilitate P2P file sharing liable for copyright infringement. However, it has been argued by public interest groups that imposing secondary liability on technology purveyors would stifle the availability of public domain works and may chill technological innovation.⁶⁶ If ISPs were liable for content passing through their networks they might limit lawful content, for fear of breaking the law. There are also doubts that making ISPs liable would be compatible with Community law.⁶⁷

5.97 The USA has the concepts of contributory infringement and inducement, which were used to find liability in the case of *MGM v Grokster*.⁶⁸ Australia, like the UK,⁶⁹ has a concept of authorisation, which was used in the case of *Universal Music Australia v Sharman License Holdings*.⁷⁰ Notwithstanding some similarities between UK and Australian law, the outcome of similar lawsuits in UK courts is uncertain. Accordingly, the Review is not making specific legislative recommendations this area, but this may need to be reviewed sometime in the future if other measures, as discussed below, do not work satisfactorily.

⁶⁵ Section 28A of the CDPA 1988 and regulations 17 to 19 of the Electronic Commerce (EC Directive) Regulations 2002 (SI 2002/2013).

⁶⁶ *IP Review*, Devinsky P. and Rotstein R., Spring 2006.

⁶⁷ In particular Article 5(1) of Directive 2001/29/EC and Articles 12 to 14 of Directive 2000/31/EC (E-Commerce Directive).

⁶⁸ 125 S. Ct. 2764 (2005).

⁶⁹ Section 16(2) of the CDPA 1988.

⁷⁰ FCA 1242 [2005].

5.98 ISPs have generally been cooperative in attempts to reduce large scale P2P use through their networks by providing details of large scale infringers. However, ISPs, as data processors, have obligations under the Data Protection Act 1988, which limit the extent to which they can disclose data on P2P copyright infringers without court orders.

**Collaboration
between ISPs and
Creative
Industries**

5.99 The ISP Association is currently undertaking work to encourage ISPs and rights owners to collaborate. One part of this work is the development of a Best Common Practice (BCP) document that might enable ISPs to engage rights holders in a co-ordinated and regularised fashion. This could operate in a similar way to the BCP for ISPs relating to the use of the Regulation of Investigatory Powers Act (RIPA) by law enforcement agencies.

5.100 The adoption of such a practice is likely to change public attitudes and behaviours as users gradually become aware of the procedures in place for removal from an ISP. BCP should assist rights holders by providing a procedure through which automatic action in courts will be avoided and would allow greater scrutiny on the actions of users. BCP is an ideal way to proceed if an agreement can be brokered between the ISPs and the copyright owners and would respect safe harbour provisions for ISPs which were set up in good faith. If there is a failure to agree, the Government should look towards establishing an appropriate statutory protocol.

Recommendation 39: Observe the industry agreement of protocols for sharing data between ISPs and rights holders to remove and disbar users engaged in 'piracy'. If this has not proved operationally successful by the end of 2007, Government should consider whether to legislate.

**Markets can be
sources for
counterfeit goods**

5.101 Car boot sales and markets are also a major source of counterfeit and pirated goods. A 2005 report co-funded by the Government and industry into consumer usage and attitudes towards counterfeits and fakes revealed that roughly 25 per cent of all counterfeit purchases take place in markets, including street markets and car boot sales.⁷¹ In order to address the issue, the Review recommends that there should be greater regulation of occasional sales.

Recommendation 40: DTI should consult on measures to tighten regulation of occasional sales and markets by 2007.

Pursuit of infringers by the relevant authorities

**The Review
supports the
National IP crime
strategy**

5.102 The National IP Crime Strategy is a partnership between Government Departments, industry and enforcement agencies, set up to determine policy on enforcing IP rights. It brings together many different organisations including Trading Standards, the Patent Office, the Police and Her Majesty's Revenue and Customs (HMRC). Responsibility for its development sits with the PO, which works with 12 regional groups of Trading Standards offices. The PO has developed a central IP crime intelligence database, TellPat, to bring together information on IP crime and the criminals involved from industry and enforcement agencies.

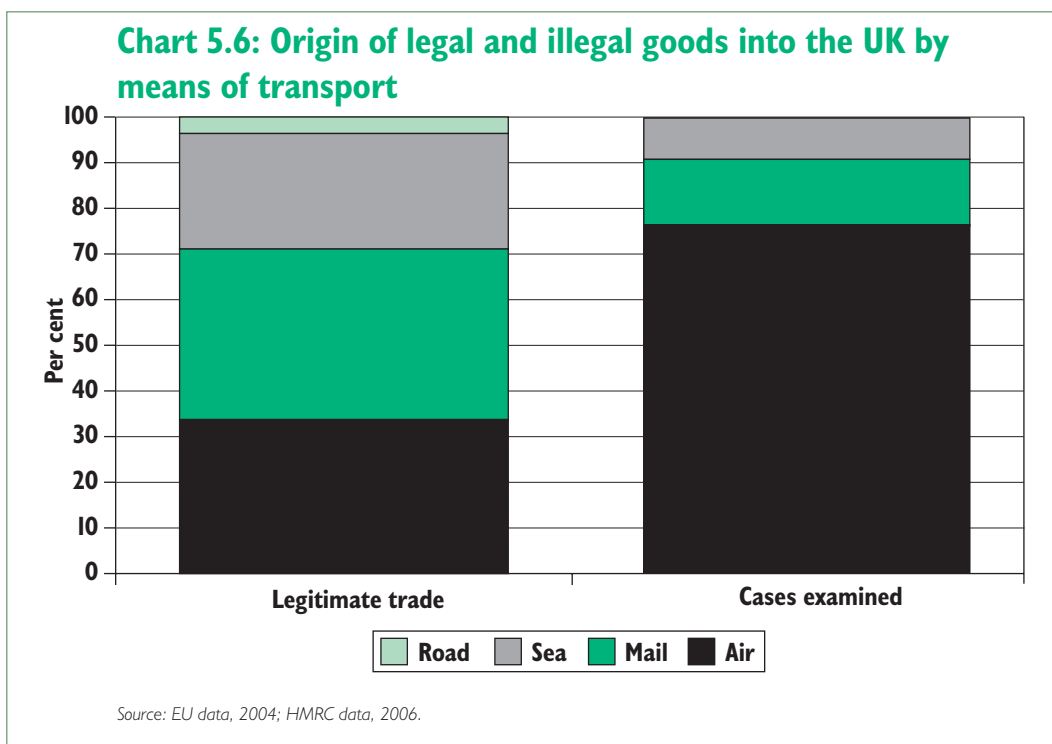
5.103 The first operation carried out under the strategy was a series of raids at Wembley Market in late 2005. Brent & Harrow Trading Standards led the operation with the involvement of the Police, the Immigration Service and Job Centre Plus. It resulted in the seizure of more than £1.5 million of counterfeited and pirated goods and the prosecution of 34 people for trading in counterfeit goods.⁷²

⁷¹ *Fake Nation*, Intellectual Property Theft and Organised Crime Research Project, 2005.

⁷² *National Intellectual Property (IP) Enforcement Report*, Patent Office, 2005 accessed at <http://www.patent.gov.uk/enforcereport2005.pdf>.

5.104 The Review supports the coordinated approach to IP crime that the strategy represents. There are some areas, however, where the current IP crime strategy could be improved. The initial work has been done to bring together the relevant bodies, but further work now needs to be done to achieve the desired results.

5.105 The graph below shows legitimate and illegitimate trade into the UK broken down by means of transport. Goods entering via ports account for a larger proportion of trade than of seizures. Furthermore, UK port seizures are lower in the UK than many other countries including Germany, Italy and Ireland. The Review encourages HMRC to play a full and active role to increase sharing of data and monitoring activities at ports.



5.106 The Serious Organised Crime Agency (SOCA) recognises IP crime as being linked to organised criminal activity, and devotes resources to improving the intelligence base necessary to take action. However, national policing plans do not presently recognise IP crime as a Police priority as part of broader action against organised crime. It is important to recognise publicly the work that the Police are doing in this area, and therefore, IP crime should be acknowledged as an area for action by the Police as part of the work to tackle organised crime.

Recommendation 41: The Home Office should recognise IP crime as an area for Police action as a component of organised crime within the updated National Community Safety Plan.

5.107 The National IP Crime Strategy should also be closely harmonised with enforcement across the EU to help to reduce counterfeit goods entering Europe. Involvement in international initiatives outside Europe is also required. The Patent Office has been working with the USA, China and EU accession states to improve enforcement and reduce the flow of counterfeit goods. This work could be extended to encourage other countries to reduce levels of IP infringement.

Role for Trading Standards

Trading Standards 5.108 Copyright and trade mark owners have full access to civil and criminal provisions to enforce their rights and distinction should be made between these provisions. Where crimes are more difficult to detect and involve organised crime, rights holders will require greater involvement of Trading Standards and the police to enforce rights, and infringements should be dealt with using criminal penalties.

5.109 Trading Standards ensure that trade is fair and lawful. Unlawful trade of pirated goods generally involves infringement of either copyright, trade marks or both.

5.110 When the maximum penalty for certain copyright offences was increased in 2002⁷³ copyright offences became 'serious arrestable offences'.⁷⁴ Trading Standards have powers and the duty to prevent the sale of trade mark protected goods. However, where the infringement of rights relates to copyright alone Trading Standards do not have the power to act, and cannot perform searches and seizures. This means, for example, that where there are sales of counterfeit CDs and DVDs, Trading Standards have only a limited response. This creates an inconsistency in the way that the law treats piracy and counterfeiting.

