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NAVIGATING THE INTERFACE BETWEEN UTILITY PATENTS AND COPYRIGHTS

Andrew P. Bridges, Fenwick & West LLP

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A. Hypothetical

A computer scientist with training in operations research leaves her employer, an e-commerce retailer, to help found a new web-based company that will revolutionize the way customers buy custom-tailored clothing online without having to visit a tailor. She and three friends take their savings, borrow money on their credit cards, and rent a house where they spend fourteen months feverishly, planning their business and writing code for the new website. One of the founders, a computer science professor, also draws upon a graduate student occasionally to help with the coding, paying the student on an hourly basis to write code for the user interface of the website at home according to general specifications the professor furnished.

Urged on by a venture capitalist who provides early financing after the founders had spent months soliciting funding, the founders file a series of patent applications covering the company's business model, its ordering process, its methods for fitting customers remotely, its systems for tracking customer preferences and for anticipating changes in customer sizing, and its innovations in customer communications and web design.

The new venture's website goes 'live', and its business becomes wildly successful. The following year, however, a rival emerges in the nascent online custom-tailored clothing market: the graduate student is its chief technology officer, and venture capitalists who didn't get to invest in the first venture back the rival. The new business emulates in every way the business model of the first business, and its user interface is virtually identical to the first company's interface. The founders of the first venture, outraged, want to assert every type of legal claim

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against the rival. In particular, they explore the possibility of asserting both copyright and patent claims in respect of their creations that were misappropriated by the follow-on business. This chapter explores some of the issues arising from the overlap between patents and copyrights in such a context.

B. Conceptual Interplays between Utility Patent and Copyright Law

(1) The constitutional basis of patent and copyright in United States law

- **1.04** The relationship between utility patent law and copyright law in the United States (US) presents a remarkable paradox: they share the same fundamental principles but have widely divergent details and applications in practice.
- 1.05 Copyright and patent protection have a special place in US law because the original Constitution in 1787 made explicit provision¹ for them in the powers that the Constitution accorded Congress: 'The Congress shall have the Power . . . To Promote the Progress of Science and the useful Arts, by securing for limited Times to Authors and Inventors the exclusive Rights to their Writings and Discoveries.' United States Constitution Article I, § 8, clause 8. US courts have repeatedly underscored the importance of that foundation in interpreting and applying the copyright and patent laws.² US courts also have invoked principles of patent law to interpret copyright law, and vice versa.³
- 1.06 Nevertheless, while US copyright and patent law shares a common Constitutional basis and have a 'historic kinship', Congress has exercised its Constitutional power with respect to the two fields in a very different fashion. Moreover, the differences in apparent stakeholders in the respective laws, their expected roles in litigation, their marketplace power, and their political influences account for vastly different contours of the laws as they affect the practical business of litigation and the opportunities and choices for litigants to exploit copyright and patent theories in individual cases.
- 1.07 The dividing line between copyrights and utility patents is implicit in the two categories of protected activity in the US Constitution: 'Writings and Discoveries'. Shaped by statutes, and applied by the courts, the respective fields of law have grown beyond mere writings and discoveries, and the lines have blurred. This allows practitioners to capture the benefits of both protections in a variety of contexts, especially where writings or other expressive works may embody or reflect discoveries and inventions.

¹ In fact, the rights of authors and inventors are the *only* rights expressly described as such in the original Constitution, before the Bill of Rights added to them in 1791.

² See, eg, Board of Trustees of the Leland Stanford Junior University v Roche Molecular Systems, Inc, 563 US ____, 131 S Ct 2188, 2194 (2011) (patent); Quanta Computer, Inc, v LG Electronics, Inc, 553 US 617, ____ (2008) (patent); Reed Elsevier Inc v Muchnick, 559 US ____, ___, 130 S Ct 1237, 1241 (2010) (copyright); Feist Publications Inc v Rural Telephone Service Co., 499 US 341, 349 (1991) (copyright); Sony Corp of Am., Inc v Universal City Studios, Inc, 464 US 417, 428 (1984) (copyright).

³ See, eg, eBay, Inc, v MercExchange LLC, 547 US 388, 392–3 (2006) (policies regarding injunctions, citing copyright law in patent case); Sony Corp, 464 US at 439–42 (drawing from patent statute in recognizing non-statutory contributory infringement cause of action in copyright law, because of 'historic kinship' between patent and copyright law).

(2) The United States Patent Act and Copyright Act

In the US, utility patents protect rights in new, useful, and non-obvious inventions that are manifest in processes, machines, manufactures, or compositions of matter.⁴ Examples include new pharmaceuticals, new types of machines, new ways of assembling products, and new business methods. At the controversial edge of patent protection are business methods or strategies such as tax-avoidance methods, investment strategies, and one-click ordering systems on a website.

In the US copyrights protect rights in original, creative expression in 'works of authorship' that have been rendered in a tangible medium of expression. They include (1) literary works; (2) musical works, including any accompanying words; (3) dramatic works, including any accompanying music; (4) pantomimes and choreographic works; (5) pictorial, graphic, and sculptural works; (6) motion pictures and other audiovisual works; (7) sound recordings; and (8) architectural works.⁵

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The US Copyright Act appears to make patent and copyright coverage mutually exclusive. It states that '[i]n no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.' The Patent Act, by contrast, provides protections for processes as inventions; a 'procedure, . . . system, and method of operation' as described in the Copyright Act may be variants upon the concept of 'process'. Similarly, the Copyright Act limits protection that might otherwise apply to utilitarian products. It defines 'useful article' as 'an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information.' It then limits the scope of 'pictorial, graphic, and sculptural works' as follows.

Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a picrorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.⁹

By contrast, the Patent Act protects inventions consisting of utilitarian manufactures. 10

The Copyright Act expressly limits protection for *pictorial*, *graphic*, *and sculptural* works that may constitute *useful articles*. There is no such explicit limitation for *literary works* in the Act, but the limitations of Section 102(b) derive from a seminal US Supreme Court case pertaining to a book. In *Baker v Selden*, ¹¹ the plaintiff owned the copyright in a book detailing a new book-keeping method, which consisted primarily of book-keeping forms and a description of their use. The plaintiff sued defendant for authoring a book that contained forms identical

^{4 35} USC §§ 101-102.

⁵ 17 USC § 102.

⁶ 17 USC § 102(b).

⁷ 35 USC § 101.

⁸ 17 USC § 101.

⁹ Ibid.

^{10 35} USC § 101.

¹¹ 101 US 99 (1879).

to those of the plaintiff. The US Supreme Court considered the question as whether the author, by owning copyright in the book in which he explained his system or method of book-keeping, could prevent others from copying forms from the book.

1.13 The Court stated as follows,

The copyright of a work on mathematical science cannot give to the author an exclusive right to the methods of operation which he propounds, or to the diagrams which he employs to explain them, so as to prevent an engineer from using them whenever occasion requires. The very object of publishing a book on science or the useful arts is to communicate to the world the useful knowledge which it contains. But this object would be frustrated if the knowledge could not be used without incurring the guilt of piracy of the book. And where the art it teaches cannot be used without employing the methods and diagrams used to illustrate the book, or such as are similar to them, such methods and diagrams are to be considered as necessary incidents to the art, and given therewith to the public—not given for the purpose of publication in other works explanatory of the art, but for the purpose of practical application.

