CHAPTER 1

Introduction to Licensing

Chapter Contents

§ 1.01 What Is Licensing?
[1] Types of Licensing Agreements
[2] Requirements for Effective Licensing Agreements
[3] Nature of Rights and Unlicensable Rights
§ 1.02 Innovation and Licensing in a Worldwide Marketplace
[1] Two Paradigms of Intellectual Property Law
[2] Innovation in the International Marketplace
§ 1.03 Business Advantages of Licensing
[1] "Leveraging" Resources
[2] Broadening Geographic Markets
[3] Broadening Product Markets
[4] Obtaining Early Market Entry
[5] Increasing Market Penetration Through Complementary Products
[6] Obtaining Additional Revenue
[7] Technology "Barter"
[8] Enhancing Reputation and Goodwill
[9] Controlling Exploitation
§ 1.04 Business Disadvantages of Licensing
[1] Loss of Control Over Exploitation
[2] Loss of Contact with Customers
[3] Loss of Incentive for Expansion
[4] Loss of Incentive for Vertical Integration
[5] Loss of New Business Opportunities
[6] Dependence on Others for Revenue
[7] Risk of Piracy
[8] Loss of Technological "Edge"
[9] Loss of Public Recognition
§ 1.05 The Subject Matter of Licensing: Bundles of Intangibles
[1] "Bundles of Rights" in Intellectual Property
[2] Combining Bundles of Rights

§ 1.06 Open Source Licensing
[1] The Legal Status of Open Source Software
[A] Copyright and Trademark
[B] Patent

§ 1.01 What Is Licensing?

Simply defined, licensing is granting rights in property without transferring ownership of it. Although licenses can cover any type of property, this book deals only with licensing of "intellectual property." Thus, the subject of this book—licensing agreements—is contracts that convey rights in intellectual property without necessarily conveying ownership.

In the broadest sense, "intellectual property" is intangible personal property in creations of the mind. In legal terms, intellectual property includes the distinct fields of patents,[1] copyright,[2] mask works,[3] trade secrets,[4] trademarks

[1] See 35 U.S.C. §§ 1-376, codifying Patent Act of 1952, Pub. L. No. 593, 82d Cong., 2d Sess. 66 Stat 792, Ch. 950 (July 19, 1952). For comprehensive descriptions of the field, see generally: Chisum, *Patents: A Treatise on the Law of Patentability, Validity and Infringement* (1991); Dratler and McJohn, 2 *Intellectual Property Law: Commercial, Creative, and Industrial Property* Ch. 2 (patents generally), Ch. 3 (process patents) (Law Journal Press 1991).

Most foreign countries have their own patent statutes. For the full text of foreign patent laws, see Sinnott, *World Patent Law & Practice* (1974).

[2] See 17 U.S.C. §§ 101-1010, codifying Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (Oct. 19, 1976) and Audio Home Recording Act of 1992, Pub. L. No. 102-563, 106 Stat. 4237 (Oct. 28, 1992). See generally, Dratler and McJohn, 2, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* Chs. 5-7 (Law Journal Press 1991). The two leading treatises on copyright law are Goldstein, *Copyright, Principles, Law and Practice* (1989), and Nimmer and Nimmer, *Copyright* (1991). Both are updated regularly. For foreign copyright laws see UNESCO, *Copyright Laws and Treaties of the World* (BNA 1990), updated irregularly.

[3] "Mask works" are a new form of intellectual property in semiconductor chip designs, established by the Semiconductor Chip Protection Act of 1984, Title III of Pub. L. No. 98-620, 98 Stat. 3335, 3347 (Nov. 8, 1984), codified in Chapter 2 of Title 17 of the United States Code, 17 U.S.C. §§ 901-914. See generally: Dratler and McJohn, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* Ch. 8 (Law Journal Press 1991); Stern, *Semiconductor Chip Protection* (1986).

[4] In the United States, trade secrets are protected under state, not federal, law. Over twenty states have adopted variations of the Uniform Trade Secrets Act, first promulgated by the Commissioners of Uniform State Laws in 1979, and later amended in 1985. See 14 Uniform Laws Annot. 433 (1990) (Commissioners' Prefatory Note). For the state enactments, see:

Arkansas: Ark. Stat. Ann. §§ 70-1001 to 70-1007.
California: Cal. Civ. Code §§ 3426-3426.10.
Colorado: Col. Rev. Stat. §§ 7-74-101 to 7-74-110.
Connecticut: Conn. Gen. Stat. Ann. §§ 35-50 to 35-58.
Delaware: 6 Del. Code Ann. §§ 2000-2009.
Hawaii: Haw. Rev. Stat. §§ 482B-1 to 482B-9.
Idaho: Idaho Code §§ 48-801 to 48-807.
Illinois: Ill. Ann. Stat., Ch. 140, §§ 351-359.
Indiana: Ind. Code §§ 24-2-3-1 to 24-2-3-8.

and unfair competition,[5] confidential information,[6] and similar rights. These various forms of legal protection cover such things as inventions, discoveries, creative expression in books, music, and movies, the structural design of integrated circuits, nonpublic information, trade symbols, and product configurations. The ABA Ethics 20/20 Commission put forward important ethical responsibilities with respect to new technology. Model Rule 1.1 (competence) states an obligation for attorney to remain current with "the benefits and risks associated with relevant technology."[6.1]

Kansas: Kan. Gen. Stat. Ann. §§ 60-3320 to 60-3330.
Louisiana: La. Rev. Stat. Ann. §§ 51:1431 to 51:1439.
Maine: 10 Me. Rev. Stat. Ann. §§ 1541-1548.
Minnesota: Minn. Stat. Ann. §§ 325C.01-325C.08.
Montana: Mont. Rev. Code Ann. §§ 30-14-401 to 30-14-409.
Nevada: Nev. Rev. Stat. §§ 600A.010-600A. 100.
North Dakota: N.D. Cent. Code §§ 47-25.1-01 to 47-25.1-08.
Oklahoma: 78 Okla. Stat. §§ 85-95.
Oregon: Ore. Rev. Stat. §§ 646.461-646.475.
Rhode Island: R.I. Rev. L. Ann. §§ 6-41-1 to 6-41-11.
Virginia: Va. Code Ann. §§ 59.1-336 to 59.1-343.
Washington: Wash. Rev. Code §§ 19.108.010 to 19.108.940.
West Virginia: W. Va. Code Ann. §§ 47-22-1 to 47-22-10.
Wisconsin: Wis. Stat. Ann. § 134.90.

See generally, 14 Uniform Laws Annot. 433, 440 (1990) (listing current adoptions).