5.111 This inconsistency would be rectified by bringing into force section 107A of the Copyright, Designs and Patents Act (CDPA) 1988⁷⁵ which would make enforcement of copyright infringement the responsibility of Trading Standards. It would also give Trading Standards the power to make test purchases, enter premises and inspect and seize goods and documents. To offset the cost of enforcement, full use should be made of the powers within the Proceeds of Crime Act (2002).⁷⁶

5.112 The OFT is taking on the role of championing Trading Standards and helping to define meaningful priorities for local authority Trading Standards Services (TSS). IP crime not only affects legitimate local businesses but can have a detrimental effect on consumers, since counterfeit products may be of substandard quality and even in some cases lead to safety concerns. It is therefore recommended that TSS take full account of IP crime-related issues in setting their local priorities. The OFT and the Patent Office are working closely together to introduce better targeted enforcement through more widespread usage of the National Intelligence Model (NIM) by local authority Trading Standards Services.

Recommendation 42: Give Trading Standards the power to enforce copyright infringement by enacting section 107A of the Copyright, Designs and Patents Act 1988.

⁷³ By the Copyright, etc and Trade Marks (Offences and Enforcement) Act 2002.

⁷⁴ Under the Police and Criminal Evidence Act 1984.

⁷⁵ This provision was inserted by the Copyright, etc and Trade Marks (Offences and Enforcement) Act 2002 but has never been brought into force.

⁷⁶ POCA was set up to reduce crime by confiscating the proceeds of crime with a new power of civil recovery. The Assets Recovery Agency was granted powers under the act to take the profits from crime through civil recovery, criminal confiscation or taxation.

Mechanisms to resolve conflict

IP litigation in England and Wales is extremely expensive 5.113 Litigation of patents is extremely expensive in England and Wales with costs of comparable cases in English patent courts up to four times greater than in Germany, as shown in Table 5.4 below. Professional fees in England and Wales are generally higher and the patent proceedings more complex. This leads to lengthier cases and higher costs. This can make it more difficult for SMEs to enforce (or defend) any infringement claim. Chapter 6 will consider how the current England and Wales court structure can be improved to reduce costs.

Table 5.4: A comparison of costs in selected European courts

England and Wales	Germany	France	Netherlands
High Court: £1m	£37–74,000 first instance (depends on scale fees)	£44–74,000	£15–30,000 (summary proceedings), £60,000 simple action

Source: *The Enforcement of Patent Rights, IPAC, 2003.*

Note: € converted to £ at exchange rate 1:1.48.

ADR, including mediation, can be used to avoid litigation 5.114 Alongside reforming the courts in England and Wales, the number of cases reaching litigation should be reduced by alternative methods to resolve disputes.⁷⁷ Alternative dispute resolution (ADR) can be defined as: “... any type of procedure or combination of procedures voluntarily used to resolve issues in controversy. ADRs include, but are not limited to, conciliation, facilitation, mediation, early neutral evaluation, adjudication, arbitration and the use of ombudsmen.” It is intended as a low cost alternative to litigation.

5.115 ADRs can help to avoid the negative aspects of conflict such as damage to reputation, lost customers, and damage to company morale as well as the large cost implications.

5.116 Mediation involves a controlled discussion between two opposing parties. A neutral person assists the two parties in working towards a negotiated agreement. The opposing parties are in ultimate control of the decision to settle and the terms of resolution. Mediation is more flexible than litigation in that a broad range of terms can be agreed outside the limitations of law. It can help preserve positive relations between parties that could be broken down by moving to litigation. Mediation is also much cheaper than litigation; costs in the UK for mediation cases in general are around £3,000. A high proportion of cases referred to mediation result in settlement.⁷⁸

5.117 Mediation’s usefulness depends, however, upon the circumstances of the dispute, the parties’ objectives, the engagement of the parties and the mediator. Both parties have to agree to, and adhere to, the decision, taking responsibility for the decision instead of passing responsibility to a judge or arbitrator.

⁷⁷ The number of cases reaching court at the moment in the UK is already fairly low, mainly due to the high costs causing parties to settle rather than reaching trial.

⁷⁸ The Centre for Effective Dispute Resolution state that over 70% cases referred to them are successfully settled.

5.118 The Patent Office has recently started a mediation service. Several Patent Office staff members have been trained in mediation and the Patent Office also provides a venue and administrative support. This service has not been widely used by mediating parties. The World Intellectual Property Organization (WIPO) also has ADR procedures of mediation and arbitration where the majority of mediation cases are successfully settled.

5.119 Arbitration is not as common as mediation. It involves an appointed arbitrator whose decision is binding and enforceable. There are no on-going court fees so arbitration is also much cheaper than litigation. Arbitration is often used as an alternative to court when confidentiality is important.

5.120 Different ADR procedures are suited to different client objectives as shown in the table below. Mediation is of particular value where contracts between the two parties already exist, as it can maintain good working relationships.

Table 5.5: A comparison of the suitability of mediation, arbitration and court proceedings depending on the client objective

Objective	Non-binding		Binding	
	Mediation	Arbitration	Arbitration	Court
Minimise cost	3	1		0
Rapid decision	3	1		0
Non-public decision	3	1		0
Maintain/improve relationship	3	1		0
Vindication	0	2		3
Obtain neutral opinion	0	3		3
Set precedent	0	2		3
Maximise/minimise recovery	0	2		3

Source: 'Mediation Principles and Practice', Kimberlee K. Kovach, 2004.

Key: 0 = fails to meet objective, 3 = fully meets objective

5.121 Mediation and other ADR are currently poorly used and understood for IP. DCA has been promoting the use of ADR for several years. However, some judges have been reluctant to encourage parties to mediate. Large companies are often unwilling to mediate in case they are seen as “weak”. Practice Directions, which relate to the practice and procedure of the court, can be altered to encourage mediation.

Recommendation 43: Strengthen Practice Directions, to provide greater encouragement for parties to mediate,⁷⁹ in particular this should raise the profile of mediation with judges.

5.122 Under the Human Rights Act 1998, a person has a right to access to the courts. The Review has therefore rejected imposing further incentives to mediate such as introducing mandatory mediation.

5.123 IP cases rarely come before magistrates and can raise novel points of law. Owing to the complexities of IP law, and the increasing sophistication of the defence provided by IP infringers, judges and magistrates should have a good understanding of all aspects of IP law. Therefore, greater training specifically dedicated to this area would be beneficial.

⁷⁹Rule 1.4.(2)(e) of the Civil Procedure Rules requires the court to use active case management to “encourage[e] the parties to use an alternative dispute resolution (GL) procedure if the court considers that appropriate and facilitate[e] the use of such procedure.”

Recommendation 44: The Patent Office should consult with the Judicial Studies Board to determine the extent to which the complexity of IP law may give rise to a training need for judges and magistrates and their legal advisers.

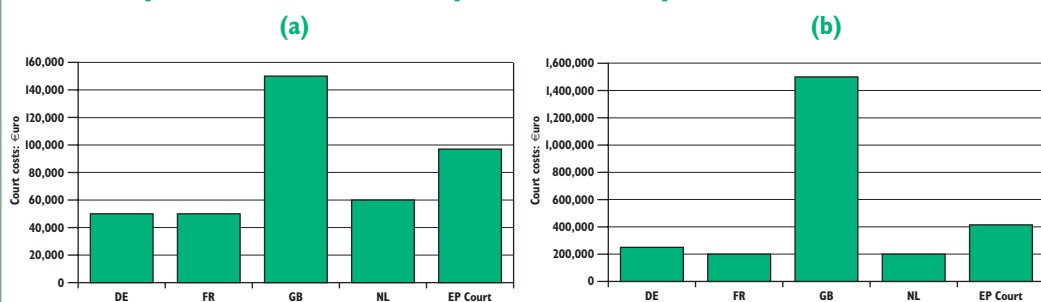
Reform of European litigation

5.124 Patents that are granted through the EPO eventually lead to a bundle of national patents. This can raise the costs associated with litigation and can lead to inconsistency between national judgments. One solution that has been put forward is the European Patent Litigation Agreement (EPLA). The EPLA would establish a single European Patent Court with jurisdiction over patents in all the states contracting to the European Patent Convention.

5.125 It should be noted that the EPO processes in the region of 180,000 patent applications every year of which around half are granted. However, across the EU there are fewer than 1,500 cases of patent infringement before the courts. Of these, somewhere between 75 and 150 involve more than one jurisdiction.⁸⁰ One reason for this low number of parallel cases in the prohibitive costs of litigation in contracting states.

Multiple litigation in Europe is expensive **5.126** As the chart below shows, the estimated costs of litigation at a potential European Patents Court could be considerably cheaper than pursuing a case in the UK at present. This provides a strong endorsement for the EPLA and the European Court from the UK perspective.

Chart 5.7: Estimated (a) minimum and (b) maximum costs at the court of first instance for patent cases in selected European states, and in a potential European Court



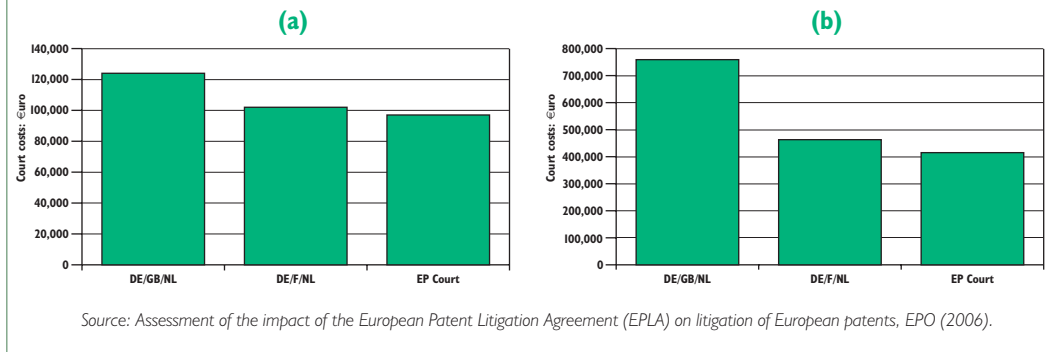
Source: Assessment of the impact of the European Patent Litigation Agreement (EPLA) on litigation of European patents, EPO, 2006.