... [T]he teachings of science and the rules and methods of useful art have their final end in application and use, and this application and use are what the public derive from the publication of a book which teaches them. But as embodied and taught in a literary composition or book, their essence consists only in their statement. This alone is what is secured by the copyright. The use by another of the same methods of statem in, whether in words or illustrations, in a book published for teaching the art would undoubtedly be an infringement of the copyright. 12

- 1.14 Thus the effect of such limiting provisions in the Copyright Act and of decisions such as *Baker* is to prefer patent law as the basis of projection of functional intellectual creations that may occupy a boundary zone between writings and discoveries, which is to say, copyrights and patents. On the other hand, literary works are explicitly not patentable in the US:¹³ the invention of a new and non-obvious plot twist in a novel, for example, is not eligible for protection because it does not fall within the categories of eligibility in the Patent Act (processes, machines, manufactures, or compositions of matter).¹⁴
- 1.15 US law provides for the 'egistration of copyrights. Mindful of the boundary between patents and copyrights, for a number of years the US Copyright Office forced an election on inventors/authors to choose between patent (utility or design) protection and copyright with respect to, for example, scientific or technical drawings that may explicate an invention. It dropped that requirement in 1995, 15 allowing that distinct monopolies could exist with respect to certain related matters, but in so doing it did not signal a position in favour of convergence of patent and copyright protection. Notably, the notice of the regulatory change in the Copyright Office procedure did not suggest that copyrighted works in the boundary zone were functional; the suggestion instead was that they potentially provided information about inventions.
- **1.16** In the US, it is therefore evident that the Constitution provides a common basis for patent and copyright law, while the federal statutes appear to divide them into separate domains.

^{12 101} US at 103-04.

¹³ See, eg, Manual of Patent Examining Procedure § 2106 IV.B.

^{14 365} USC § 101.

¹⁵ 60 Fed Reg 15,605 (14 March 1995).

With the abandonment of a regulatory effort to force an election between one domain and the other, the law allows creators and their lawyers room to urge dual protection of creative expression with functional purposes and effects. ¹⁶

(3) Statutory foundations of patent and copyright law in other countries

Patent law and copyright law in the European Union (EU) and many other countries do not have a basis analogous to the US Constitution; instead, they derive from statutes and show the influence of the international TRIPS agreement.¹⁷ There is no EU-wide patent at this point, but inventors have a choice of filing applications in individual jurisdictions or in the European Patent Office (EPO).¹⁸ It enables a single procedure for obtaining patent protection in designated member states, in essence gaining a group of national rights. Some countries provide rigorous examination of patents; others do not. Nevertheless, patent law in the European countries has undergone a great deal of de facto harmonization, thanks in part to both TRIPS and the European Patent Convention. Generally, following TRIPS, patent protection extends to inventions that have novelty, inventiveness, and industrial applicability, which roughly correspond to US criteria for protection.

European copyright law operates at a national level, but European directives have promoted some degree of harmonization of the laws of the several member states. It has a broader scope than US copyright law, affording rights not only to authors and creators but also to performers, producers, and broadcasters. It also protects performances and broadcasts in a way that extends beyond US protection. Most notably for our purposes, European copyright law pertaining to computer programs (unlike regular copyright) lacks an 'originality' requirement.¹⁹

Whereas US law appears to allow some overlap between patent and copyright in the case of functional literary works, such as computer software, EU law appears to resolve the ambiguity in favour of copyright and not patent protection. Thus, one European directive²⁰ classifies computer programs explicitly as literary works subject to copyright protection, while the European Patent Convention states that computer programs 'as such' are not eligible for patent protection.²¹

In addition, a related Furopean directive²² protects 'database rights', which correspond roughly to those non-creative products of effort and investment (including to a degree the protection of ideas) that the US Supreme Court excluded from copyright protection in *Feist*. The term of protection is much shorter than copyright: 15 years from the date of completion of the database or its publication, whichever is later. Whereas US patent and copyright law have tension at their interface, this database protection in Europe explicitly addresses some

¹⁶ One high-profile current example of combined patent and copyright litigation, over Google's Android platform, is *Oracle America Inc v Google, Inc*, case no 3:10-cv-03561 (ND Cal Complaint filed 12 August 2010)

¹⁷ Agreement on Trade Related Aspects of Intellectual Property Rights, a World Trade Organization agreement connected with the Uruguay Round of the GATT (General Agreement on Tariffs and Trade), 1994.

¹⁸ The EPO is *not* an EU agency. Instead, it is a separate intergovernmental organization with 38 member states. See http://www.epo.org/about-us.html last visited 28 February 2012.

¹⁹ Directive 2001/29/EC.

²⁰ Directive 2009/24/EC.

²¹ Article 52.

²² Directive 96/9/EC.

of the problems of that interface. To the extent one has, through effort and ingenuity, assembled a body of information, including reports of discoveries of natural phenomena or data pertaining to laws of nature, the intellectual product may be akin to, but lie outside the bounds of, the areas of patent and copyright protection. Database protection may govern such a product. Another chapter on this book focuses on database rights.²³

(4) The treatment of business models

- **1.21** The scope of patent protection for inventions in the Patent Act extends nearly to the limit of human ingenuity, subject to a principal limitation that patents cover actual *inventions* and not mere *ideas*. Case law²⁴ has established that laws of nature, physical phenomena, and abstract ideas (including algorithms and mathematical formulas) are not patentable.
- 1.22 Among the most controversial subjects of patent protection are business methods, including investment, financial trading, and tax avoidance methods or strategies. Because many of these business methods have their expression and execution in sophisticated computer programs, for example for program trading or large-scale data mining, this topic lies at the intersection of patent and copyright law.
- 1.23 The continued scope of 'business method' patents is uncertain in the US. Controversy results both from debate over whether they deserve protection by a legal monopoly and from a sense on the part of some observers that examination of each patents is hopelessly flawed, especially in the evaluation of novelty and prior art. The US Supreme Court recently disappointed some observers with little guidance in a case that many had expected to lead to a wide-ranging review of patentability in this context. The Court, in *Bilski v Kappos*, ²⁵ affirmed the rejection of a patent for an investment-bedging method based upon mathematical formulas. It refused to exclude business methods from patentability without suggesting broad patentability of such methods. Further, it disapproved of a requirement that patented processes be tied to a machine or to transformation of matter but acknowledged that other limiting criteria may be appropriate if they are consistent with the text of the Patent Act.
- 1.24 Thus, inventions such as novel tax or investment strategies appear vulnerable after *Bilski*. Moreover, in light of changes in the composition of the Supreme Court, business method patents as a category may yet lose patent protection. Four of the nine justices expressed the view, in a concurring opinion, that 'business methods are not patentable.'²⁶ The Federal Circuit's later decision in *Cybersource Corp v Retail Decisions, Inc*²⁷ goes further in limiting patents for internet-enabled inventions, holding that the implementation of an otherwise unoriginal process on a general-purpose computer or network does not render the overall invention patentable.
- **1.25** 'Schemes, rules, and methods for performing mental acts, playing games, or doing business, and programs for computers' as such are unpatentable in member jurisdictions of the

²³ See Chapter 9: Jonathan Band and Brandon Butler, Overlapping Forms of Protection for Databases.