Those states that have not adopted a version of the Uniform Trade Secrets Act protect trade secrets at common law. See *Restatement of Torts* § 757 (1939). See generally: Dratler and McJohn, 2 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 4.01[3][a] (Law Journal Press 1991); Milgrim, *Trade Secrets* (1991).

Outside the United States, trade secrets often receive weak or no protection, especially in civil law countries. See U.S. International Trade Commission, *Foreign Protection of Intellectual Property Rights and the Effect on U.S. Industry and Trade, Report to the United States Trade Representative, Investigation No. 332-245, under Section 332(g) of the Tariff Act of 1930* at vii-xii (summary), 1-1 (survey methodology), 3-9, 3-10 (findings of survey regarding trade secrets) (Jan. 1988) (declassified Feb. 26, 1988). However, some civil law countries, such as Japan, have adopted trade secret protection by special legislation. See Law of June 29, 1990 [Japan], amending Unfair Competition Prevention Law.

[5] In the United States, a unique combination of federal and state law protects trademarks and similar property, such as service marks, trade names, and trade dress. See N.12 *infra*. See generally, Dratler and McJohn, 4 *Intellectual Property Law: Commercial, Creative, and Industrial Property,* §§ 11.01, 11.02 (Law Journal Press 1991). However, amendments to the federal statute have subsumed much of the protection under state statutory law and the common law of unfair competition, so that federal law is of predominant practical importance. See Dratler and McJohn, *supra*, §§ 11.03[2], 11.04. The relevant federal statute is the Trademark Act of 1946, known to practitioners as the "Lanham Act," Pub. L. No. 489, 79th Cong., 2d Sess., 60 Stat. 412 (July 5, 1946), codified as amended at 15 U.S.C. §§ 1051-1127. The leading treatise on the subject is McCarthy, *Trademarks & Unfair Competition* (3d ed. 1992).

[6] In the United States, contracts may protect confidential information that does not rise to the level of a trade secret. See *Restatement of Torts,* § 759 (1939). See also:

Ohio: Structural Dynamics Research Corp. v. Engineering Mechanics Research Corp., 401 F. Supp. 1102, 1111-1112, 1113-1114, 1117-1118 (E.D. Mich. 1975) (applying Ohio law and finding contractual protection, but no trade secret protection, against former employees who helped develop trade secrets).

Washington: Boeing Co. v. Sierracin Corp., 108 Wash.2d 38, 738 P.2d 665, 673-674 (1987) (*en banc*).

See generally, Dratler and McJohn, 2 *Intellectual Property Law: Commercial, Creative, and Industrial Property,* § 4.05[2] (Law Journal Press 1991).

[6.1] Model Rules of Professional Conduct R. 1.1.

So, for example, license rights are valuable property and may be the subject of a deductible charitable contribution.[6.2] Similarly, licensing rights may be used in the financing of a business, such as collateral for debt or as an asset to attract investors. As a form of property, licensing may be relatively new, but its value is increasingly recognized and utilized.

Notions of intellectual property are not static, however. History has seen newer forms of intellectual property emerge or gain in importance. Examples are plant varieties under the Plant Variety Protection Act of 1970,[7] "mask works" for integrated circuits under the Semiconductor Chip Protection Act of 1984,[8] rights of publicity under the common law[9] and state statutes,[10] and fine artists' rights to resale "royalties" under California law.[11] The last decade of the twentieth century brought a number of variants of old forms of intellectual property that also may be the subjects of licensing agreements, including some relating to cyberspace and the Internet. These

---

[6.2] *Cf.,* Internal Revenue Service, Private Letter Ruling, PLR 201132011 (Aug. 12 2011) (donation of broadcast licenses deductible).

[7] Pub. L. No. 91-577, 84 Stat. 1542 (Dec. 24, 1970), as amended, codified at 7 U.S.C. Ch. 57, §§ 2321-2582. This statute permits discoverers and breeders of novel varieties of sexually reproduced plants (excluding fungi, bacteria, and first-generation hybrids) to apply for a certificate of plant variety protection from the Secretary of Agriculture. See 7 U.S.C. §§ 2401, 2402, 2421. Upon issue, this certificate evidences the rights to exclude others, for a period of eighteen years, from selling, offering for sale, importing, exporting, or reproducing the protected variety, and from using it in producing (as distinguished from developing) a hybrid or different variety. See 7 U.S.C. § 2483.

In contrast, plant patents protect distinct and new varieties of plants that are reproduced asexually, that is, by cuttings, rather than by seeds. See 35 U.S.C. §§ 161-164. See also, Yoder Brothers, Inc. v. California-Florida Plant Corp., 537 F.2d 1347, 1351-1352 (5th Cir. 1976), *cert. denied* 429 U.S. 1094 (1977) (discussing use and economic value of plant patents in chrysanthemum industry).

[8] Title III of Pub. L. No. 98-620, 98 Stat. 3335, 3347 (Nov. 8, 1984), codified in Chapter 2 of Title 17 of the United States Code, 17 U.S.C. §§ 901-914. The term "mask work" is defined in 17 U.S.C. § 901(a)(2).

[9] See, e.g.:

California: White v. Samsung Electronics America, Inc., 971 F.2d 1395, 1399 (9th Cir. 1992), *cert. denied* 113 S.Ct. 2443 (1993) (reversing summary judgment and allowing Vanna White to try claim that magazine advertisement depicting blond-wigged robot in front of Wheel of Fortune unlawfully appropriated her identity under California common law).

Georgia: Pavesich v. New England Life Insurance Co., 122 Ga. 190, 50 S.E. 68, 72-73, 80-81(1905) (applying Georgia common law and affirming plaintiff's right to general damages for use of his picture, without his permission, in false "testimonial" advertisement for insurance).

New York: Haelan Laboratories, Inc. v. Topps Chewing Gum, Inc., 202 F.2d 866, 868-869(2d Cir.), *cert. denied* 346 U.S. 816 (1953) (applying New York common law).

Virginia: Lavery v. Automation Management Consultants, Inc., 234 Va. 145, 360 S.E.2d 336,342 (1987) (holding that Virginia right-of-publicity statute creates property right for purposes of determining appropriate statute of limitations).

But *cf.*, Stephano v. News Group Publications, Inc., 64 N.Y.2d 174, 485 N.Y.S.2d 220, 474 N.E.2d 580, 583-584 (1984) (holding that enactment of New York right-of-publicity statute superseded common-law right of publicity in New York).

See generally, McCarthy, *The Rights of Publicity and Privacy* §§ 1.4[B], 1.7, 6.9[A], 6.9[D](1987).