5.127 However, as well of being of benefit to litigants in the British courts, once parallel litigation is taken into consideration, the European Court also becomes cheaper than parallel litigation in three states.⁸¹ As the chart below shows it would be cheaper to litigate at the European Court than in parallel in Germany, France and the Netherlands.

⁸⁰ Access at http://www.channelregister.co.uk/2006/09/29/legitimate_doucts.

⁸¹ Assessment of the impact of the European Patent Litigation Agreement (EPLA) on litigation of European patents, EPO, 2006.

Chart 5.8: Estimated (a) minimum and (b) maximum costs at the court of first instance for parallel litigation in selected European states, and in a potential European Court



5.128 Moreover, in addition to reduced costs, a single European Court will considerably reduce the amount of time taken to litigate as there will only be one judgment rather than multiple decisions. This will also lead to far greater certainty of outcomes as opposing decisions would not be reached in different jurisdictions. Provided it is staffed by expert IP judges, the Court will ensure that high quality decisions are taken.

5.129 Historically, the European Commission has been sceptical of the EPLA, viewing it as an unwelcome distraction from the ultimate goal of COMPAT. However, this position seems to be shifting in a welcome direction. Responding to the consultation on the future of patent policy in Europe, Commissioner McCreevy said: “COMPAT and the EPLA are not mutually exclusive initiatives. They are both aiming at the same goal: a better, cheaper, more reliable patent system.”⁸²

Recommendation 45: Support the establishment of a single EU court to adjudicate cross-border IP disputes by promoting the European Patent Litigation Agreement.

Conclusion

5.130 The recommendations in this chapter are aimed at improving the operations of the IP system in terms of how IP is awarded, used and enforced. The implementation of these recommendations alongside those from the Instruments and Governance chapters will address some key problems in the UK IP system.

⁸² IP Rights – next steps, McCreevy C, 2006. See <http://europa.eu.int/rapid/pressReleasesAction.do?reference=SPEECH/06/485&format=HTML&aged=0&language=EN&guiLanguage=en>.

6

GOVERNANCE

6.1 It is vital that the organisations responsible for administering, enforcing and setting policy for IP are well run and effectively integrated. Without adequately functioning bodies, the IP system will not operate in the way users expect. As noted in Chapter 4 there are a number of international fora and bodies engaged in IP policy making and operation. The Review focuses on the principal UK body with responsibility for IP: the UK Patent Office.

THE UK PATENT OFFICE

6.2 The UK Patent Office has a range of responsibilities in relation to IP, as outlined in Chapter 3. This chapter focuses on three areas:

- policy formulation;
- administration of registered IP rights (patents, designs and trade marks); and
- dispute resolution as a tribunal.

6.3 Chapter 5 addressed the Patent Office's role leading the IP crime strategy, and its work providing information to business.

Patent Office policy role

6.4 The Patent Office is responsible for advising Ministers on the vast majority of IP policy.¹ It reports to the Minister of State for Science and Innovation in the Department of Trade and Industry (DTI). The Review has identified three principal concerns in relation to policy formulation at the Patent Office:

- policy development has often been reactive and has not taken into account changes in the economy and relevant developments in related policy areas;
- there is no clear separation between operational and policy functions in the Patent Office, leading to a potential conflict of interest; and
- it has proven difficult to grow policy skills in the Patent Office.

Policy has been reactive

6.5 Responsibility for policy development in the Patent Office rests with the Intellectual Property and Innovation Directorate (IPID). IPID has a clear understanding of detailed IP issues, and can play a strong representational role on specific policy areas. For example, UKPO ensured that UK business interests were represented in European discussions to amend the Community Trade Mark Regulations in 2005. It also successfully implemented the European Directive concerning remuneration for artists when their works are re-sold, receiving a commendation from the Davidson Review of the Implementation of European Directives for its work in this area.

¹ Plant breeders rights and protection of geographic indicators and related rights fall within the scope of the Department for the Environment, Food, and Rural Affairs.

6.6 However, the Patent Office has been less effective at taking a strategic view of IP policy. The Patent Office has not always been effective at linking IP and other, related areas, such as, trade, health and broader innovation policy. For example, it has not undertaken systematic work examining how the IP framework has helped or hindered the development of Open Source methods,² or proteomics, a subset of genetic science.

6.7 The Patent Office has a Steering Board and an Executive Board. The Steering Board's role is to advise Ministers on the corporate plan and performance. The Executive Board's role is to oversee the day-to-day running of the Patent Office. Both boards focus on the operational performance of the Office, and neither have detailed oversight of the Patent Office's policy function.

Reforms to date have not been successful

6.8 In order to add strategic focus to policy development the DTI established the Intellectual Property Advisory Committee (IPAC) in 2001. It was charged with identifying strategic issues for IP policy and relaying stakeholder views to Government. IPAC has drawn attention to some of the challenges for IP policy, including the lack of awareness of IP among businesses, particularly SMEs. However, in many areas of policy, IPAC's investigations have been protracted and, in a number of instances, it has failed to produce substantive outputs. IPAC has failed to add substantively to policy development because it has had an insufficiently clear remit, been inadequately resourced, and its membership drawn from too narrow a group of stakeholders.

6.9 The Review believes that a strong, independent body could make a real contribution to IP policy development. An independent board should be given a clear and coherent remit to provide a strategic overview of policy and to challenge Government policy-making. In addition, it should advise on how the UK's interests should be pursued in international IP negotiations. The chair should be operationally independent from Government and be appointed by the Chancellor. The board should be drawn from a wide range of stakeholders, including academics, consumer groups and industry representatives – from creative industries and 'industrial' IP users – who are able to draw links between IP and a number of related issues. In addition to independent stakeholders, the head of IPID at the Patent Office and a senior official from the DTI and HM Treasury should sit on the board. The board should be free to set out the activities it undertakes and the policy areas it investigates. Government should respond to the advice of the board, but should not be bound by its direction or decisions.

Adequate resourcing

6.10 One of the factors that hindered IPAC from making an impressive contribution to policy, was inadequate resource. The independent policy advisory board should be given a standing secretariat based in London. Staff should be drawn from the OSI in the DTI, and the chair should have the ability to bring in external experts to assist the secretariat where necessary.

Recommendation 46: Establish a new Strategic Advisory Board for IP policy (SABIP), covering the full range of IP rights, reporting to the minister responsible, by 2007. The Board should be drawn from a wide range of external experts as well as key senior policy officials from relevant government departments, and should be based in London. £150,000 should be allocated to fund the secretariat by the Patent Office.

² Open Source software can be freely used and improved upon by programmers, provided that any improvements to the source code are made available to subsequent users.

6.11 In addition to the standing secretariat, the Review believes that the work of SABIP would be enhanced if it could commission external research. The Japanese Patent Office sets aside a significant amount of money each year for research into IP-related policy issues. This is used by their Institute of Intellectual Property and has produced a wide range of policy reports analysing the changing environment for IP. It is a key part of Japan's strategic approach to Intellectual Property. Similarly, US proposals to solve the problem of orphan works were developed using research funded by the Library of Congress. Funds set aside in the UK could be used to commission independent and forward looking research to supplement the standing secretariat.

Recommendation 47: The Patent Office should provide an annual IP strategic analysis fund of £500,000 managed by the policy advisory board in consultation with the IP Policy Directorate.

**Strengthening
Patent Office
policy making**

6.12 In addition to providing a strong independent board to improve strategic policy making, the Review believes that the Patent Office's internal policy making function should be strengthened to provide a stronger strategic focus and link more effectively with wider themes and other Government objectives.

6.13 The Patent Office's policy function is not clearly distinct from its operational work. While IPID is nominally the lead on policy development, the CEO, the Patents Directorate, the Trade Marks and Designs Directorate and the Finance Directorate all undertake additional policy analysis and provide advice. This creates a potential conflict of interest. The optimal policy for the Patent Office, functioning as a Trading Fund, may not be the optimal policy for Government, particularly in international negotiations. For instance, national offices may not want international rights to be cheaper to register than national rights, as this would reduce demand for their services. In order to remove the potential for conflicts of interest, a clear distinction between policy and operational functions is necessary. The policy directorate should take the lead on issues of policy, including at the European Patent Office (EPO), Office of Harmonisation for the Internal Market (OHIM) and World Intellectual Property Organization (WIPO), with support from operational colleagues as necessary. It is important that policy officials report through a different management structure to their operational colleagues, and that IP policy takes full account of wider Government objectives.

Recommendation 48: Patent Office should introduce a clear split of responsibility between delivery and policy directorates.

6.14 The Patent Office is located in Newport in South Wales. Since moving to Wales the Patent Office has reduced running costs by more than ten per cent. Staff turnover has also reduced. However, this physical separation of Patent Office staff from central Government departments has contributed to the lack of connectivity with wider Government agendas and has made it more difficult to grow policy skills in the Patent Office. The Review recognises the benefits of having certain Government functions located outside London and the South East, but believes that policy making would be strengthened if staff added to their experience in the Patent Office by working in central Government departments.