²⁴ eg, Parker v Flook, 437 US 584 (1978); Gottschalk v Benson, 409 US 63 (1973).

²⁵ 561 US ____, 130 S Ct 3218 (2010).

 $^{^{26}\,}$ 561 US ___, 130 S Ct 3218, 3232 (2010) (concurring opinion of Stevens, J. in which Ginsburg, Breyer, and Sotomayor, J.J., joined).

²⁷ 654 F 3d 1366 (Fed Cir 2011).

European Patent Convention.²⁸ The 'as such' limitation²⁹ leaves room for patentability of inventions that rely in part upon schemes or methods which may gain patent protection based upon the extent they involve a novel use of an apparatus or solve a technical problem.³⁰ On the other hand, Japan, China, Australia, and Canada permit business method patents in certain circumstances. The field has a great deal of ferment, however, and there is uncertainty over how far business methods may be protectable by patents in certain applications and settings.

Companies document their business methods in many ways, whether in business plans, training videos, instruction manuals, diagrams, or other written or recorded works. The law is clear that such documents are entitled to copyright protection. To guard against competitors' copying one's business methods, a company may wish to protect against copying or distribution of those documents that may most easily inform or coach another on how to carry out the business method. Copyright can thus supplement trade secret protection, in protecting against imitation by others, to the extent that the methods are not evident in a rights holder's public activities.

(5) The treatment of computer programs

Related to the question of business method patents is that of software patents. Computer programs create methods for a wide variety of business activities, from calculating investment strategies to controlling manufacturing machinery. The *Bilski* decision suggests that certain computer programs that affect machines should enjoy protection under the patent laws. The question is more difficult, however, with computer programs that simply engage in calculations and whose output is information rather than a physical effect on a machine or another object, because *Bilski* made clear that a patentable process must involve something more than an idea.³¹

Computer programs are, by their very nature, functional products: they consist of a series of instructions to machines (ie, computers) to carry out a variety of functions that, in turn, stimulate other functions of greater and greater generality and complexity. Mapped to the terrain of patent and copyright law, these aspects place them on the patent side of the field. Yet computer programs consist of language and symbols, originally but not exclusively emanating from human thought and ingenuity, and reflecting a certain type of expression. For that reason, computer programs (originally written on paper, then converted to machine-readable media such as punch cards, paper tape, and eventually electronic tapes, disks, and chips) obtained registration under the 1909 US Copyright Act as 'books'. The 1976 Copyright Act provided for computer software within the definition of 'literary works', even though that classification seems counterintuitive,

'Literary works' are works, other than audiovisual works, expressed in *words, numbers, or other verbal or numerical symbols or indicia*, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied (emphasis added).³²

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²⁸ Art 52, European Patent Convention.

²⁹ Art 52(3).

³⁰ See http://www.epo.org/law-practice/legal-texts/html/caselaw/2010/e/clr_i_a_2_5_1.htm last visited 28 February 2012, for collected cases of the Boards of Appeal under the European Patent Convention.

³¹ 561 US _____ at ____, 130 S Ct 3218 at 3231.

³² 17 USC § 101.

- 1.29 In 1980, the US Congress amended the Copyright Act to make explicit its application to computer programs, which it defined as 'a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result', 33 and it also limited enforcement of copyright in computer programs against reproductions by owners of copies of programs in the course of their utilization or archival. 34 Court decisions from the early 1980s recognized copyrightability of computer programs expressed in object, or machine, code. 35
- **1.30** The conception of computer programs as a form of protectable expression finds analogous support in US court decisions ruling that they deserve the First Amendment guarantees of freedom of expression. ³⁶ Not only is a computer program a literary work, but it also constitutes Constitutionally-protected expression.
- 1.31 In Europe, the Software Copyright Directive, following TRIPS, recognizes software as a 'literary work', 37 suggesting that its primary mode of protection is under copyright law and not patent law. 38 Indeed, the same article of the European Patent Convention that restricts business method patents also restricts patentability of 'programs for computers' in member jurisdictions. 39 An applicant may obtain a patent by showing that the invention is a technical solution to a technical problem, but software to implement a business method, for example, will be unpatentable. 40
- 1.32 While computer programs often have functional aspects in their operations of machines, they also may have artistic and graphic aspects in how they appear to computer users, including to remote users accessing software over the Web. A lively question has been to what extent software developers can assert copyright not userly over the code they write but over the images generated in their user interfaces when a user operates the software. One early trial court decision upheld protection for software user interfaces in *Lotus Development Corp v Paperback Software Int'l.* An appellate court in a different case arising from the same judge as the first case held otherwise in *Lotus Development Corp v Borland Int'l, Inc,* limiting protection

³³ Pub L 96-517 § 10(a) (12 December 1980) (amending 17 USC § 101).

³⁴ Pub L 96-517 § 10(b) (12 December 1980) (amending 17 USC § 117).

³⁵ eg, Apple Computer, Inc v Franklin Computer Corp, 714 F.2d 1240 (3rd Cir 1983); Williams Electronics, Inc v Artic International, Inc, 685 F.2d 870 (3rd Cir 1982).

³⁶ Junger v Daley, 209 F 3d 481 (6th Cir 2000); Bernstein v United States Dep't of Justice, 176 F 3d 1132 (9th Cir 1997) (withdrawn upon grant of rehearing, and case eventually dismissed as moot when defendant represented it would not enforce challenged regulation).

³⁷ The concept of 'literary work' comes from the Berne Convention, which defines 'literary and artistic works' jointly, without distinguishing the two, as follows,

The expression 'literary and artistic works' shall include every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression, such as books, pamphlets and other writings; lectures, addresses, sermons and other works of the same nature; dramatic or dramatico-musical works; choreographic works and entertainments in dumb show; musical compositions with or without words; cinematographic works to which are assimilated works expressed by a process analogous to cinematography; works of drawing, painting, architecture, sculpture, engraving and lithography; photographic works to which are assimilated works expressed by a process analogous to photography; works of applied art; illustrations, maps, plans, sketches and three-dimensional works relative to geography, topography, architecture or science.

³⁸ Directive 2009/24/EC.

³⁹ Article 52.

⁴⁰ 'Patents for software?' http://www.epo.org/news-issues/computers/software.html last visited 28 February 2012.