[10] See, e.g.:

California: Cal. Civ. Code §§ 990, 3344 (protecting name, voice, signature, photograph and likeness of deceased and living persons, respectively).

New York: N.Y. Civ. Rights L. §§ 50-51 (civil and criminal remedies for unauthorized commercial appropriation of plaintiff's "name, portrait or picture").

[11] See Cal. Civ. Code § 986. This statute may well be preempted by the Copyright Act of 1976, and therefore artists have pushed for federal legislation to provide statutory royalties on the resale of original works of art. See generally, Comment, "Droit de Suite: Only Congress Can Grant Royalty Protection for Artists," 9 Pepperdine L. Rev. 111 (1981).

included so-called rights of performers and broadcasters in "unfixed" live musical performances,[11.1] a federal right of trademark owners to be free from "dilution" of their "famous" marks [11.2] (and hence to license the mark for use on goods and services unrelated to those that made the marks famous[11.3]), rights in Internet domain names,[11.4] rights with respect to encrypted or otherwise technologically protected copyrighted works to be free from circumvention of the protection and trafficking in means of circumvention,[11.5] and the right to prohibit the falsification, alteration and removal of copyright management information associated with copyrighted works,[11.6] including those disseminated on the Internet and the World Wide

---

[11.1] See: 17 U.S.C. § 1101, as added by Uruguay Round Agreements Act, § 512, Pub. L. No. 103-465, 108 Stat. 4809, 4974 (Dec. 8, 1994), discussed in Dratler and McJohn, 1, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* §§ 1A.06[4][e][i], 1A.09[1][b], 2[b], 6.01[7] (Law Journal Press 1991) (civil cause of action); 18 U.S.C. § 2319A, as added by Uruguay Round Agreements Act, § 512, Pub. L. No. 103-465, 108 Stat. 4809, 4974-4876 (Dec. 8, 1994) (corresponding criminal sanctions, discussed in Dratler and McJohn, 1, 3, 4 *Intellectual Property Law: Commercial, Creative, and Industrial Property* §§ 1A.06[4][e][i], 1A.09[1][b], 2[b], 6.01[7], 13.04[1A] (Law Journal Press 1991).

[11.2] See Lanham Act § 43(c), 15 U.S.C. § 1125(c), as added by Federal Trademark Dilution Act of 1995, Pub. L. No. 104-98, 109 Stat. 985, 985-987 (Jan. 16, 1996), discussed in Dratler and McJohn, 4 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 10.03 (Law Journal Press 1991).

[11.3] See Dratler and McJohn, 4 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 10.01[1][b][iii], [iv] (Law Journal Press 1991 & Supps.).

[11.4] See Lanham Act § 43(d), 15 U.S.C. § 1125(d), as added by Anticybersquatting Consumer Protection Act, Pub. L. No. 106-113, Appendix I-S.1948 (Intellectual Property and Communications Omnibus Reform Act of 1999), Tit. III—Trademark Cyberpiracy Prevention, 113 Stat. 1501A-521, 1501A-545 through 1501A-552 (Nov. 29, 1999), discussed in Dratler and McJohn, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 9.01[7][c] (Law Journal Press 1991).

An effective enforcement regime through private dispute resolution processes of the Internet Corporation for Assigned Names and Numbers (ICANN) provides an alternative method of protecting Internet domain names. See Uniform Domain Name Dispute Resolution Policy (adopted Aug. 26, 1999, implementation documents approved Oct. 24, 1999), available at http://www.icann.org/udrp/udrp-policy-24oct99.htm (visited April 2, 2000), discussed in Dratler and McJohn, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 9.01[7][b] (Law Journal Press 1991). See also: Rules for Uniform Domain Name Dispute Resolution Policy (adopted Aug. 26, 1999, implementation documents approved Oct. 24, 1999), available at http://www.icann.org/udrp/udrp-rules-24oct99.htm (last visited April 2, 2000), discussed in Dratler and McJohn, *supra*, § 9.01[7][b]; World Intellectual Property Organization, Decisions [list of decisions under Policy and Rules with hyperlinks to full text of all decisions], available at http://arbiter.wipo.int/domains/decisions/index.html (visited April 18, 2000), summarized as of April 2000 in Dratler and McJohn, *supra*, at § 9.01[7][b].

[11.5] See: 17 U.S.C. § 1201(a), (b), as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, § 103(a), 112 Stat. 2860, 2863-2865 (Oct. 28, 1998), discussed in Dratler, *Cyberlaw: Intellectual Property in the Digital Millennium* §§ 2.03-2.05 (Law Journal Press 2000 & Supps.) (prohibitions on circumventing and trafficking in means to circumvent technological protection measures); 17 U.S.C. §§ 1203, 1204, as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, § 103(a), 112 Stat. 2860, 2874-2876 (Oct. 28, 1998), discussed in Dratler, *Cyberlaw: Intellectual Property in the Digital Millennium* Ch. 5 (Law Journal Press 2000 & Supps.) (corresponding civil and criminal sanctions).

[11.6] See: 17 U.S.C. § 1201(a), (b), as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, § 103(a), 112 Stat. 2860, 2863-2865 (Oct. 28, 1998), discussed in Dratler, *Cyberlaw: Intellectual Property in the Digital Millennium* §§ 2.03-2.05 (Law Journal Press 2000) (prohibitions on circumventing and trafficking in means to circumvent technological protection

Web.[11.7] As additional forms of intellectual property arise under common or statutory law in the United States and in foreign countries, lawyers no doubt will adapt licensing agreements to cover them.

Not every product or service is the subject of intellectual property protection and therefore a possible object of licensing, however. For example, creators of stock-market indices whose use they have authorized in publicly-traded exchange-traded funds (EFTs) do not have sufficient rights in them to preclude, and therefore license, the creation of options for the ETFs.[11.8] However, creators of stock-market indices may have rights to stop others from marketing securities that reflect the indices more directly.[11.9]

[1]—Types of Licensing Agreements

License agreements often defy easy categorization. Since they reflect real business transactions, rather than abstract legal categories, they often cut across the lines that separate distinct fields of intellectual property. In practice, a single commercial or industrial licensing agreement may include such diverse forms of property as creative expression (a book, movie, or teleplay), commercial properties (a title, name, or trademark), and a new technology (laser-disk or database management system). In broad generality, however, licensing agreements may be placed into one of three general categories on the basis of their dominant purpose:

(1) *Technology licenses*. These cover patents, patentable inventions, trade secrets, "know-how," confidential information, and copyrights in such technical material as computer software, databases, and instruction manuals. They also may cover "mask works," that is, the subject matter of semiconductor chip protection.