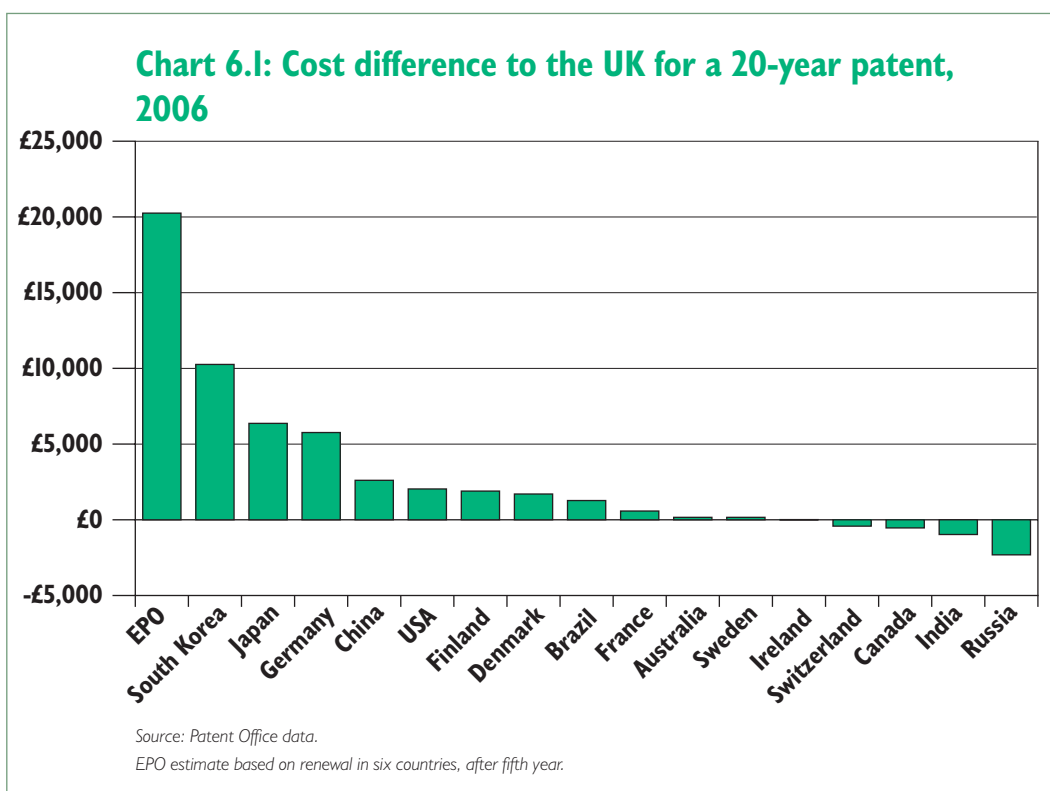
6.15 Patent Office staff sometimes lack an understanding of how businesses use IP and the problems they face negotiating the existing system. A greater understanding of how IP policy impacts on all stakeholders across industry, NGOs and consumers would ensure that Ministers were more fully appraised of the potential impacts of a policy under consideration.

Recommendation 49: Encourage IP policy officials to obtain policy experience outside the IP Policy Branch, and support short industry placement schemes for policy staff.

Patent Office administrative role – granting IP rights

UK patents are cheap to acquire

6.16 Many submissions to the call for evidence were positive about the service provided by the Patent Office to applicants. Patent Office customer surveys also suggest stakeholder satisfaction. Patent grant fees in the UK are low. As Chart 6.1 below shows, the UK is one of the cheapest countries to have a patent in force for twenty years.



6.17 The Review recognises that office fees are only a small part of the overall pre-grant fees borne by applicants, and has made recommendations in Chapter 5 to reduce legal costs, which make up the bulk of the costs.

6.18 The Patent Office is an executive agency of the DTI, and operates as a Trading Fund under the Patent Office Trading Fund Order. This means that it must use its own revenue sources to cover operating costs and provide a return on capital to the Government. A separate order sets out the activities that can be taken into account when setting statutory fees to allow cross-subsidy between different functions.

UK patents do not cover their costs

6.19 The Patent Office trade mark and design operations generally break even and provide a return on capital employed. However, at present, patent operations do not. The Patent Office charges small initial fees at the patent grant stage. It recoups costs principally via renewal fees. UK renewal fees are payable each year from the first year after being granted. Currently the break-even point on domestically granted patents at the UK Patent Office is fourteen years. A UK patent that expires before this period effectively has its registration and administration costs subsidised by the Patent Office. The current average life for a UK patent is between ten and eleven years. Consequently, domestic patents operations do not cover their costs.

6.20 Domestic patents are currently subsidised by European patents designating in the UK. The Patent Office currently retains half of the renewal fees from European patents designating the UK. However, the EPO Administrative Council could change this division at any time and as such, this stream of revenue is unpredictable.

Recommendation 50: Realign UK Patent Office administrative fees to cover costs more closely on Patent Office administrative operations (e.g. granting patents).

6.21 Patent Office income is used to fund policy, awareness, and enforcement, and the Patent Office's tribunal functions. It is important that the use and allocation of such resources for both its statutory and non-statutory work is clear and transparent.

Recommendation 51: Increase the transparency of Patent Office financial reporting.

6.22 The position of the Patent Office as both a granting authority for IP rights and as a tribunal where those rights may be challenged creates a potential conflict of interest. Officials in the tribunal may be reluctant to over-rule the decisions made by their colleagues in granting rights.

Recommendation 52: Ensure that under current arrangements in the Patent Office, there is a clear internal separation of responsibility between the granting of rights and disputes over their ownership or validity. This should be achieved by clearly separating the line management structures.

Name of the Patent Office

6.23 The name of the Patent Office can be misleading to stakeholders. It suggests that the office is only concerned with patents while, in fact, it performs a broad range of functions in relation to all IP. The present name also contributes to the perception that other forms of IP, for example copyright, take a lower priority.

6.24 Some stakeholders have suggested that a separate Copyright Office be established. However, the Review believes that there are a greater number of synergies than differences across different forms of IP. Policy, education, enforcement, business support, and awareness raising cut across the boundaries of all IP rights. The Review has therefore decided not to recommend that a separate Copyright Office be established.

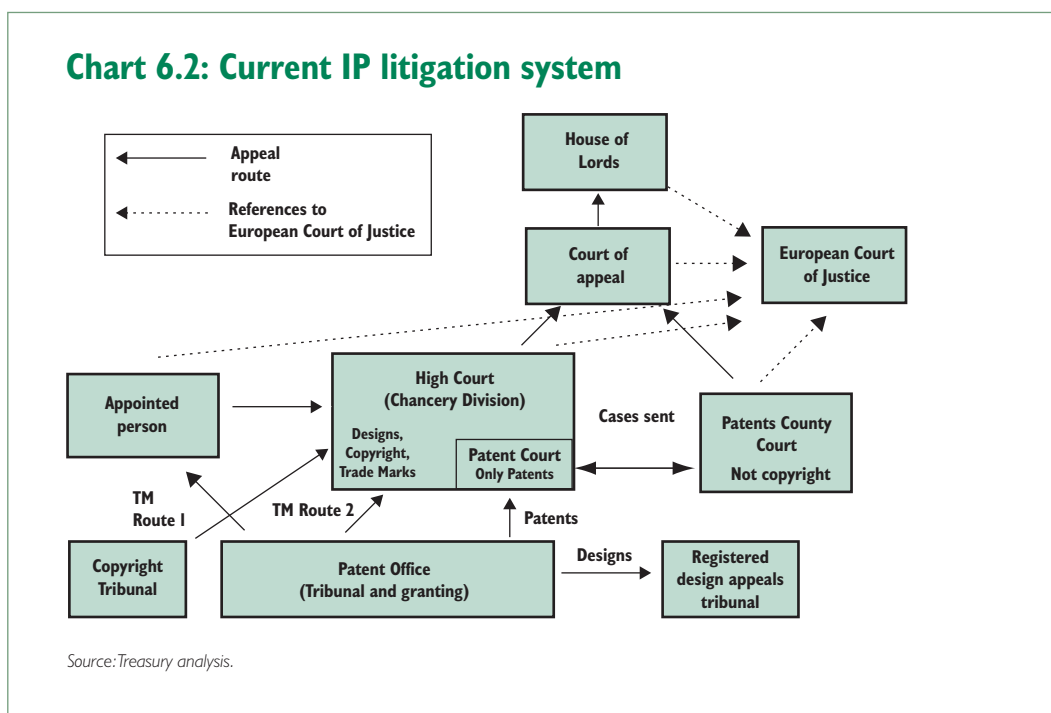
6.25 Instead, the Patent Office should ensure that all stakeholders are given, and are seen to be given, equal consideration in IP policy. The Review therefore recommends that the name of the Patent Office should change to reflect better the functions it carries out.

Recommendation 53: Change the name of the UK Patent Office to the UK Intellectual Property Office (UK-IPO) to reflect the breadth of functions the office has, and to dispel confusion.

COST AND COMPLEXITY OF LITIGATION

6.26 As outlined in Chapter 2, the current UK IP litigation structure is complex, with litigants having a choice of tribunals through which to commence their action. While having a number of judicial fora enables litigants to choose the most cost effective or appropriate tribunal or court, it can add to complexity. The diagram below summarises the current court and tribunal structure together with appeal routes.

Chart 6.2: Current IP litigation system



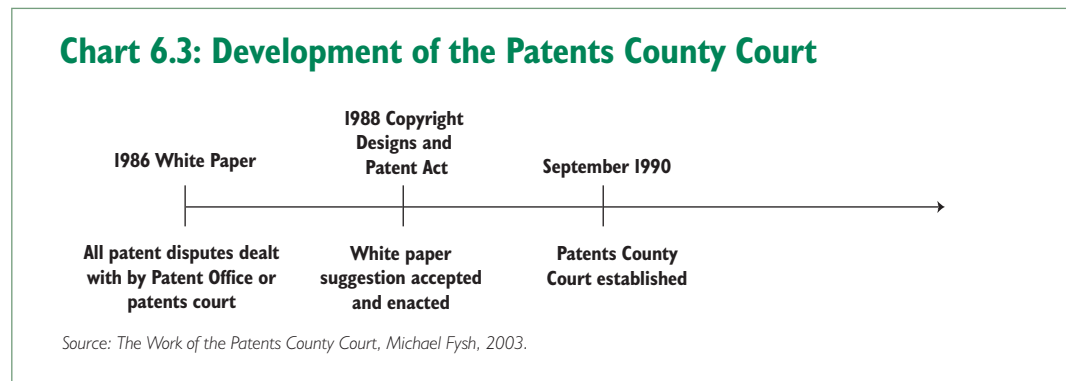
6.27 As discussed in Chapter 5 IP litigation is expensive in the UK relative to other countries. Claims in English and Welsh courts can be up to four times more expensive than in Germany, yet there are few differences compared to Europe in the remedies available or the quality of legal decisions. There are a number of reasons why lawsuits in England and Wales are costlier than throughout Europe. Professional fees in England and Wales are generally higher and the patent litigation process is more complex, involving disclosure, cross-examination and the use of expert witnesses. Other jurisdictions in Europe make less use of these processes and also have systems of capped or scale costs. This reduces risk and gives both parties an indication of their liability should they lose.