⁴¹ 740 F. Supp. 37 (D. Mass. 1990).

for a user interface on the ground that Lotus was trying to enforce rights in a method of operation reflected in its menus and command hierarchy.⁴²

To the extent computer programs generate displays and sounds during their use, they may qualify as audiovisual works and gain copyright protection on that basis. This was apparent early in the context of computer programs that generated audiovisual games: copyright holders had registered copyrights not only in their computer programs but also in the audiovisual works comprising their displays.⁴³

In Europe, a recent case distinguished between underlying computer programs and user interfaces, finding user interfaces not protectable under the law relating to computer programs but eligible for protection under ordinary copyright law.⁴⁴ This recognizes a distinction evident in US law but with a different approach since US copyright law does not distinguish between software copyright and ordinary copyright in the way that European directives do.⁴⁵

One important limitation on the copyright enforcement of functional computer programs (including games) in the US is the 'idea/expression dichotomy' and its related concept, the 'merger doctrine.' The first distinguishes between unprotectable ideas and protectable expression. The second creates a rule that, if an idea and its expression are tightly connected, with few practical ways to express an idea, they 'merge' and neither enjoys protection. ⁴⁶ In cases involving computer software, largely influenced by the seminal decision in *Computer Associates Int'l, Inc v Altai, Inc,* ⁴⁷ courts take those limitations into account by analysing the software to 'filter' out the expressions that are so closely linked to ideas, processes, functions, and the like. Only after the filtering takes place can the court evaluate the substantial similarity of the programs to determine what protectable expression finds its counterpart in the defendant's program. In this fashion courts have developed modes of analysis to protect the boundaries and distinct interests of copyright and patent law.

Based on a review of the laws and frameworks for patent and copyright protection, the following highlights emerge:

- Jurisdictions do not generally exclude dual protection of intellectual creation under patent and copyright law, but there are significant tensions between the different domains as applied to the same intellectual products.
- Statutes, directives, and international agreements try to distinguish between matters fit for patent protection and those fit for copyright protection, but the distinctions are not necessarily clear.
- The intellectual products that most fully implicate both patent and copyright interests, namely computer software to implement novel business methods, are the most controversial and are relatively unstable in terms of assured recognition and enforceability.

⁴² 49 F.3d 807 (1st Cir 1995), affd 516 US 233 (1996). The Supreme Court granted review but affirmed without opinion by operation of law when the Court divided evenly (one justice recusing himself).

⁴³ eg, Williams Electronics, Inc, v Artic International, Inc, 685 F 2d 870 (3rd Cir 1982).

⁴⁴ Č-393/09, Bezpečnostní softwarová asociace—Svaz softwarové ochrany.

⁴⁵ As the court pointed out in C-393/09, originality is not a requirement for copyright protection of computer programs.

⁴⁶ See, eg, *BUC Int'l Corp v Int'l Yacht Council Ltd.*, 489 F.3d 1129 (11th Cir 2007).

⁴⁷ 982 F 2d 693 (9th Cir 1992).

C. Practical Considerations in Choice of Protection and Enforcement

- 1.37 The hypothetical scenario that began this chapter illustrates how a variety of activities and results of the company may yield both patent and copyright protection. There may be copyright in all computer code underlying the business, the user interface designs, and the unpublished business plans generated internally by the company. Patents may be available for business models for the new type of business and in its ways of interacting with customers; and patents may be available for groundbreaking software design. There are also potential intellectual property weaknesses in the hypothetical scenario: who owns the copyright in code that the graduate student wrote? Has the company adequately secured ownership rights in its copyrights and patents? Do the patent applications seek coverage merely of abstract ideas? Did premature disclosure of the invention kill the prospects of a patent?
- 1.38 The following are some industries and companies that may typically seek both patent protection and copyright protection for their products or services: computer software companies, computer hardware companies (firmware protection), integrated computer companies, consumer electronics companies (ie, iPad), financial services companies and investment companies, business consulting companies, videogame companies, social networking companies, online services (such as online retailers and enter(a) ment companies), manufacturers of electronic products that depend on authentication (garage door openers, printers), and training providers.
- 1.39 Against that backdrop, numerous factors will a fect a decision to rely upon patent or copyright protection, or both, in protecting a company's business against rivals or unauthorized followers. Apart from the differences in the scope and object of protection, there are numerous differences in the practical aspects of enforcement, ranging from venue to defences to remedies.
- 1.40 Timing of Protection US copy. ight arises instantly upon the creation of a qualifying work, and it lasts for a very long time: generally for the life of the author plus 70 years (in the case of certain works, 95 years from the date of publication or 120 years from the date of creation). While a copyright registration is necessary for litigation over US works, it is not usually a significant impediment. Copyright registration applications do not undergo significant substantive examination, they are inexpensive and easy, and they can result in registration very quickly (within a month) if the applicant demonstrates a need and pays an extra fee.
- **1.41** By contrast, US patents require formal issuance of the patent in order for protection to start, and they last a much shorter period, generally 20 years from the date of the application. They undergo serious examination, which may involve significant attorney fees, and they typically require more than a year to mature.
- 1.42 In addition, a delay in seeking a copyright registration may affect the availability of statutory damages, but a delay in filing a patent application may be fatal: US law bars patents where the invention was the subject of a disclosure, sale, or offer for sale more than one year before the patent application. Because of TRIPS provisions, patent terms in other countries tend to match the US term, 20 years from the application date (with extensions possible for certain pharmaceutical patents). Thus, in terms of timing, copyright law is stronger for the rights holder.

In other countries, copyright also generally arises automatically, without the requirement of any formality, as in the US. But unlike the United States, other countries lack an obligation to register a copyright in order to enforce the copyright in court. As a consequence, unlike the US, other countries generally do not impose a penalty or forfeiture of any remedies based upon a failure to register the copyright. Copyright terms vary, frequently for either life of the author plus 50 years under the influence of TRIPS or life of the author plus 70 years in harmony with EU legislation. Some countries have extended the term even further, however: Mexico, for example, now has a copyright term of life of the author plus 100 years.

Ownership of Rights In the US, patents belong to inventors, who are natural persons responsible for conceiving the invention, whether or not the inventor reduced the invention to practice.⁴⁸ Inventors who are employees of a business typically assign their patent applications to the employer, as such an assignment is necessary to perfect ownership in the employer.⁴⁹

In most other countries, companies may own patents at the outset, and either individuals or companies may apply for patents. In the United Kingdom, for example, a provision of the Patent Act defines when an employer or employee owns the right to patent an invention: if an employee makes an invention in the course of normal duties, or pursuant to work specifically assigned to the employee, or involving a special obligation to further the employer's interest, the employer is the owner. In other circumstances the employee may be the owner.⁵⁰

Under US copyright law, the copyright 'author' may be an individual or a business entity. In the case of a person creating a work alone, that person is usually the author. When a person works for a business, authorship depends on the relationship of the parties and often hinges on the definition of 'work made for hire' in the Copyright Act.⁵¹ When a person creates a work as an employee of a business, in the normal conduct and scope of the person's employment, the work is a 'work made for hire.' The consequence is that the employer is the author and the initial owner of the copyright

Where a person is an independent contractor and creates a work upon a commission or special order by another, the work may or may not be a 'work made for hire.' On this point numerous persons, including experienced lawyers, often make mistakes: to qualify as a work made for hire in this context, (a) the work must be specially ordered or commissioned, (b) there must be a written 'work made for hire' agreement, and (c) the work must fall into one of the several specific categories of works eligible for 'work made for hire' treatment by agreement.⁵²

If an enterprise wishes to acquire a copyright from an individual non-employee author, and the work does not qualify as the enterprise's 'work made for hire', then the enterprise may

⁴⁸ Manual of Patent Examining Procedure § 2137.01.

⁴⁹ Employers, without being inventors or patent owners, may have rights to practise an invention by an employee without fear of liability for infringement under the common-law doctrine of 'shop right', which grants the employer an implied royalty-free, non-exclusive, and non-transferable licence.