(2) *Publishing and entertainment licenses*. These focus primarily on copyrights in creative properties such as books, plays, movies, videotapes, television productions, music, and multimedia productions. They also

---

measures); 17 U.S.C. §§ 1203, 1204, as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, § 103(a), 112 Stat. 2860, 2874-2876 (Oct. 28, 1998), discussed in Dratler, *Cyberlaw: Intellectual Property in the Digital Millennium* Ch. 5 (Law Journal Press 2000) (corresponding civil and criminal sanctions).

11.7 See Dratler, *Cyberlaw: Intellectual Property in the Digital Millennium* § 4.02[3] (Law Journal Press 2000 & Supps.).

11.8 See Dow Jones & Company, Inc. v. International Securities Exchange, Inc., 451 F.3d 295, 302-303, 79 U.S.P.Q.2d (BNA) 1225 (2d Cir. 2006) ("By authorizing the creation of ETFs using their proprietary formulas, and the sale of the ETF shares to the public, the plaintiffs have relinquished any right to control resale and public trading of those **[*303]** shares, notwithstanding the fact that plaintiffs' intellectual property may be embedded in the shares").

11.9 See, e.g.:

Second Circuit: Standard & Poor's Corp. v. Commodity Exchange, Inc., 538 F. Supp. 1063, 1065, 1071 (S.D.N.Y.), *aff'd* 683 F.2d 704 (2d Cir. 1982) (defendant misappropriated property of plaintiff by publishing value of plaintiff's index under other name and creating and offering futures contracts based on it).

State Courts:

Illinois: Board of Trade v. Dow Jones & Co., Inc., 98 Ill. 2d 109, 121-122, 456 N.E.2d 84, 74 Ill. Dec. 582 (1983) (defendant's use of index identical to plaintiff's Dow Jones Industrial Average to create futures contract misappropriated plaintiff's property).

may include trademark and related rights, as well as rights of publicity under state law.

(3) *Trademark and merchandising licenses*. These cover trademarks, trade names, and trade "dress," that is, the way products or services are packaged or presented,[12] but they may also cover related intellectual property such as rights of publicity copyrights. Merchandising licenses have become increasingly important as owners of well-known trademarks such as "Coke" and "McDonalds" have begun to license their trademarks and trade names for use outside their fields of primary use. Widespread trademark licensing has resulted in such products as "Coke" pants, "McDonalds" tableware, and "Harley Davidson" rings.

---

[12] "Trade dress," which the common law and the Lanham Act protect like unregistered trademarks, originally referred to product packaging, containers, and labels. See, e.g.:

Second Circuit: Stormy Clime, Ltd. v. Progroup, Inc., 809 F.2d 971, 974 (2d Cir. 1987).

Fifth Circuit: Sicilia Di R. Biebow & Co. v. Cox, 732 F.2d 417, 425-426 & n.5, 433-434 (5th Cir. 1984); Chevron Chemical Co. v. Voluntary Purchasing Groups, Inc., 659 F.2d 695, 705 (5th Cir. 1981), *cert. denied* 457 U.S. 1126 (1982).

Eleventh Circuit: AmBrit, Inc. v. Kraft, Inc., 812 F.2d 1531, 1533-1535, 1551-1552 (11th Cir. 1986).

"Trade dress," however, has come to mean much more than packaging. It includes the configuration of products themselves and even the "look and feel" of products and service establishments. See, e.g.:

Supreme Court: Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763, 112 S.Ct. 2753, 2755-2756, 120 L.Ed.2d 615, 23 U.S.P.Q.2d (BNA) 1081 (1992) (distinctive features of Mexican restaurant's layout and decor could be protected as trade dress).

Second Circuit: Le Sportsac, Inc. v. K Mart Corp., 754 F.2d 71, 74-75, 80 (2d Cir. 1985) (luggage); Warner Brothers, Inc. v. Gay Toys, Inc., 658 F.2d 76, 78 (2d Cir. 1981) (toy "Dukes of Hazzard" car).

Third Circuit: American Greetings Corp. v. Dan-Dee Imports, Inc., 807 F.2d 1136,1143-1145 (3d Cir. 1986) (teddy bear); SK&F Co. v. Premo Pharmaceutical Laboratories, 481 F. Supp. 1184, 1187 (D.N.J. 1979), *aff'd* 625 F.2d 1055 (3d Cir. 1980) (gelatin capsule).

Seventh Circuit: Schwinn Bicycle Co. v. Ross Bicycles, Inc., 870 F.2d 1176, 1178-1180, 1182-1184, 1191-1192 (7th Cir. 1989) (exercise bicycle); Service Ideas, Inc. v. Traex Corp., 846 F.2d 1118, 1120-1121, 1123-1124 (7th Cir. 1988) (beverage dispenser covered by expired design patent); Vaughan Manufacturing Co. v. Brikam International, Inc., 814 F.2d 346, 347, 348 n.2, 351 (7th Cir. 1987) (folding table); W.T. Rogers Co. v. Keene, 778 F.2d 334, 337, 338, 346 (7th Cir. 1985) (paper tray with hexagonal end panels).

Eighth Circuit: Truck Equipment Service Co. v. Fruehauf Corp., 536 F.2d 1210, 1213 & n.1,1223 (8th Cir.), *cert. denied* 429 U.S. 861 (1976) (twin-hopper semitrailer truck); Prufrock, Inc. v. Lasater, 781 F.2d 129, 131, 133 (8th Cir. 1986) (restaurant; look and format were protectible in theory, but were functional).

Ninth Circuit: Clamp Manufacturing Co. v. Enco Manufacturing Co., 870 F.2d 512, 513, 515-516, 518 (9th Cir.), *cert. denied* 493 U.S. 872 (1989) ("C" clamp); Fuddruckers, Inc. v. Doc's B.R. Others, Inc., 826 F.2d 837, 841-842, 848 (9th Cir. 1987) (restaurant's layout, menu, and decor could be protected; case remanded for further proceedings).

Tenth Circuit: Hartford House, Ltd. v. Hallmark Cards, Inc., 846 F.2d 1268, 1269-1271, 1275 (10th Cir.), *cert. denied* 488 U.S. 908 (1988) ("look and feel" of line of greeting cards); Brunswick Corp. v. Spinit Reel Co., 832 F.2d 513, 516-517, 524-525 (10th Cir. 1987) (spinning reel for fishing: product's "image or look" is its trade dress).