6.28 High costs of litigation fall particularly heavily on SMEs defending their rights. SMEs are often dissuaded from bringing cases against larger firms, as they know that larger firms can stretch out suits and thereby increase the cost. For SMEs, protecting their market position is initially more important than recovery of damages: infringement needs to be stopped quickly. The current UK appeals route is slow and so does not meet their needs.

Reform of Patents County Court

6.29 The Patents County Court (PCC) was established to provide a cheaper and more streamlined procedure than the High Court for litigating patents and designs and recently this has been extended to trade marks, Community Trade Marks and Community Designs. The Patents County Court is run by the courts service. In most respects, the High Court and PCC have the same jurisdiction.

Chart 6.3: Development of the Patents County Court



6.30 Following the Woolf reforms to the civil law system in 1999, all courts in England and Wales now work to the same rules of procedure. The reforms led to three “tracks” of legislation: small claims; fast; and multi-track. Cases are allocated largely according to the amount in dispute. Anything over £15,000, which includes nearly all IP cases, is heard as a multi-track case. Accordingly, many of the benefits of the fast track system, such as capped costs, limited trial length and limited disclosure, do not apply to IP cases. This means the PCC is now almost as expensive and complex as High Court litigation. High costs at the PCC and the High Court act as a barrier to all potential litigants, and to SMEs in particular.

6.31 Changes to the relevant Civil Procedure Rules (CPR) could enable IP cases to be allocated to their own “fast track” procedure. This would entail raising the current £15,000 limit on the amount in dispute that can be heard in fast tracked cases. In addition, legal fees for fast track IP procedures should be capped to reduce costs.

Recommendation 54: DCA should review the issues raised in relation to IP cases and the fast track and seek views in the context of its forthcoming consultation paper, which will consider the case track limits, and how the claims process can be made more timely, proportionate and cost-effective. It should bring forward any proposals for change by the end of 2007.

CONCLUSION

6.32 This chapter has made a number of recommendations to improve the Patent Office’s work in respect of policy making and administration of rights and its tribunal function. These reforms will reduce the costs of litigation and make sure the Patent Office has a secure financial footing. Furthermore, they will ensure that future challenges to the IP system are adequately addressed by policy and that the UK is able to place itself at the forefront of the knowledge economy.

7

CONCLUSION

7.1 Creativity, innovation and investment are crucial to boosting the productivity of the UK economy. Looking forward, their importance is set to remain centre-stage as we enter the ‘third industrial revolution’. The UK must be able to harness creativity and promote innovation in order to compete in the global, knowledge-based economy. Intellectual Property creates the link in the chain which incentivises individuals and firms to innovate and create, with the confidence that their investment is protected.

Improving the current system

7.2 The Review has shown that while in many regards the UK IP system works well, there are a number of areas where it could perform even better. The Review has made a number of recommendations to improve the framework for innovation; in particular it has called for:

- stronger enforcement of IP rights to ensure practical protection is provided for rights owners and effective deterrents to infringement are in place;
- lower operational costs for business, simplifying processes such as licensing and litigation, and improving education and advice; and
- greater balance and flexibility of IP rights to allow individuals, businesses and institutions to use information and ideas in ways consistent with the digital age.

7.4 The Review has set a vision for IP policy motivated by a clear purpose. The IP system must enable greater economic productivity whilst ensuring equity for all those who use IP. In order to achieve this, the instruments of the system must be balanced, coherent and flexible, and the operation of those instruments must be effectively administered. Changes will be required within the UK and abroad. In order to drive a programme of greater international coherence, especially at the European level, the UK should take a lead on IP policy development. A more efficient international IP system is not only to the benefit of the UK, but to the whole of Europe and beyond.

Meeting the challenges

7.5 If the Government accepts and implements the Review’s recommendations, the Review believes that the portfolio of measures will ensure that the UK IP system is fit for purpose in the digital, global age.

A

GLOSSARY

ACID: Anti Copying in Design

Additional damages: Damages provided for by the CDPA for infringements of copyright, design rights or performer's property rights

ADR: Alternative Dispute Resolution

Arbitration: A form of ADR where an impartial referee hears and determines a dispute

Berne Convention: Berne Convention for the Protection of Literary and Artistic Works that provides certain minimum standards in relation to literary, dramatic, artistic and music works

Biotechnology: The use of living organisms and tissues in the development and manufacture of products

BMR: British Music Rights

BPI: British Phonographic Industry, the British record industry's trade association

Business Link: UK national business advice service

Call for Evidence: The Gowers Review consultation, from February to April 2006

CBI: The Confederation of British Industry, a trade association representing the interests of UK business

CFI: Court of First Instance

CIPA: Chartered Institute of Patent Agents

Civil Procedure Rules (CPR): A set of rules which govern the way in which civil court cases are conducted in England and Wales

Claims: The part of a patent that states the uses and possible applications of the invention described in the patent

Combined Patent Search and Examination (CSE): UK Patent Office initiative to combine patent search and examination and thus reduce time to grant a patent

Community acquis: The body of common rights and obligations which are acknowledged by all the Member States of the European Community

Community Patent: A patent law measure being debated within the EC which would allow an applicant to obtain a unitary patent which would have effect throughout the Community

Community Patent Review: A peer review system for patents currently being developed at the USPTO

Community Registered Design: A design right that gives protection throughout the Community, administered by OHIM

Community Trade Mark (CTM): A trade mark that has unitary effect and gives protection throughout the Community, administered by OHIM

Companies House: An executive agency of DTI which registers and provides information on all UK companies under the Companies Acts

Competition Commission: An independent public body which conducts enquiries into mergers, markets and the regulation of the major regulated industries

Copycat packaging: Competitors using packaging designs for their products that mimic closely the packaging of familiar brands

Copyright: A set of exclusive rights granted by the CDPA, which last for a limited time to protect the particular form, way or manner in which an idea or information is expressed. Copyright arises automatically in the UK

Copyright, Designs and Patents Act (CDPA) 1988: An Act which governs UK copyright laws, created an unregistered design right and contained modifications to the law on patents and registered designs

Copyright Tribunal: An independent body set up under the CDPA to settle various types of copyright disputes, mainly in relation to copyright licensing. The UK Patent Office provides a secretariat to the Tribunal

Copyright (Visually Impaired Persons) Act 2002: An act which amended the CDPA 1988 and introduced exceptions to copyright law that remove the need to obtain permission from the rights holder of a copyright protected work in order to produce an “accessible copy” for those with visual impairment

Counterfeit: An imitation of a good made to represent the original, which is not authorised by the rights owner

Creative Commons: A non-profit organisation which offers a set of copyright licences to promote freedom of use and reuse of creative works

DCA: Department for Constitutional Affairs

DCMS: Department for Culture, Media and Sport

DfES: Department for Education and Skills

DRM: Digital Rights Management, technology used by content owners to control the use of their work

DTI: Department of Trade and Industry

EC: European Community

ECJ: European Court of Justice

Educational Exceptions: Certain exceptions to copyright which allow works to be used for a range of non-commercial educational purposes

EPC: European Patent Convention, a treaty which created the European Patent Organisation and sets the rules of the European patent

EPLA: European Patent Litigation Agreement, a proposed single European patent judicial system

EPO: European Patent Office, the executive body of the European Patent Organisation

EPOrg: European Patent Organisation, an international organisation set up by the EPC which provides a centralised patent grant system administered by the EPO

Esp@cenet: A patent search service developed by the EPO

EU: European Union

Executive Agency: An organisation which carries out some executive functions of UK government. Do not generally set policy but have flexibility in managing the implementation of policy

Fair dealing: A series of copyright exceptions which permit a work to be used for limited purposes, provided the use is “fair”

Fair use: Exceptions to US copyright law which allow limited use of copyright material without requiring permission from the rights holders

FDI: Foreign Direct Investment, investment in one country by firms owned in another country

Free riding: When one person benefits from the actions and efforts of another without paying for or sharing the costs

GDP: Gross Domestic Product, the total value of goods and services produced by a nation

Get-up: Visual appearance of a product that may require protection as part of the total image or overall impression created by the product or its packaging in the marketplace

GNP: Gross National Product, the value of a country’s final output of goods and services in a year

Gross Value Added: The difference between output and intermediate consumption for a given sector or industry

High Court: In England and Wales, the High Court hears the most important civil cases and appeals from the County Courts

IFPI: International Federation of the Phonographic Industry

Industrial application: In order to receive patent protection, an invention must be capable of being made or used in some kind of industry

Information Society Directive (“InfoSoc”): Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society

Intangible assets: Items of value owned by a firm or individual without a physical existence, such as goodwill and the value of patents

Inventive Step: The concept that an invention is not an obvious development on what has been done or published before the priority date

IPAC: Intellectual Property Advisory Committee, a body formed to give independent advice to Government on IP issues

IPID: Intellectual Property and Innovation Directorate, the Directorate at the UK Patent Office which deals with IP policy

ISP: Internet service provider

ITMA: Institute of Trade Mark Agents

JPO: Japanese Patent Office

Licence of Right: The endorsement of a patent as licence of right enables the owner to pay half renewal fees. In return anyone may have a licence upon reasonable terms