⁵⁰ Patent Act 1977, s 39(1).

⁵¹ 17 USC § 101.

⁵² The eligible works are: (a) a contribution to a collective work, (b) a part of a motion picture or other audiovisual work, (c) a translation, (d) a supplementary work, (e) a compilation, (f) an instructional text, (g) a test, (h) answer material for a test, and (i) an atlas. 17 USC § 101.

obtain an assignment from the author. But US law creates a long-term trap with respect to assigned copyright rights. *Except* in cases of works made for hire, an assignor (or licensor) of a copyright has an absolute, non-waivable right to terminate the transfer, recapture the copyright, and renegotiate a new assignment or license. This termination power generally arises 35 years after the grant or a publication pursuant to a grant; there are detailed requirements and formalities for its exercise.⁵³

- 1.49 The US treatment of these matters is idiosyncratic. In many other countries, the creator of a copyrighted work is generally considered the author even if the first copyright owner is the author's employer. The US 'work made for hire' concept that makes the employer both author and owner usually does not apply elsewhere. Generally, other countries give employers the copyright in works that employees create; cases of independent contractors may turn upon the facts and reasonable expectations of the parties.
- **1.50** Required Disclosures Copyright registration, which is necessary to enforce US works, normally requires the deposit of a copyrighted work. In the case of copyrighted works that may contain trade secrets, however, such as source code of a copyright program, the law allows protection of the trade secret by a partial deposit with redactions. ⁵⁴ Copyright applications are public documents, but deposits need not be public, and indeed some copyrighted works are unpublished. Copies of copyright deposits may be obtained from the Copyright Office upon a showing of an appropriate need.
- 1.51 Because other countries do not generally require registration, or even provide a facility for registration, there is generally no deposit requirement. An exception exists in those countries that may demand that copyright owners furnish copies of their works for 'legal deposit libraries' for the public's benefit. In the UK, for example, one copy of every print publication must go to the British Library, and five other academic libraries may request copies within one year of publication.⁵⁵
- 1.52 A patent applicant must fully disclose the invention to the point that one skilled in the art can apply the teaching to carry out the claimed invention; this 'enablement' requirement also ensures that the invention has 'utility' and that mere ideas do not gain patent protection. The applicant must describe a complete embodiment of the invention and the best mode of practising the invention.⁵⁶ Patent applications are confidential until they are published, generally 18 months from the filing date, subject to certain exceptions.⁵⁷
- 1.53 An issued patent is a public document, as is the file history that details the prior art that the examiner reviewed, the applicant's amendments and arguments, and the entire prosecution process: the disclosure is part of the bargain that the inventor enters into in order to secure the monopoly over the invention. For software inventions in particular, the 'enablement' requirement often means that the applicant must disclose the specific source code used to

^{53 17} USC §203.

⁵⁴ In fact this lack of a deposit of a complete work can lead to some ambiguity or gamesmanship relating to whether the work in the registration is the same as the work at issue in litigation.

⁵⁵ Legal Deposit Libraries Act 2003. Beyond the legal requirement, there is a code of practice for other forms of publication, such as microform and off-line electronic media; computer programs and computer games are subject neither to a legal requirement or a code of practice. See http://www.bl.uk/aboutus/stratpolprog/legaldep/voluntarydeposit last visited 28 February 2012.

⁵⁶ 35 USC § 112; 37 CFR § 1.71; MPEP 608.01(h).

⁵⁷ 35 USC § 122.

implement the invention, and a patent's scope can sometimes be limited to the source code disclosure and its equivalents.

Thus a choice of patent protection entails a greater degree of disclosure than copyright protection, and it may be more difficult for a defendant to verify the scope of a copyright than the scope of a patent. This is particularly so in software cases where a defendant's attorney may not be able to inspect source code of a plaintiff's work. Given that copyright prevents only copying of the work, the lack of access to the work itself may not pose any significant disadvantage to a third party who comes up with similar software. On the other hand, if the software is patented, any person who uses any part of the claim in his or her follow-on invention may be prone to an infringement action.

Scope of Rights US copyright law⁵⁸ gives a copyright holder control over five activities: (1) the reproduction of a copyrighted work in copies or phonorecords (which are defined as material objects); (2) preparation of derivative works based upon the original work; (3) distribution of copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership or by rental, lease, or lending; (4) public performance of the copyrighted work;⁵⁹ and (5) public display of the copyrighted work.

In the European Union, copyright law of various states harmonized pursuant to the Copyright Directive⁶⁰ generally protects the rights of (1) reproduction, (2) communication to the public, and (3) distribution of copies to the public. Another directive provides for the protection of the rights of (4) rental and lending, (5) fixation, and (6) croadcasting.⁶¹

US patent law gives the patent holder control over making (or having made), using, offering to sell, selling, or importing a patented invention. Note that the control over 'use' makes patent protection broader than copyright protection, which has no such control. One could traditionally use a copyrighted work—by reading a book, watching a movie or television program, listening to a concert, or looking at a painting—without implicating copyright law.

Nevertheless, the advent of digital computing and communication technologies has drastically changed that copyright environment because those technologies fundamentally depend on *copying*: opening on e-book may involve loading the data constituting that e-book into a devices memory, which may mean moving the data onto a RAM chip temporarily. One Court Of Appeals has found such RAM loading to constitute making an infringing copy.⁶² Another US Court Of Appeals found a 1.2 second buffer not to constitute a reproduction that implicated a copyright holder's rights.⁶³

Moreover, new 'paracopyright' laws, while not directly increasing the scope of copyright rights, make illegal the use of certain devices and technologies that merely give 'access' to copyrighted works even if their users do not engage in any of the controlled activities. ⁶⁴ As a

^{58 17} USC § 106.

 $^{^{59}}$ This summary compresses two different subsections of the relevant statute; the scope of the public performance right varies according to the type of work. See 17 USC $\$ 106 (4), (6).

⁶⁰ Directive 2001/29/EC.

⁶¹ Directive 2006/115/EC.

⁶² MAI Systems Corp v Peak Computer, Inc, 991 F 2d 511 (9th Cir 1993), legislatively overruled in part by 17 USC § 117(c).

⁶³ Cartoon Network, LP, LLLP v CSC Holdings, Inc, 536 F.3d 121 (2nd Cir 2008).