Eleventh Circuit: Original Appalachian Artworks, Inc. v. Toy Loft, Inc., 684 F.2d 821,831-832 (11th Cir. 1982) (fanciful papers and procedures for "adoption" of toy dolls).

District of Columbia Circuit: Reader's Digest Ass'n, Inc. v. Conservative Digest, Inc., 821 F.2d 800, 802, 805 (D.C. Cir. 187) (magazine cover and format).

Federal Circuit: CPG Products Corp. v. Pegasus Luggage, Inc., 776 F.2d 1007, 1011, 1013-1014 (Fed. Cir. 1985) (luggage).

[2]—Requirements for Effective Licensing Agreements

However broad its coverage, any effective licensing agreement must satisfy four fundamental requirements. First, the party granting the license must have ownership of relevant intellectual property or authority from the owner to grant the license. One cannot "license" rights that one neither owns nor controls. Second, the intellectual property must be protected by law, or at least must be eligible for legal protection. Attempting to coerce others to take licenses and pay royalties for nonexistent or invalid intellectual property not only may produce unenforceable obligations,[13] but also may violate the antitrust laws[14] or create tort liability.[15]

Third, the licensing agreement must specify what rights with respect to the intellectual property it purports to grant. Since a licensing agreement does not transfer ownership of the licensed intellectual property, it normally gives the licensee only some, but not all, of the rights in the intellectual property that accompany ownership. The licensing agreement should specify what rights are granted with enough precision to avoid disputes since rights not expressly granted are generally deemed reserved, at least in copyright licensing.[16]

Finally, a licensing agreement should state what rights, if any, are reserved by the licensor, whether for its own use or to support future grants to others. Licensors usually reserve some, and often many, of the rights that they have under governing intellectual property law.

Reservations of rights are particularly common in the publishing and entertainment industries, in which, by custom, the licensing agreement usually spells out in some detail both the rights granted and the rights reserved by the licensor. For example, a publishing license for a written work should grant or reserve the rights to publish hardbound and paperback editions, to serialize the work, and to adapt the work to other media, such as stage, broadcast television, and videocassettes.

Summing up these modern trends, the Eleventh Circuit defined "trade dress" as "the total image of a product [which] may include features such as size, shape, color or color combinations, texture, graphics, or even particular sales techniques." John H. Harland Co. v. Clarke Checks, Inc., 711 F.2d 966, 980 (11th Cir. 1983). See also Blue Bell Bio-Medical v. Cin-Bad, Inc., 864 F. 2d 1253, 1256 (5th Cir. 1989) ("The 'trade dress' of a product is essentially its total image and overall appearance").

The Supreme Court has cited both of these definitions with apparent approval. See Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763, 112 S.Ct. 2753, 2755 n.1, 120 L.Ed.2d 615, 23 U.S.P.Q.2d (BNA) 1081 (1992).

[13] See: §§ 1.05[1], 2.02, 2.03 *infra*.

[14] See § 2.04 *infra*.

[15] See § 2.05 *infra*.

[16] See: S.O.S., Inc. v. Payday, Inc., 886 F.2d 1081, 1088 (9th Cir. 1989) ("copyright licenses are presumed to prohibit any use not authorized"); Cohen v. Paramount Pictures Corp., 845 F.2d 851, 854 (9th Cir. 1988) (license, made before invention of videocassettes, to record and copy motion picture and exhibit it "by means of television" did not include right to distribute it in videocassette form).

Cf., e.g.:

Second Circuit: ARP Films, Inc. v. Marvel Entertainment Group, Inc., 952 F.2d 643, 650 (2dCir. 1991) (upholding refusal to give jury instruction that rights not specifically reserved by licensor are granted to licensee, where language of license was not particularly broad).

What makes licensing agreements difficult in practice is that they often cover more than one category of intellectual property.[17] As a result, lawyers and executives must assess their validity, business sense, and consequences against the background of several different kinds of laws governing all of the types of intellectual property involved. A video game license, for example, may cover the copyrighted audiovisual output, the copyrighted software, and trade secrets embedded in the software. Or a biotechnology process license may cover a patented recombinant process, unpatented trade secrets, and auxiliary technology used in the process, as well as the use or sale of patented cell lines or biologicals.

A lawyer may be liable for malpractice for giving inaccurate licensing advice, such as mistakenly advising a client that licensing a patent would not compromise the client's rights in the patent.[17.1] Many lawyers now in practice attended law school when licensing was not offered as a course and was not familiar to the faculty. So, many lawyers, even commercial lawyers, may have a spotty understanding of the commercial and legal aspects of licensing. Nevertheless, their responsibility to guide clients as with more established areas of the law is recognized.

Each licensing agreement thus covers a "bundle" of intellectual property rights, which make up the subject matter of the license. Ordinarily the business and technical specialists who shape the licensing transaction describe this bundle of rights in business terms, or in the jargon of the applicable technical specialty. Seldom do they refer directly to the exclusive rights that the law provides or to the underlying legal categories. It is the lawyer's job to draft the licensing agreement to cover all applicable legal categories of intellectual property without unduly complicating the description of the business or technical subject matter. Doing this job well often requires a keen sensitivity to the nature of the commercial, creative, or industrial property at issue and to customs and practices in the industry.

[3]—Nature of Rights and Unlicensable Rights

Rights in intellectual property that are subject to licensing come in a bewildering variety of statutory forms. Rights under copyright are explicitly "exclusive rights,"[18] but those rights are subject to a bewildering variety of

---

Ninth Circuit: Apple Computer, Inc. v. Microsoft Corp., 759 F. Supp. 1444, 1451 (N.D. Cal. 1991) (under Ninth Circuit precedent, copyright licenses are interpreted narrowly to promote federal policy "of providing incentives in the form of copyright protection to authors").

[17] See § 1.05 *infra*.

[17.1] Joyce v. Armstrong Teasdale LLP, 635 F.3d 364 (8th Cir. 2011).

[18] 17 U.S.C. § 106 (preamble) ("Subject to [exceptions], the owner of a copyright under this title has the *exclusive rights* to do and to authorize any of the following [six activities]"). (Emphasis added.)