Licensing (in-licensing/out-licensing): Contractual agreement granting permission to use IP under specific conditions. “In-licensing” refers to licensing of another’s IP, “out-licensing” refers to licensing of one’s own IP to others

London Agreement: An international agreement under the EPC aimed at reducing European patent costs by reducing the post-grant translation requirements

Madrid Protocol: Provides for the protection of trade marks in a number of countries by means of a single application

MCPS: Mechanical Copyright Protection Society, a UK collecting society

Mediation: The negotiation between two parties to resolve differences, aided by a neutral third party

National IP Crime Strategy: A strategy set up to tackle IP crime by bringing together different parts of government, industry stakeholders, policymakers and enforcers, to create a coordinated approach to intellectual property enforcement. Currently led by the Patent Office

NGO: Non-governmental organisation

Novelty: The concept that the claims defining an invention in a patent application must be new for an invention to be patentable

Observations (“Section 21”): In the UK, the ability to comment on whether the Patent Office should grant a patent for a particular invention after it has been published

OFT: Office of Fair Trading

OHIM: Office for Harmonisation in the Internal Market, the receiving and examining Office for applications for Community Trade Marks and Design rights

ONS: Office for National Statistics

Open Source: A program whose source code is distributed, often with copyright licensing terms allowing others to use that source code

Orphan work: A copyright work where the rights holder cannot be found

P2P: Peer to peer, the sharing and delivery of files among groups of people logged on to a file sharing network

Paris Convention: The first treaty on industrial property rights which was originally agreed in 1883. It provides for national treatment, priority and some minimum standards

Passing off: A common law claim which can be used to protect the reputation of a trade mark, brand or get up of a product

Patent opposition: A request to a patent office by an opposing party that an application should be refused, or that a granted patent should be annulled; there is no patent opposition under UK law

Patent Pools: A cooperative agreement between several patent owners to cross-licence patents relating to a particular technology

Patentability: The ability of an invention to satisfy the legal requirements for obtaining a patent, including novelty, involving an inventive step (non-obviousness), having industrial application and not be “excluded” (e.g. computer software may not be patentable in many countries)

Patents County Court: A court founded to cater for the needs principally of medium and small size firms in litigating patents and designs, recently extended to trade marks

PCT: Patents Cooperation Treaty, the treaty that facilitates filing of applications between member countries by providing a single international application procedure

Performers Rights: Rights, additional to the rights of copyright owners, initially belonging to the performer with respect to the performance and subsequent exploitation of the performance

Piracy: Unauthorised duplication of goods protected by IP law

PPL: Phonographic Performance Limited, a UK collecting society

Preliminary examination: The initial study of an application by a patent office to check that it meets formal requirements, in particular that it is properly formatted

Prior art: Previously used or published technology, that may be referred to in an application

Priority date: The initial date of filing of a patent application, normally in the applicant’s domestic patent office. This date is used to help determine the novelty of an invention

Proceeds of Crime Act (POCA): A law which enables property obtained by unlawful conduct to be recovered by enforcement agencies

PRS: Performing Rights Society, a UK collecting society

Punitive Damages: Also known as exemplary damages, are damages used to punish a defendant for his or her wrongdoing, they are generally unavailable under English law

R&D: Research and Development

RDA: Regional Development Agency, non-departmental public bodies for the development of each of the UK’s regions

Registered Design: A monopoly right granted in respect of the appearance of the whole or part of a product

Relative Grounds (for refusal): The decision to reject a trade mark application as it is identical to or similar to earlier marks

Renewal fees: Payments that must be made by the applicant to keep a registered right in force and prevent it from lapsing

Retrospective/Retroactive term extension: Extension of copyright term for works that are already in copyright (retrospective) and for works that have fallen out of copyright, but which would still be in copyright if the longer term existed when they were created (retroactive revival of copyright)

Reverse Engineering: The process of understanding how a product is made from disassembly of the product

Search report: The list of citations of published prior art documents prepared by the Patent Office examiner in checking the novelty of a patent application

SEEDA: South East England Development Agency

SIPO: (State Intellectual Property Office), China's IP Office

SME: Small and Medium-sized Enterprise

SOCA: Serious Organised Crime Agency

Specification: The description, drawings and claims of an invention prepared to support a patent application

Substantive examination: The examination by the patent office examiner of a patent application to determine whether a patent meets the patentability criteria

Sui generis: ("of its own kind") A right specifically designed to address the needs and concerns of a particular issue

Supplementary Protection Certificate (SPC): Additional protection equivalent to an extension of patent term which gives certain products (in particular pharmaceutical products) longer protection due to the additional regulatory requirements

TellPat: The National Intellectual Property Intelligence System

Term: The number of years that a particular IP right lasts

TPM: Technical protection measure, designed to prevent unauthorised use of copyright protected content

Trade mark: A distinctive sign or identifier that can distinguish the goods and services of one trader from those of another

Trade Mark Opposition: After a trade mark has been published, the period of three months during which time anyone can raise an objection to the Patent Office decision to accept the mark

Trading Fund: Parts of Government which operate in specialised fields and rely on their ability to derive income in order to cover their costs. Each is established by their own Trading Fund Order

Transformative works: Works that use other works protected by copyright for a purpose such as to comment upon, criticize or parody the copyrighted work

TRIPS: Trade Related Aspects of Intellectual Property Rights Agreement, a treaty administered by WTO which sets down minimum standards for IP regulation

UK Trade and Investment (UKTI): Government organisation that supports companies in the UK doing business internationally and overseas enterprises seeking to do business in the UK

UKPO: United Kingdom Patent Office

Unregistered design right: A right which comes automatically into being to protect an original design

USPTO: United States Patent and Trademark Office

Utility model: A kind of patent available in some countries (but not the UK) which involves a simpler inventive step than that in a patent. Also known as a petty patent

VPL: Video Performance Limited, a UK collecting society.

WIPO: World Intellectual Property Organization

Woolf Reforms: Changes to civil law procedures in England and Wales which aim to simplify and speed up the process of taking cases through the courts

WTO: World Trade Organization

B

CALL FOR EVIDENCE

B.1 The formal Call for Evidence was published on 23rd February 2006. It set out the scope of the Review and asked respondents to comment on a range of general and specific IP issues, and to highlight other issues they considered important. The questions posed in the Call for Evidence are set out below. The Call for Evidence closed on 21st April 2006.

B.2 The Call for Evidence elicited 517 responses and a petition on extending copyright term for sound recordings. Responses not designated as confidential can be viewed on the Gowers Review website. The full list of respondents is below.

RESPONSES: INDIVIDUAL

Alan Bunting	B F Woodgate	Dave Glass
Alan Cox	B J Moore	Dave Jessop
Alasdair Poore	Barry McCanna	Dave McAleer
Albert Pattison	Bernard Smith	David Ades
Alexander Mckenna	Bharath Manu Akkara Veetil	David and Nansi Mottram
Alistair Kerr	Bill Myatt	David Colp
Alistair Mitchell	Brian Hawkins	David Cummings
Andrew John	Brian Matthews	Professor David Kirkby
Andrew John Hughes	Charles Harrison	Lord David Puttnam
Andrew Shuttlewood	Chris Bartram	David Robinson
Andy Green	Chris Brand	David Symes
Andy Turner	Chris Newton	Derek Holt
Anne Duffill	Lord Chris Smith	Derek Metheringham
Anthony Austin	Christopher Lee	Don Cox
Anthony Barnett	Christopher Wood	Donald Petter
Anthony Bradley	Colin Charman	Duncan Curley
Anthony H Ratcliffe	Cristian Miceli	Edward Barrow
Anthony Skyrme/Michael Schofield	D B Fletcher	Eric Smith
	D C Kendal	Fiona Frank
Antony Howard	D M Soall	Frank Bristow
Antony Watts	Dan Re'em	Frank Cullen
Ashley Karyl	Daniel Moylan	Frank French
Austin Powell	Dave Bishop	Fred McCormick

Gary Holloway	K F Harris/ A J Reid/ S J Goddard/G Goddard	Neil Manthorpe
Geoff Dann		Neil Rennoldson
Geoff Wallis	Ken Caswell	Neil Thomas
Geoff Wilding	Ken Sephton	Nicholas Bentley
Geoff Woolfe	Ken Strachan	Norman Jones
Glenn Mitchell	Kenneth I Brown	Ossie Dales
Glenn Thorpe	Lee Raymond	P Rees
Howard Hope	Leonard Nicholson	Pali Rao
Ian Bruntlett	Les Hurdle	Paul Collenette
Ian Forbes	Leslie Davidson	Paul Hampton
Ian Gillis	Louis Barfe	Paul Holroyd
Dr J Pelan	Louise Pryor	Paul L D Rank
J R Wrigley	Lyn Shailer	Paul Massot
James Cort	M Highton	Paul Morris
James Hogg	M Ivan	Paul Pedley
James Nice	Malcolm Austen	Paul Roberts
Jamie Robert Thompson	Margaret Smith	Peter Adamson
Jim Marshall	Mark Berresford	Peter Charlton
John Adrian	Mark Spry	Peter Cripps
John Booth	Maurice McCarthy	Peter Luck
John Capes	Melvin Metcalfe	Peter Sandercock
John Earl	Michael Asser	Peter Wallace
John Goslin	Michael Martin Foreman	Phil Brooke
John Hope	Michael Pointon	R Dixon Smith
John Howkins	Michael Smith	Ray Spendley
John Walsh	Dr Michael Steele	Rexton Bunnett
Jonathan Sanders	Michael van Boolean	Richard Allen
Jonnie Dance	Michelle Mathurin	Richard Baker
Jui Hsuan Tang	Mike Child	Richard Porter
Julian Dyer	Mike Ellis	Richard Powell
Julian Myerscough	Mike Feist	Richard Watts
Julian Vein	Neil Jeffares	Rob Twisse