⁶⁴ These include the Audio Home Recording Act, 17 USC § 1001 *et seq* and the Digital Millennium Copyright Act, 17 USC § 1201.

consequence, the effective scope of copyright law is becoming broader and more resembles that of patent law in the sense that copyright law regulates 'uses' of copyrighted works as the Patent Act regulates 'uses' of inventions. This is true even though the Patent Act explicitly governs use whereas the Copyright Act does not on its face limit use but merely limits five specific categories of activities. The rights of a patent holder in other countries are similar to those of a US patent holder. For example, the rights of a patent holder in the United Kingdom (generally speaking) are to control the making of, disposal of, offer to dispose of, use of, importing of, or keeping of a product embodying a patented invention or a product obtained by the use of a patented process, and to control the using or offering for use of a process practising the invention.⁶⁵

- 1.60 In the US, both patent and copyright infringement are considered 'strict liability' causes of action. 66 Nevertheless, in cases involving online services in particular, courts in copyright cases have interpreted the law as requiring 'volitional' conduct by a defendant to justify liability. 67 This reflects a realization that online service providers with massive source and user bases may be helpless to avoid activities that may implicate copyright law owing to the automated nature of their functions and services. The courts take for granted the utility and benefit of the online services and refrain from imposing impossible obligations and unsupportable liabilities.
- defendant. Copyright law protects 'original' creations of but patent law protects 'novel' and 'non obvious' inventions. In this context 'novel' means never known before; 'original' means 'not copied'. If three persons independently arrive at the same technological breakthrough, only one is 'novel'. If three persons independently create the same expression, without any access to or knowledge of each other, all times products are 'original'.
- 1.62 In this respect patent law has a much more forceful preclusive effect on rivals: an authentically independent breakthrough may not be available to a company if another beat it to the punch. The only solution is to design around the patent. In copyright law, proof that a second developer had no access to the first copyrighted work will protect the second developer. In cases where there has been some access and a controversy over similarity has arisen, a defendant may adout a 'clean room' method of isolating a new development crew so that it has no access to the first work, giving it specifications for product performance and parameters for its use, and soliciting a fresh effort that is demonstrably independent. In evaluating patent and copyright protection for certain intellectual products, a company may wish to consider the relative ease and cost to a potential defendant of a patent workaround or a copyright clean-room replacement.

⁶⁵ Patents Act 1977, s 60(1).

⁶⁶ They are strict liability causes of action in that neither knowledge nor intent is an element of direct infringement (they may be elements of secondary liability). Thus, for example, a songwriter may be liable for infringing upon a song he or she had previously heard based on unconscious plagiarism. See, eg, *Bright Tunes Music Corp v Harrisongs Music, Ltd*, 420 F Supp. 177 (SDNY 1976)(George Harrison's 'My Sweet Lord' unconsciously plagiarized 'He's So Fine').

⁶⁷ Costar Group Inc v Loopnet, Inc, 373 F 3d 544, 554 (4th Cir 2004); Religious Tech Ctr v Netcom On-line Commc'n Servs, Inc, 907 F Supp 1361 (ND Cal 1995).

⁶⁸ European copyright law has an idiosyncratic exception to this requirement with respect to copyright in computer programs. Cf Directive 91/250/EEC (protection of computer programs) with Directive 2001/29/EC (copyright generally); see C-393/09, Bezpečnostní softwarová asociace—Svaz softwarové ochrany.

In addition, US copyright law has a robust doctrine of 'fair use' that limits the scope of a copyright.⁶⁹ The Copyright Act's fair use statute identifies a non-exhaustive list of examples of fair use and provides four non-exclusive factors for courts to consider in determining fair use:

Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

The fact that a work is unpublished shall not itself bar a finding of fair use it such finding is made upon consideration of all the above factors.⁷⁰

Courts apply the factors flexibly and on a case-by-case basis with copyright's ultimate purpose in mind: the promotion of science and the useful arts.⁷ Some decisions in the US have expressly found reverse engineering, and copies made in the course of reverse engineering, to be fair use.⁷²

In Europe and other jurisdictions, the law of fair use is not as general (or vague) and flexible. Instead, the law provides enumerated exceptions or limitations that are highly detailed. The European Directive, 73 for example, sets forth 15 specific exceptions and limitations that might roughly correspond to American fair use; in the UK the Copyright, Designs, and Patents Act 1988 sets forth over 50 specific exceptions and limitations. 74 Express provisions in the UK Act immunize reverse engineering. While the European Copyright Directive does not authorize reverse engineering, a different directive on the legal protection of computer programs allows justification for reverse engineering. 75

Patent law in the US and other jurisdictions does not have an equivalent limiting doctrine of fair use. Only very narrow circumstances defined by statute, such as preclinical testing of pharmaceuticals, ⁷⁶ are outside the scope of patent enforcement. Some jurisdictions use additional restrictions on patentability, such as prohibiting patent protection for methods of medical treatment in lieu of a fair use doctrine as a defence.

⁶⁹ The rights of a copyright holder under section 106 of the Copyright Act, 17 USC. § 106 are specifically 'subject to sections 107 through 122' of the Act. Section 107 states: 'Notwithstanding the provisions of section[] 106, the fair use of a copyrighted work . . . is not an infringement of copyright.'

^{70 17} USC. § 107.

⁷¹ Campbell v Acuff-Rose Music, Inc, 510 US 569, 577–78 (1994).

⁷² Sony Computer Entertainment, Inc v Connectix Corp, 203 F 3d 596 (9th Cir 2000); Sega Enterprises Ltd. v Accolade, Inc, 977 F 2d 1510 (9th Cir 1992).

⁷³ Directive 2001/29/EC, Article V.

⁷⁴ Copyright, Designs, and Patents Act 1988, s 28–76.

⁷⁵ Directive 2009/24/EC.

⁷⁶ 35 USC § 271(e)(1).

- **1.67** Thus, in the US, patent holders are in a much stronger position than copyright holders in enforcing rights where there may be independent creation, automated activity, or strong innovation-promoting uses by a defendant. Outside the US, stronger copyright protection and specifically enumerated limitations in lieu of a flexible fair use doctrine make copyright law more useful by comparison.
- 1.68 Secondary Liability In the US, patent and copyright law both have secondary liability regimes that reflect a striking symmetry of effect with a striking asymmetry of means. Patent statutes expressly define contributory patent infringement⁷⁷ and active inducement of infringement⁷⁸. On the other hand, the Copyright Act has no analogues to those statutes. Nevertheless, the US Supreme Court has twice turned to the Patent Act to fashion, judicially, a doctrine of contributory infringement and of active inducement of infringement.⁷⁹ Generally speaking, the doctrines in both fields (a) impose liability on persons who furnish a product knowing that product to be specially adapted to infringement and lacking a substantial non-infringing use; and (b) impose liability for actively inducing infringement.
- 1.69 US copyright law has also developed a separate, specific judicial doctrine of 'vicarious liability'. The doctrine is a specific form of liability, distinct from the generic notion of 'vicarious liability', and it finds no counterpart in US patent law. As the Second Circuit stated in *Shapiro*, Bernstein & Co v H.L. Green Co.

Many of the elements which have given rise to the doctrine of re-pondeat superior . . . may also be evident in factual settings other than that of a technical employer–employee relationship. When the right and ability to supervise coalesce with an obvious and direct financial interest in the exploitation of copyrighted materials—even in the absence of actual knowledge that the copyright monopoly is being impaired . . . the purposes of copyright law may be best effectuated by the imposition of liability upon the beneficiary of that exploitation.⁸⁰

- **1.70** Later cases have expanded that description, primarily by substituting (in *Fonovisa, Inc v Cherry Auction, Inc*⁸¹) 'direct financial benefit' for 'an obvious and direct financial interest', and then finding (in *A&M Records, Inc, v Napster, Inc*⁸²) a direct financial benefit because of the investments a company had attracted despite an absence of revenues.
- 1.71 Other countries have yide variation in the treatment of secondary liability. The UK expressly provides for secondary liability for copyright infringement;⁸³ Australia treats it as a form of direct infringement, by violation of the right of a copyright holder to authorize certain actions with respect to copyrighted works.⁸⁴

⁷⁷ 35 USC § 271(c).