Copyright licensees must be careful to procure *all* of the various rights needed for their business activities. See Leadsinger, Inc. v. BMG Music Publishing, 512 F.3d 522, 85 U.S.P.Q.2d (BNA) 1257, CCH Copy. L. Rep. ¶29,499, 2008 U.S. App. LEXIS 7 at *12014 (9th Cir. 2008) (holding that phonorecord compulsory license under 17 U.S.C. § 115 did not permit karaoke disk maker to show song lyrics separately or together with sounds, as lyrics were subject to separate copyright and, when synchronized with sounds, made audiovisual work).

exceptions.[18.1] Rights under the Semiconductor Chip Protection Act of 1984,[19] which is modeled on the copyright statute,[20] are similar.[21] Patents, on the other hand, provide only the right *to exclude others* from certain activities;[22] they provide no positive right to engage in those activities.[23] Plant variety protection, modeled as it is on plant patent protection, is similar.[24] Yet under the federal trademark statute,[25] registration of a mark on the principal register provides only "prima facie evidence" of exclusive rights.[26]

[18.1] Statutory exceptions to the copyright owner's exclusive rights occupy about half of the Copyright Act's considerable length. See: 17 U.S.C. §§ 107-122 (explicit statutory exceptions). In addition, the structure of copyright law itself precludes control over facts and ideas, which are not protected by copyright. See: 35 U.S.C. § 102(b) ("In 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"); Feist Publications, Inc. v. Rural Telephone Service Co., 499 U.S. 340, 350, 111 S.Ct. 1282, 113 L.Ed.2d 358, 18 U.S.P.Q.2d (BNA) 1275 (1991) ("Facts, whether alone or as part of a compilation, are not original and therefore may not be copyrighted"). See generally, Dratler and McJohn, 2 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 5.01[2] (Law Journal Press, 1991) (discussing idea/expression dichotomy by which ideas and facts are excluded from copyright protection).

The various exceptions and exclusions to copyright protection may have important commercial consequences. See, e.g.:

Seventh Circuit: Assessment Technologies of WI, LLC v. WIREdata, Inc., 350 F.3d 640, 642-643, 647-648, 68 U.S.P.Q.2d (BNA) 1953 (7th Cir. 2003) (dismissing copyright infringement action where owner of valid copyright in database attempted to control use of data separately).

Ninth Circuit: Newton v. Diamond, 349 F.3d 591, 595-597, 68 U.S.P.Q.2d (BNA) 1740 (9th Cir. 2003) (affirming judgment that digital "sample" of plaintiff's work, consisting of six-second, three-note segment, was *de minimis* and therefore not infringement, even though defendant "looped" sample to create multiple repetitions in his allegedly infringing work).

[19] Title III of Pub. L. No. 98-620, 98 Stat. 3335, 3347 (Nov. 8, 1984), codified in Chapter 2 of Title 17 of the United States Code, 17 U.S.C. §§ 901-914. The term "mask work" is defined in 17 U.S.C. § 901(a)(2), discussed generally in Dratler and McJohn, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* Ch. 8 (Law Journal Press 1991).

[20] See Dratler and McJohn, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 8.02[3] (Law Journal Press 1991).

[21] See 17 U.S.C. § 905 (preamble) ("The owner of a mask work provided protection under this chapter has the *exclusive rights* to do and to authorize any of the following [activities]"). (Emphasis added.)

[22] See 35 U.S.C. § 154(a)(1) (Emphasis added.):"Every patent shall contain . . . a grant to the patentee, his heirs or assigns, of *the right to exclude others* from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States, and, if the invention is a process, of *the right to exclude others* from using, offering for sale or selling throughout the United States, or importing into the United States, products made by that process, referring to the specification for the particulars thereof."

[23] See Dratler and McJohn, N.20 *supra*, at § 2.05[1] (introduction), [a]. The right to practice a patented invention is not statutory, but arises at common law. *Id*.

[24] See 7 U.S.C. § 2483(a)(1) (preamble; emphasis added.) ("Every certificate of plant variety protection shall certify that the [plant] breeder (or the successor in interest of the breeder), has the right, during the term of the plant variety protection, *to exclude others from* selling the variety, or offering it for sale, or reproducing it, or importing it, or exporting it, or using it in producing (as distinguished from developing) a hybrid or different variety therefrom, to the extent provided by this Act").

[25] See N.5 *supra*.

[26] See Lanham Act § 7(b), 15 U.S.C. § 1057(b) (" A certificate of registration of a mark upon the principal register provided by this Act shall be *prima facie evidence* of the . . . registrant's exclusive right to use the registered mark in commerce on or in connection with the

The actual statutory rights in both registered and unregistered marks are merely rights to bring certain causes of action,[27] the success of which depends on a complex interaction between the provisions of the federal statute and the common-law rules of priority of use.[28] Trade secret law is even less definitive;[29] it provides no exclusive rights at all—only a right to protest "improper means" to acquire or use a trade secret.[30]

Besides the basic intellectual-property statutes themselves, a number of related civil and criminal statutes may implicate licensing arrangements or suggest a need for written permission in the nature of licensing. Among these are: (1) the federal trademark counterfeiting laws, which have both civil[30.1] and criminal[30.2] provisions; (2) the federal counterfeit label trafficking statute, which prohibits trafficking in counterfeit labels for phonorecords, computer programs, computer program documentation or packaging, and copies of motion pictures or other audiovisual works;[30.3] (3) the federal "anti-bootlegging" statute, which prohibits unauthorized fixation of and

---

goods or services specified in the certificate, subject to any conditions or limitations stated in the certificate"). (Emphasis added.)

[27] See, e.g.: Lanham Act § 34(a), 15 U.S.C. § 1116(a) (power of courts to provide injunctive relief "according to the principles of equity and upon such terms as the court may deem reasonable" in order "to prevent the violation of any right of the registrant of a mark registered in the Patent and Trademark Office or to prevent a violation under subsection (a), (c), or (d) of section 43[, 15 U.S.C. § 1125(a), (c), or (d),]" which protect, *inter alia*, unregistered marks and trade dress against infringement, dilution, and cybersquatting); Lanham Act § 35(a), 15 U.S.C. § 1117(a) (providing monetary remedies for "a violation of any right of the registrant of a mark registered in the Patent and Trademark Office, a violation under section 43(a), (c), or (d)[15 U.S.C § 1125(a), (c), or (d)], or a willful violation under section 43(c) [15 U.S.C. § 1125(c)]").

[28] See, e.g.: Lanham Act § 7(c), 15 U.S.C. § 1057(c) (in part: "[c]ontingent on the registration of a mark on the principal register . . ., the filing of the application to register such mark shall constitute constructive use of the mark, conferring a right of priority, nationwide in effect, on or in connection with the goods or services specified in the registration against any other person" with certain exceptions); Lanham Act § 22, 15 U.S.C. § 1072 (registration of mark on principal register has effect of nationwide constructive notice of registrant's claim of ownership); Lanham Act § 33(b)(5), 15 U.S.C. § 1115(b)(5) (providing defense for innocent, good-faith use of similar mark in limited area before registrant's application and, in certain cases, before registrant's registration).