Robert Watson	Simon Moss	Tom Duffy
Robert Young	Simon O'Neill	Tom Ellis Huckstep
Robin Broadbank	Sonia Wood	Tony Dean
Robin Cherry	Soon Ong	Tony Langford
Robin Mukerji	Stanley Smith	Trevor Taylor
Ronald Prentice	Stephen Marshall	Wallace J McLean
Ross Anderson	Steven Anderman	William J Clark
Roy Waters	Susan Bell	William Kingston
Russell Barnes	Swithun Crowe	William Scott
Sally Ramage	Sylvia Panrucker	Willie Liam
Sarah Smith	Ted Kendall	
Sheldon Greeberg	Theo Morgan	
Simon Booth	Tim Brooks	
Simon Levene	Tim Gander	

RESPONSES: ORGANISATIONS

Accent Software Ltd	Association for University Research and Industry Links	Atmosphere Picture Library
Active Rights Management and Netresult	Association of Art Historians	Authors' Licensing and Collecting Society Ltd
AHDS Visual Arts	Association of Independent Music	BAe Systems
AHRC Research Centre for Studies in IP and Technology Law, University of Edinburgh	Association of Learned and Professional Society Publishers	BBC / BBC Worldwide Ltd
All Party Parliamentary Jazz Appreciation Group	Association of Photographers	Biodiversity Organisation
All3Media	Association of Scottish Colleges	BioIndustry Association
Alliance Against IP Theft	Association of Streaming Media Companies	Biomedical Industry Advisory Group
Antenna Audio Ltd	Association of the British Pharmaceutical Industry (ABPI)	Bournemouth University
Anti Copying in Design	Association of United Recording Artists	Brightman Art Library
ARM Ltd	AstraZeneca	British Academy
Arts Council England		British and Irish Association of Law Librarians
Ascot Racecourse Ltd		British Association of Picture Libraries and Agencies (BAPLA)
Ashurst		

British Brands Group and Anti-Counterfeiting Group	Chartered Institute of Journalists (CIJ)	Designs IQ
British Chambers of Commerce	Chartered Institute of Patent Attorneys (CIPA)	Dial Solutions
British Copyright Council	Chartered Institute of Public Relations (CIPR)	Digital Content Forum
British Design Innovation	City of London Law Society	Digital Curation Centre, University of Edinburgh
British Equity Collecting Society (BECS)	City of London Phonograph and Gramophone Society	Disability Rights Commission
British Film Institute	Clifford Chance	D J Association
British Geological Survey	Comite Interprofessionnel Du Vin De Champagne (CIVC)	D J Licensing Working Party
British Library	Competition Commission	Dr P R Lewis and Associates Ltd
British Music Rights	Computer & Communications Industry Association (CCIA)	Dramatico Entertainment Ltd
British Phonographic Industry (BPI)	Computer Patent Annuities (CPA) Management Systems Ltd	Dress Circle
British Screen Advisory Council	ConcurrentComputing.co.uk	Dutton Vocalion
British Society of Plant Breeders	Confederation of British Industry (CBI)	East London Inventors Club
British Telecom	Consumer Project on Technology	Educational Recording Agency (ERA)
British Universities Film and Video Council (BUFVC)	ContraVision	Electronic Frontier Foundation (EFF)
British Video Association (BVA)	Copyright Licensing Agency Ltd	Electronics Leadership Council/UK Electronics Alliance
BSkyB	Creative Commons	Element Design
Business Software Alliance (BSA)	Creators Rights Alliance	Elysium Ltd
CALL (Communication Aids for Language and Learning) Centre, University of Edinburgh	Crop Protection Association	EMI
Cambridge Assessment	Cuillin FM	Enfis Ltd
Centre for the History and Analysis of Recorded Music, Royal Holloway, University of London (CHARM)	Dart Sensors Ltd	Entertainment and Leisure Software Publishers Association (ELSPA)
Channel Four Television Corporation	Data Publishers Association	Envisage Ltd
Channel 5 Broadcasting Ltd	Davenport Lyons	Equity
	Design and Artists Copyright Society (DACS)	Esterco Biofuel Ltd
		Ethical Medicines Industry Group (EMIG)
		European Federation of Journalists

European Publishers Council	Institute of Patentees and Inventors	Joint Information Systems Committee (JISC)
Evergreen Melodies	Institute of Professional Sport	JSP Records
Federation Against Software Theft (FAST)	Institute of Trade Mark Attorneys	Just Media Resources
Federation of Small Businesses (FSB)	Institute of Videography	Lancaster University
FeONIC PLC	Institution of Engineering and Technology	Law Society
Field Fisher Waterhouse	Intel Corporation, Europe, Middle East & Africa	Law Society of Scotland
Film Distributors' Association Ltd	Intellect	Libraries and Archives Copyright Alliance (LACA) [including Museum Copyright Group (MCG)]
Flare Records	Intellectual Property Institute	Licensing Executives Society
Fo'c'sle Folk Club Southampton	Intellectual Property Lawyers' Association	Lowlights Publishing
Foldback Media Ltd	International Association for the Study of Popular Music (IASPM)	MacRoberts
Foundation for a Free Information Infrastructure (FFII) UK	International Association of Music Libraries, Archives and Documentation Centres (IAML)	McDonald Bridge
Foundation for Information Policy Research (FIPR)	International Chamber of Commerce (ICC)	Mechanical Copyright Protection Society and Performing Rights Society Alliance
Freddysays.com	International Concertina Association	Mellotone Records
Freeth Cartwright	International Federation of the Phonographic Industry (IFPI)	Microsoft
Glasgow Caledonian University	International Military Music Society (UK Branch)	Milbank Tweed Hadley and McCloy
GlaxoSmithKline (GSK)	International Policy Network (IPN)	Motion Picture Association
Global Village Ltd	IP Wales	MP4
Google	ITV	Muirhead Management
Handy women	Jazz Services	Museum Documentation Association
Hospital Broadcast Association	Johnson Matthey PLC	Museums, Libraries and Archives Council
Ian Anderson Group of Companies Ltd		Music Business Forum
Iansyst Ltd		Music Hall Magazine
ICI		Music Managers Forum
Incorporated Society of Musicians		Music Traditions Records
Institute of Child Health		Music Users' Council (UK)

Music Video Producers Association	Opendawn Ltd	Racehorse Holdings Trust Ltd
Musical Stages Magazine	Ordnance Survey	Random House Group Ltd
Musicians' Union	Organisations representing Specific Learning Difficulties	Rangers Football Club
National Academies	Own It	Redeye The Photography Network
National Archives	Oxford Intellectual Property Research Institute	Reed Elsevier Group plc
National Association for Music in Higher Education (NAMHE)	PACT	Research Councils UK
National Consumer Council (NCC)	Past Perfect	Research Information Network
National Council on Archives	Patent and Trade Mark Group (PATMG)	Reuters
National Library for the Blind	Peninsula Medical School	Right to Read Alliance
National Library of Scotland	Periodical Publishers Association	Rivers Consultancy
National Library of Wales	Personal Managers' Association (PMA)	Roehampton University
National Museum Directors Conference and Museums Copyright Group	Philips Intellectual Property and Standards	Rollercoaster Records
National Union of Journalists	Phonographic Performance Ltd and Video Performance Ltd	Royal Bank of Scotland Group plc
Naxos UK	Pierian Records	Royal National Institute of the Blind (RNIB)
National Endowment for Science Technology and the Arts (NESTA)	Pink Floyd	Royal Society
Newspaper Licensing Agency Ltd	Poppy Records	Royal Society of Arts
Newspaper Society	Professional Contractors' Group	S4C
NHS Innovations East Midlands	Proper Music Group	Sage
NHS Innovations South East	Public Patent Foundation	Scientific Generics Ltd
Northern Lights PR	Publishers Association	Scottish Funding Council
ntl	Publishers Licencing Society	Scottish Intellectual Assets Centre
Open Plan Solutions Ltd	QinetiQ Ltd	Scottish Screen
Open Rights Group	Queen Mary IP Research Institute, University of London	Sepia Records
Open University	Queen's University of Belfast	Share the Vision
	Racecourse Association Ltd	Sheffield Hallam University
		Sheridans Solicitors
		Skyscan Photolibrary
		Society for Computers and Law

Society of College, National and University Libraries (SCONUL)	The Monster Factory	University of Loughborough
Society of Information Technology Management Open Source Software Group (SOCITM)	This England and Evergreen Magazines	University of Manchester
Society of London Theatre and Theatrical Management Association (SOLTTMA)	Tiny Quest	University of Newcastle
Sports Rights Owners Coalition (SROC)	Tony Smith Personal Management	University of Oxford
Stanford Law School	Trade Marks, Patents & Designs Federation (TMPDF)	University of Southampton Centre for Enterprise and Innovation
Stock Artists Alliance	Trading Standards, North West (TSNW) IP Group	University of Surrey
Stockholm Network	UCB S.A.	University of Sydney
Sun Microsystems Inc	UK Association of Online Publishers	University of Wales, Aberystwyth
Swedish Society of Popular Music Composers (SKAP)	UK Film Council	University of Wales, Swansea
Technical Advisory Service for Images, Institute for Learning and Research Technology, University of Bristol	UK Hydrographic Office	University of Warwick
Tertullian Project	UK Professional Football Leagues	Video Networks Ltd
Tesco plc	UNICO: The University Companies Association	Villeroy & Boch
The Blacksmith Collection Ltd	Unilever plc	Warner Brothers Entertainment UK
The British Association of The International Federation of Industrial Property Attorneys (FICPI - UK)	Universities UK	Wedlake Bell
The Laureate Company	Universities UK & Standing Conference of Principals (UUK&SCOP)	Welsh Assembly Government
The Learning Machine	University of Edinburgh IP Academics	wePod
	University of Glasgow	West Country Inventors Club
	University of Hull	Wheal Associates Ltd
	University of Leicester	Yahoo
	University of Liverpool	Yorkshire Garland Group

CALL FOR EVIDENCE

B.3 This Call for Evidence will form a key part of the evidence base that the Review team can use to develop its analysis. It will be used alongside a range of other evidence sources, including quantitative data; surveys and views of representative groups; visits; seminars; and interviews. **We encourage stakeholders to submit evidence in three areas:**

- First, we invite evidence on a series of [General Questions](#) for each of these elements of the IP system identified. These are set out below.
- Second, there are also a number of [Specific Issues](#) on which we would particularly welcome evidence. These are also set out below.
- Finally, we also invite respondents to [highlight other issues](#) on which the Review should focus its attention that are within our scope, but not listed below.