⁷⁸ 35 USC § 271(b).

⁷⁹ Sony Corp of Am v Universal City Studios, Inc, 464 US 417 (1984) (contributory infringement); Metro-Goldwyn-Mayer Studios, Inc, v Grokster Ltd, 545 US 913 (2005). Some courts following Grokster have evidenced uncertainty as to whether 'inducement' is a separate branch of secondary liability or instead is a form of contributory infringement. The Supreme Court in Grokster made clear several times that 'inducement' was the same as contributory infringement. 'One infringes contributorily by intentionally inducing or encouraging direct infringement. .' Grokster, 545 US at 930.

^{80 316} F 2d 304, 307 (2nd Cir 1963).

^{81 76} F 3d 259, 262 (9th Cir 1996).

^{82 239} F 3d 1004, 1023 (9th Cir 2001).

⁸³ Copyright, Designs and Patents Act 1988, ss 22–26.

⁸⁴ Copyright Act 1968, s 36(1).

Remedies In this area, patent and copyright laws in the US are extraordinarily diverse. Selection of types of protection and enforcement will normally place these considerations at the forefront of an intellectual property strategy.

1.72

In the area of injunctions, a recent US case law has put patent and copyright law on a relatively even footing. The landmark US Supreme Court decision in *eBay Inc v MercExchange, LLC*⁸⁵ ruled that the provision in the patent statute for injunctive relief, which states that a court 'may grant injunctions in accordance with the principles of equity' in cases of infringement, ⁸⁶ requires courts to evaluate the propriety of injunctions according to traditional equitable criteria. The Court rejected the general rule that patent holders are presumptively entitled to injunctions upon a finding of infringement. The Court explicitly drew a parallel with the treatment of injunctions under the Copyright Act and cited its earlier copyright cases rejecting the suggestion that an injunction automatically follows whenever there is a finding of infringement. As a consequence, one may infer that the standard for injunctive relief in US patent and copyright cases will be comparable for at least the near future.

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In the area of damages, copyright law and patent law are quite different in the US. A primary difference is the availability of 'statutory damages' in copyright cases at the election of the copyright holder instead of actual damages from infringement. Statu ory damages normally range from \$750 to \$30,000 per work infringed, with all parts of a compilation or derivative work being counted as one work. In cases of innocent infringement, statutory damages may fall as low as \$200 per work infringed; in cases of wilful infringement, statutory damages may reach \$150,000 per work infringed.⁸⁷

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This has led to some extraordinary damages claims in copyright litigation, including a damage claim potentially in the *trillions* of dollars—without any proof of actual harm to the copyright owner—in the *LimeWire* litigation. Reduced, in one prominent case record labels have obtained verdicts against an individual—a single mother of modest means—of over \$1 million for the download of 24 sores from the internet.

1.76

Copyright holders may seek actual damages or statutory damages at their election as discussed above. They may also obtain additional profits of the infringer not included in the actual damages. In establishing profits, the copyright holder need only prove a defendant's gross revenues; the alleged infringer has to prove deductible expenses and an allocation of profits to factors other than the copyrighted work.⁹⁰ A prevailing party in a copyright case (plaintiff or defendant) may recover attorney's fees in the court's discretion, a departure from the normal American rule, with the standard requiring something more than mere victory but less than bad faith or an 'exceptional case'.⁹¹

^{85 547} US 388 (2006).

^{86 35} USC § 283.

^{87 17} USC § 504(c).

⁸⁸ Arista Records LLC v Lime Group LLC, case no. 06 CV 5936 (KMW), slip op. at 6 (SDNY 10 March 2011) (rejecting claim that damages could reach trillions of dollars).

⁸⁹ Capitol Records, Inc, v Thomas-Rasset, case no. 06-1497 (MJD/LIB) slip op. (Dkt 457) (D Minn 22 July 2011)(granting remittitur to \$54,000 after jury award, at third trial, of \$1.5 million; second trial had resulted in verdict of \$1.92 million, leading to an earlier remittitur).

^{90 17} USC § 504.

⁹¹ 17 USC § 505.

- 1.77 Patent holders may seek damages adequate to compensate for the infringement but no less than a reasonable royalty; the court has the power to increase damages up to three times the amount. Page A court may, in lieu of an injunction, order payment of post-judgment 'running' royalties as an alternative. A court may award attorney's fees to a prevailing party in patent litigation, but only in an 'exceptional case'. A
- 1.78 Both patent law and copyright law provide for forfeitures of certain damages by plaintiffs. A patent holder who fails to use a patent notice cannot recover any pre-litigation damages from an infringer who received no notification of infringement. ⁹⁵ A copyright holder forfeits the ability to recover statutory damages and attorney's fees if (a) infringement of an unpublished work began before the effective date of the copyright registration or (b) in the case of a published work the copyright holder failed to register the copyright by the earlier of (i) three months after first publication or (ii) commencement of the infringement. ⁹⁶
- **1.79** Thus, in the US, copyright holders may have a substantial advantage over patent holders in seeking damages and attorney's fees; they are at slightly greater risk of paying attorney's fees if they lose the litigation.
- 1.80 Other jurisdictions generally provide consistent remedies for patent and copyright infringement, including actual damages or an accounting of a defendant's profits and injunctions. ⁹⁷ In strong cases, additional damages are available and, in very strong cases, seizure of infringing goods may be available. In some cases an innocent infringer is liable only for an accounting of profits. ⁹⁸ The TRIPS Agreement ⁹⁹ promotes recovery of damages and recovery of expenses, including attorney's fees, in intellectual property infringement cases.
- **1.81 Litigation Forums** In the US, the use of a potent or copyright strategy has only a relatively small effect on the available forums for lingation. Both patent law and copyright law¹⁰⁰ are exclusively federal, and only federal courts have the power to adjudicate infringement actions.¹⁰¹ Infringement lawsuits begin in federal district courts, which are courts of general federal jurisdiction.¹⁰² Those courts have the power to decide all issues in the case, specifically both validity and infringement of the rights.
- 1.82 There is a slight difference in the rules affecting which geographic district court may handle patent and copyright litigation. A specific patent venue statute provides that an infringement case may be brought wherever the defendant resides or where the defendant has committed acts of infringement and has a regular and established place of business. 103 (That statute does

^{92 35} USC. § 284.

⁹³ See, eg, Paice LLC v Toyota Motor Corp, 504 F 3d 1293 (Fed Cir 2007).

 $^{^{94}~35~\}mathrm{USC}~\S~285$. The standard is generally 'objective baselessness' of a plaintiff's claim or wilful infringement (including objective recklessness) by a defendant. iLOR, LLC v Google, Inc, 631 F 3d 1372 (Fed Cir 2011).

^{95 35} USC § 287.

⁹⁶ 17 USC § 412.

⁹⁷ Canada and Israel provide statutory damages for copyright infringement, like the United States. Section 38.1, [Canada] Copyright Act; Section 56, [Israel] Copyright Act 2007.