See generally, Dratler and McJohn, 4 *Intellectual Property Law: Commercial, Creative, and Industrial Property* §§ 11.01, 11.02, 11.03[2][a] (Law Journal Press 1991).

[29] See generally, Dratler and McJohn, 2 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 4.04 (introduction), [2] (Law Journal Press 1991).

[30] See *id*. See also, Uniform Trade Secrets Act § 1(1), (2) (defining "improper means" and defining "misappropriation" of trade secret based on that term). *Cf*., *Restatement (Third) of Unfair Competition* §§ 40-43 (1995) (defining unlawful appropriation of trade secret as acquisition by improper means or breach of confidence, and then defining improper means as including breach of confidence).

[30.1] Lanham Act § 34(d), 15 U.S.C. § 1116(d), discussed in Dratler and McJohn, 4 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 11.09 (Law Journal Press 1991).

[30.2] 18 U.S.C. § 2320 (prohibiting trafficking in goods or services bearing counterfeit marks), discussed in Dratler and McJohn, 4 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 11.09, 13.04[2][a] (Law Journal Press 1991).

[30.3] 18 U.S.C. § 2318, discussed in Dratler and McJohn, 4 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 13.04[2][b] (Law Journal Press 1991).

trafficking in sound recordings and music videos of live musical performances;[30.4] (4) the Computer Fraud and Abuse Act,[30.5] which prohibits unauthorized access to computers;[30.6] and (5) the Electronic Communications Privacy Act (ECPA),[30.7] which, *inter alia*, prohibits unauthorized interception of wire, electronic and oral communications,[30.8] manufacture and distribution of interception devices,[30.9] and unauthorized access to or disclosure of stored electronic communications,[30.10] including stored e-mail.[30.11] In addition, the federal mail fraud statutes[30.12] have been construed to cover schemes to deprive legitimate owners of exclusive use of tangible materials protected by trademarks and copyrights,[30.13] as well as confidential information and trade secrets.[30.14]

[30.4] 18 U.S.C. § 2319A (criminal provisions), discussed in Dratler and McJohn, 4 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 13.04[1A] (Law Journal Press 1991). See also, 17 U.S.C. § 1101 (similar civil statute), discussed in Dratler and McJohn, *supra*, at § 6.01[7].

[30.5] 18 U.S.C. § 1030.

[30.6] This statute is quite general. Although a few of its provisions protect computers of government agencies and financial institutions, see 18 U.S.C. § 1030(a)(1), (2)(A), (B), (3), two of them cover any "protected computer," 18 U.S.C. § 1030(a)(4), (5), which includes any "computer . . . used in interstate or foreign commerce or communication," 18 U.S.C. § 1030(e)(2)(B), and several cover computers or protected computers whenever the intrusive conduct has an interstate or foreign character, see 18 U.S.C. § 1030(a)(2)(C), (6)(A), (7). Most computers today access the Internet, which is indisputably a tool of "interstate or foreign commerce or communication," so at least one and sometimes several provisions of this statute apply to almost any unauthorized invasion of such computers.

Furthermore, although this statute is codified in the federal criminal code (Title 18 of the United States Code), it provides a civil cause of action for damages and injunctive relief, see 18 U.S.C. § 1030(g), as well as criminal penalties, see 18 U.S.C. § 1030(b), (c), for violations of its restrictions.

[30.7] Pub. L. No. 99-508, 100 Stat. 1848 (Oct. 21, 1986), as amended, codified at 18 U.S.C. §§ 2510-2521, §§ 2701-2712.

Like the Computer Fraud and Abuse Act, 18 U.S.C. § 1030, this complex statute, although codified in the criminal code, creates civil causes of action for its violation, see: 18 U.S.C. §§ 2520, 2707, 2712, as well as criminal penalties, see: 18 U.S.C. §§ 2511(4), (5), 2701. It also has a broad exclusionary rule, prohibiting the use of evidence improperly obtained from wire or oral communications in legal proceedings. See 18 U.S.C. § 2515.

[30.8] See 18 U.S.C. § 2511(1)-(3). The three types of communications covered are defined in 18 U.S.C. § 2510(1), (2) and (12).

[30.9] See 18 U.S.C. § 2512.

[30.10] See: 18 U.S.C. §§ 2701-2703.

[30.11] See Steve Jackson Games, Inc. v. United States Secret Service, 36 F.3d 457, 459, 462, 1994 U.S. App. LEXIS 30323 (5th Cir. 1994) (Secret Service did not challenge conclusion that e-mail was "electronic communication" in "electronic storage" and therefore protected by 18 U.S.C. § 2701).

Although recognizing that e-mail is a stored electronic communication covered by Chapter 121 of the ECPA, this case dealt primarily with the difficult issue of the application of Chapter 119 to stored e-mail messages. See 36 F.3d at 462-464 (concluding that accessing stored e-mail was not "interception" of "electronic communication" prohibited by 18 U.S.C. § 2511).

[30.12] 18 U.S.C. §§ 371, 1341.

[30.13] See United States v. Hedaithy, 392 F.3d 580, 596-597, 2004 U.S. App. LEXIS 26124 (3d Cir. 2004) (standardized test score reports prepared by private-sector examination firms are "property" in their hands, and scheme to use impostors to take tests instead of named subjects deprived firms of that property with meaning of mail fraud statutes, 18 U.S.C. §§ 371, 1341); 392 F.3d at 600 (distinguishing between private firms and government entities in this regard based on Carpenter v. United States, 484 U.S. 19, 24, 26-27, 108 S.Ct. 316, 98 L.Ed.2d 275 (1987)).

Whatever their statutory form, most varieties of intellectual property have one thing in common: their owner may relax the exclusivity, exclusion, or prohibition of the law, thereby giving others the right to engage in activities that would be unlawful for them without that permission. That permission may be the subject of a licensing agreement.

Some forms of intellectual property protection, however, cannot be licensed.[30.15] Unlicensable intellectual property protection generally falls into two categories. The first comprises statutory protection that may affect the interests of more than one intellectual property owner, thereby making licensing by any single intellectual property owner inappropriate. This sort of protection has become increasingly common since the early 1990s, when Congress began addressing the effect of new technologies on copyright protection.