GENERAL QUESTIONS

How IP is awarded

1. Are there barriers to obtaining IP rights due to system complexity? What could be done to improve this situation?
2. How easy is it to find out about obtaining IP rights? What could be done to improve awareness for businesses and innovators? Is there sufficient awareness of the need to protect IP internationally?
3. Are there barriers to obtaining UK IP rights on grounds of cost? What drives these costs?
4. How do these costs compare internationally in your organisation's experience?
5. Do you have any comments on the UK Patent Office fees structure for obtaining and renewing IP protection?
6. Is lack of trust in the system a barrier? To what extent do you rely on other tools to bring innovation to the marketplace, such as being first to market, maintaining trade secrets, or using an open innovation model to generate value through reputation or network effects?
7. Are there specific barriers to obtaining IP rights in your sector?
8. Are there specific barriers to obtaining IP rights for small businesses or individuals?
9. How well does the national system for awarding IP, administered by the Patent Office perform? How well do the international and European systems work?

How IP is used

1. What types of IP does your organisation use and why?
2. To what extent do you seek multiple overlapping forms of IP protection?
3. To what extent are these decisions influenced by sector-specific considerations?

4. How does your company value its IP? Are there problems with raising finance against intangible assets based on IP? What improvements could be made in this area?
5. To what extent does the term of IP rights at the margin affect investment decisions?
6. How well does the UK IP system promote innovation?
7. To what extent does your organisation make use of other methods used by Government to encourage innovation, such as public funding?
8. Are data on the use of patents and other forms of IP useful as a means of measuring innovation?
9. Do you have any evidence as to the static or dynamic costs that IP rights (as statutory monopolies) impose on the economy?
10. Have you encountered patents or other IP rights being used defensively, i.e. obtained not to develop products, but only to prevent others from doing so? Under what circumstances do you consider this acceptable?

How IP is licensed and exchanged

1. How easy is it to negotiate licences to use others' IP for commercial or non-profit purposes?
2. What mechanisms do you use for finding potential licensing partners?
3. How easy is it to use others' IP for research purposes? Have you experienced difficulty around research exemptions?
4. Are there specific barriers to licensing in the main forms of IP currently used: patents, copyright, trade marks, and designs?
5. Are there barriers to licensing IP on grounds of cost? What drives these costs?
6. Are there specific barriers to licensing IP in your sector?
7. Does your organisation use methods to facilitate exchange of IP - such as cross-licensing or pooling IP rights with other firms or organisations?
8. Are there specific barriers to licensing IP rights for small businesses or individuals - for example barriers to entry to patent pools?
9. Are there barriers to trade and exchange of IP internationally?
10. Does your organisation consider renewing patents using "licence of right" provisions in patent law (which entitle any person to a licence under your patent and reduce your renewal fees by half)?
11. What could be done to improve "licence of right" provisions and business awareness of them?
12. Do you have any experience of the compulsory licence provisions within current patent law? Are they effective? How could they be improved?

How IP is challenged and enforced

1. Are there specific problems with enforcing the main different forms of IP: patents, copyright, trade marks, and designs?
2. Are there barriers to challenging infringement and enforcing your IP rights on grounds of cost? What drives these costs?
3. To what extent does your organisation make use of other methods than litigation to resolve IP infringement cases, for example the Patent Office opinion service, mediation services, Alternative Dispute Resolution, or the Copyright Tribunal?
4. To what extent do you use IP litigation insurance? How effective is it?
5. Are there barriers to using such methods to settle IP disputes without recourse to litigation? How might they be removed?
6. Are there specific barriers to challenging and enforcement of IP rights for small businesses or individuals?
7. To what extent is the risk of litigation a factor in your organisation's investment in innovation?
8. What are the principal barriers to efficient and successful challenge and enforcement internationally?

SPECIFIC ISSUES

Current term of protection on sound recordings and performers' rights

Background: The Review will fulfil the Government's commitment to examine whether the current 50 year term of protection on sound recordings and performers' rights in sound recordings is appropriate, in the light of its extension to 95 years in a number of other jurisdictions.

1. What are your views on this issue?
2. Is there evidence to show the impact that a change in term would have on investment, creativity, and consumer interests?
3. Are you aware of the impact that different lengths of term have had on investment, creativity, and consumer interests in other countries?
4. Are there alternative arrangements that could accompany an extension of term (e.g. licence of right for any extended term)?
5. If term were to be extended, should it be extended retrospectively (for existing works) or solely for new creations?

Copyright exceptions – fair use/fair dealing

Background: There are a number of exceptions to copyright that allow limited use of copyright works without the permission of the copyright holder.

1. What are your views on the current exceptions in copyright law?
2. Could more be done to clarify the various exceptions?
3. Are there other areas where copyright exceptions should apply?
4. Are the current exceptions adequate or in need of updating to reflect technological change? For example copyright law in the UK does not currently have a private “fair use” exception. Such an exception might allow individuals to copy music CDs onto their PC and MP3 player for their personal use. Should UK law include a statutory exception for “fair use”?
5. How would you see content owners being compensated for such use?
6. To what extent has technological change presented difficulties in use of copyrighted material in the field of education?
7. Are there issues concerning the archiving of material covered by copyright?

Copyright – digital rights management

Background: Increasingly digital media content is distributed with digital rights management (DRM) technologies that can enable rights-holders to track usage and prevent unlicensed copying by technological means. However concerns have been raised about interoperability and that such technologies may impair the content consumer’s legal rights. For example they may be unable to take into account exceptions to copyright, the ultimate expiry of copyright term, or the future evolution of technology. They may therefore undermine legitimate rights to access digital content, now and in the future. (NB: We are aware of all formal submissions that have been made to the All Party Parliamentary Internet Group on this issue.)

1. Do you have a view on how the use of digital rights management technologies should be regulated?

Copyright – orphan works

1. Have you experienced any difficulties in identifying the owners of copyright content when seeking permission to use that content?
2. Do you have any suggestions on how this problem could be overcome?

Copyright – licensing of public performances

1. Have you encountered problems with the system of licensing and paying royalties to collecting societies for public performance of music and/or sound recordings?
2. Could the system be clarified or simplified, and if so how do you see this working?

Patents – utility models

Background: Some countries, notably Germany, have a “utility model” system offering protection for simple inventions, usually subject to less examination and shorter terms than standard patents.

1. Do you have a view on some sort of second tier patent system?
2. Has your organisation encountered problems in protecting its IP internationally where such systems exist?

Pharmaceutical Supplementary Protection Certificates (SPCs)

Background: SPCs are a “sui generis” IP right available in EU Member States for pharmaceutical products (as well as plant protection products). The standard patent term is 20 years. SPCs aim to compensate rights holders for the time required to obtain regulatory approval for their products. Where regulatory approval is issued more than five years after a patent is granted, SPCs may be granted to extend the term of protection on the active ingredient in the patented product. SPCs last for a term corresponding to the period elapsed between the five-year point and the point at which the product reaches market, up to a maximum term of 5 years.

1. Does your organisation use SPCs?
2. How fair and effective are they in delivering an incentive for investment?
3. How could they be improved?
4. Should the term of SPCs be more flexible – perhaps relating straightforwardly to the period between patent award and regulatory approval?

Trade Marks – international issues

1. To what extent does your organisation register its trade marks at the European rather than national level?
2. Could the UK trade mark system be improved to work better alongside the European system?

Designs – registered designs and unregistered design rights

1. To what extent does your organisation rely on registered designs? And on unregistered design rights?
2. To what extent does your organisation register its design at the European rather than national level?
3. To what extent does your organisation rely on the European unregistered design right rather than the national UK unregistered design right?
4. Could the UK registered design be improved to work better alongside the European system?
5. Could the UK unregistered design right be simplified to work better alongside the European unregistered design right?
6. Do you see a useful role for the UK unregistered design right alongside the European design right?

Legal sanctions on IP infringement

1. Are you aware of any inconsistencies or inadequacies in the way the law applies legal sanctions to infringement of different forms of IP or to different circumstances?
2. For example, should criminal sanctions on online infringement be the same as those relating to physical infringement?

Coherence between competition policy and IP policy

1. Has your organisation experienced any activity linked to IP rights that you regarded as unfair competition?
2. How did you deal with this problem?
3. Was competition law effective at controlling this behaviour?
4. Should competition law have a greater role to play in regulating IP?
5. How would you see the system working?

Parallel Imports/International Exhaustion

Background: European law does not allow firms to use trade mark or copyright law to prevent their goods sold in one EEA Member State from being imported and resold in another Member State – i.e. they are not able to segment the EU market. However European law does allow the use of trade mark and copyright law to restrict the imports to EU Member States of goods sold outside the EEA. It also specifically inhibits EU Member States from legislating to remove such import restrictions at the national level – so called “international exhaustion” of trade marks or copyright. There has been a good deal of debate, both here in the UK and at EU level, about the costs and benefits of removing restrictions on parallel imports. There is a further issue of firms taking advantage of variations in prices on pharmaceutical products across the EU and repackaging drugs bought cheaply elsewhere within the EEA to resell within the UK.

1. Has your company been affected by parallel trade?
2. What would be the impact on your organisation of a change in the current rules?
3. What evidence is there of the costs and benefits, both for consumers and firms of the current rules?