⁹⁸ See, eg, Section 115, [Australia] Copyright Act 115.

⁹⁹ Arts 44-46

 $^{^{100}}$ With the exception of pre-1972 sound recordings, which are governed by state law and the common law, as noted above.

¹⁰¹ 28 USC § 1338(a).

^{102 28} USC § 1338(a).

¹⁰³ 28 USC § 1400(b).

not apply to declaratory relief actions, which fall under the normal federal venue statute.) Cases arising under the Copyright Act (including declaratory relief actions) have proper venue wherever the defendant or his agent resides or may be found. ¹⁰⁴ In both cases, a different statute defines where a corporate defendant 'resides' as where it is subject to personal jurisdiction, ¹⁰⁵ which usually gives a plaintiff a very wide choice of districts. In infringement cases against individual defendants, however, a copyright holder may have a much wider choice than a patent holder.

While copyright cases normally have appellate review in the various regional circuits of the US Court of Appeals, patent infringement appeals go only to a specialized court, the US Court of Appeals for the Federal Circuit. ¹⁰⁶ (To the extent that copyright cases also involve patents, those cases follow the path of patent cases to the Federal Circuit.) The US Supreme Court exercises discretionary review over all cases from all the circuits of the US Court of Appeals.

1.83

1.86

In addition to using these courts for infringement litigation, both patent and copyright holders may initiate proceedings before the International Trade Commission (ITC) in Washington, DC to exclude infringing products from the US market pursuant to the Tariff Act s 337.¹⁰⁷ Damages are not available in ITC proceedings, but its powers are strong against importers affecting a domestic industry (even importers who are not parties to the case) and its proceedings are very fast compared to normal court litigation. The importance of its exclusion orders and cease-and-desist orders has grown after the Supreme Court's *eBay* decision, which eliminated a general rule of injunctive relief after a finding of patent infringement: that ruling has had no effect on Section 337 exclusion orders. While ITC proceedings are available to enforce rights in all types of federal intellectual property, patent owners take advantage of them far more than copyright or trademark holders.

In other countries, patent and copyright cases share the same courts as well, allowing dual-purpose cases to proceed in a single court. Jurisdictions with specialized intellectual property courts, such as the United Kingdom, Mexico, and Thailand, often handle both patent and copyright matters. On the other hand, in some countries such as Germany and some Eastern European countries, some courts cannot resolve an entire patent dispute, because disputes must be divided into different courts for adjudication of infringement and invalidity claims.

Government Enforcement On this front, US patent and copyright law differ dramatically, and copyright holders have an edge. While US Customs will exclude patent-infringing products from importation based upon an exclusion order of the ITC, it will not otherwise assist patent holders or make its own determination as to whether imported products infringe upon US patents. By contrast, US Customs will investigate and evaluate imports for possible copyright infringement, based upon the mere registration of a copyright with US Customs and Border Protection and upon a request of a copyright holder. 108

^{104 28} USC § 1400(a).

¹⁰⁵ 28 USC § 1391(c).

^{106 28} USC § 1295.

^{107 19} USC § 1337.

¹⁰⁸ See <www.cbp.gov/xp/cgov/trade/priority_trade/ipr> last visited 28 February 2012.

- **1.87** Many countries provide Customs enforcement of intellectual property rights. Some countries will enforce patent rights more vigorously via Customs inspections. The European Union, for example, allows customs officers to detain goods for suspected patent infringements, unlike US Customs, pending a court determination of infringement.¹⁰⁹
- 1.88 There is no criminal enforcement of US patent rights. ¹¹⁰ By contrast, the US Copyright Act specifically includes criminal offences relating both to copyright infringement and to the 'paracopyright' restrictions on design of products that may interfere with copyright protection and on alterations to copyright management information. ¹¹¹ Criminal enforcement of copyright law has grown by leaps and bounds in recent years, as powerful industry groups have lobbied for more governmental enforcement efforts and more governmental resources to supplement their own civil litigation efforts. As an example, the Prioritizing Resources and Organization for Intellectual Property Act of 2008 (the PRO-IP Act) ¹¹² has promoted the enforcement, investigation, and prosecution of intellectual property crimes, mostly involving infringement of commercially produced sound recordings and motion pictures and production of knock-off consumer goods.
- 1.89 In addition, while technically not a copyright law, the Computer Fravo and Abuse Act establishes an offence of accessing a protected computer or network beyond one's authorization: to the extent one has gained access to a network or computer for the purpose of copying material (including both copyrighted material and trade secrets) available on the network, a copyright holder may seek governmental prosecution of the offender as well.¹¹³
- **1.90** A number of countries provide for criminal enforcement of copyright laws. Criminal enforcement of patent laws is less common; France and Germany are jurisdictions where it is available. ¹¹⁴ In many jurisdictions courts have the power to use criminal sanctions against parties that fail to respect civil injunctions by the courts, including injunctions against patent or copyright infringement.

D. Conclusion

1.91 The variation in treatment of patents and copyrights within some jurisdictions (especially the US), and among jurisdictions, offers practitioners a wide choice of strategies for protection and enforcement of rights and a wide choice of remedies. Here are the principal factors for consideration:

¹⁰⁹ Regulation 1383/2003.

¹¹⁰ In fact, two statutes relating to patents criminalize acts only of patent *claimants*, not *infringers*: forgery of letters patent and false patent marking are crimes under 18 USC. § 497 and 35 USC § 292. See also http://www.cybercrime.gov/ipmanual/07ipma.html last visited 28 February 2012.

^{111 17} USC. § 506 provides for criminal offences pertaining to infringement; 17 USC § 1204 provides for criminal offenses and penalties relating to violation of the anticircumvention and copyright management information provisions of the Digital Millennium Copyright Act.

¹¹² Pub L 110-403.

¹¹³ One recent case involved the controversial arrest of an executive for an alleged violation of the Computer Fraud and Abuse Act during his deposition in a related civil case.

¹¹⁴ Code de la propriété industrielle—art. L615-14: three years' imprisonment and 300,000 euros fine for knowing patent infringement; Urheberrecchtsgesetz, art 106: three years' imprisonment or a fine.

- Superior timing considerations make copyright protection important when available: it is
 instantly available, is instantly or quickly enforceable, and endures decades longer than
 patent protection.
- Copyright law may offer a plaintiff with low or unprovable actual damages an opportunity to secure windfall statutory damages in the US.
- Copyright law offers better opportunities to promote criminal enforcement against an adversary.
- Copyright law offers protection with less disclosure by the rights holder.
- Assuming the validity of a patent, patent protection gives a much broader preclusive effect than copyright law by displacing independent and not merely derivative efforts of others.
- Different jurisdictions have different policy-based restraints upon the enforcement of patent and copyright rights, which one must study carefully before bringing litigation.
- Fair use and fair-dealing limitations are very different between the US and other countries, and are likely more favourable to the defence in the US; other countries, however, have more vigorous policy limitations upon patent rights.
- Secondary liability remains uneven around the globe; the US has the most developed jurisprudence and attractive opportunities to broaden litigation targets.

Opportunities to combine patent and copyright claims in their boundary zone are uncertain, and both the US and other jurisdictions offer different sets of advantages for aggressive enforcement.