For example, the Audio Home Recording Act of 1992 sought to control unauthorized copying of digital audio recordings[31] by permitting noncommercial

---

See also, 392 F.3d at 594 n.16:

> "Defendants devote extensive discussion to their contention that [the victim's] trademarks and copyrights are not property interests cognizable under the mail fraud statute. We do not address this argument because, as our discussion indicates, it has no relevance here. The superseding indictments do not allege that [the victim] was defrauded of its trademarks and copyrights, but rather the materials bearing those trademarks, and the materials protected by copyright. The dispositive question is whether those materials themselves are property."

30.14 See: *id*., 392 F.3d at 594 (confidential business information and trade secrets, including TOEFL exam and its questions, are "property" that can be object of "scheme or artifice to defraud" within meaning of mail-fraud statutes, 18 U.S.C. §§ 371, 1341); 392 F.3d at 595 & n.17 (indictment for mail fraud need not allege that victim "lost" confidential or business information; deprivation of exclusive use is enough); 392 F.3d at 595-596 (hiring impostors as false test takers to sit for confidential examination and sign confidentiality agreement falsely using defendants' names, by falsely representing that defendants themselves were bound to confidentiality, constituted "scheme or artifice to defraud" victim of confidential business information and trade secrets in examination and its questions in violation of mail fraud statutes, 18 U.S.C. §§ 371, 1341).

30.15 There is also authority that privacy rights—even those related to intellectual property—are not "intellectual property rights." See: Specht v. Netscape Communications Corp., 306 F.3d 17, 36 n.19 (2d Cir. 2002) (addressing claims regarding invasion of privacy through use of browser "cookies" and similar technology, and tentatively concluding that those claims "would not appear to be shielded from arbitration [under exception in contract] on the ground that this is a 'dispute relating to intellectual property rights,'" but noting that "[t]his is not an issue that we decide today"); 306 F.3d at 36-37 (concluding that privacy-invasion claims under Electronic Communication Privacy Act and Computer Fraud and Abuse Act, made with respect to separate plug-in, were "collateral" to and not covered by agreement to arbitrate contained in license for downloadable browser suite where: (1) browser suite license did not specifically refer to plug-in, whereas plug-in license did; (2) integration-and-merger clauses in both agreements suggested that they were to be applied separately; and (3) browser suite license contained many terms relating to use and abuse of it and its intellectual property).

31 Audio Home Recording Act of 1992, Pub L. No. 102-563, § 2, 106 Stat. 4240 (Oct. 28, 1992), adding, e.g.: 17 U.S.C. § 1002(a) (prohibiting importing, manufacturing, and distributing digital audio recording devices and digital audio recording interface devices that do not conform to required "Serial Copy Management System," which is designed to preclude making copies from copies); 17 U.S.C. § 1003(a) (prohibiting importing, manufacturing, or distributing *any* digital audio recording devices or digital audio recording medium without payment of royalties); 17 U.S.C. § 1006 (providing for allocation of royalties among interested copyright owners and their representatives); 17 U.S.C. § 1009(a) (providing civil cause of action to enforce

copying by consumers[32] but prohibiting distribution of recording equipment without specialized circuits designed to preclude so-called "serial copying," i.e., making additional digital copies from a digital copy.[33] At the same time, the Act imposed royalties on the distribution of digital audio recording devices and digital audio recording media, with complex provisions for distributing the royalties collected to copyright owners and their representatives, including performing rights societies.[34] Obviously no single copyright owner could "authorize" a distributor of digital audio recording equipment or interfaces to traffic in equipment without the required serial-copy-control technology; nor could a single copyright owner "authorize" a purveyor of digital audio recording equipment or media not to pay the necessary royalties. If acted upon, such "permission" would affect the interests of other copyright owners whose works might be recorded using the same equipment, interfaces or media, thereby disturbing the statutory scheme. Thus no single copyright owner can purport to "license" any activity of manufacturers or distributors of recording equipment, interfaces or media in contravention of the statutory scheme.

Similar observations apply under the Digital Millennium Copyright Act,[35] but only in part. That statute created three new rules—an anti-circumvention rule[36] and two anti-trafficking rules[37]—providing legal protection for technological measures to protect certain works. With respect to *access*

---

statutory requirements, but not referring to Section 106 of Copyright Act, see N.18 *supra,* or using word "right").

[32] See 17 U.S.C. § 1008 ("No action may be brought under this title alleging infringement of copyright based on the manufacture, importation, or distribution of a digital audio recording device, a digital audio recording medium, an analog recording device, or an analog recording medium, *or based on the noncommercial use by a consumer of such a device or medium for making digital musical recordings or analog musical recordings*"). (Emphasis added.)

[33] See 17 U.S.C. § 1002, outlined in part in N.31 *supra*. See generally, Dratler and McJohn, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 6.01[5][f][i] (Law Journal Press 1991) (discussing statutory scheme of Audio Home Recording Act).

[34] See 17 U.S.C. §§ 1003(a), 1006, 1009(a), outlined in N.31 *supra*. See also, Dratler and McJohn, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* 6.01[5][f][ii], [iii] (Law Journal Press 1991).

[35] Digital Millennium Copyright Act, Pub L. No. 105-304, 105th Cong., 2d Sess. § 103(a), 112 Stat. 2860, 2863-2876 (Oct. 28, 1998), adding 17 U.S.C. Ch. 12, §§ 1201-1205.

For further discussion of these aspects of the Digital Millennium Copyright Act, see Dratler, *Cyberlaw: Intellectual Property in the Digital Millennium* §§ 2.03-2.05 (anti-circumvention rule and two anti-trafficking rules), 5.03-5.04 (civil remedies), 5.05 (criminal sanctions) (Law Journal Press 2000).

[36] See 17 U.S.C. § 1201(a)(1)(A), as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, 105th Cong., 2d Sess. § 103(a), 112 Stat. 2860, 2863-2864 (Oct. 28, 1998) (in part: "[n]o person shall circumvent a technological measure that effectively controls access to a work protected under this title"), discussed in Dratler, *Cyberlaw: Intellectual Property in the Digital Millennium* §§ 2.03, 2.04 (Law Journal Press 2000). This prohibition took effect generally on October 28, 2000. See Dratler, *supra,* at § 2.04[2].

[37] See 17 U.S.C. § 1201(a)(2), (b)(1), as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, 105th Cong., 2d Sess. § 103(a), 112 Stat. 2860, 2864-2865, 2865 (Oct. 28, 1998) (anti-trafficking rules for access controls and use controls, respectively), discussed in Dratler, *Cyberlaw: Intellectual Property in the Digital Millennium* §§ 2.03-2.05 (Law Journal Press 2000).

controls[38] (i.e., control over access to a protected work),[39] an intellectual property owner may (with respect to the particular intellectual property at issue) relax the statutory prohibition on circumventing protection[40] because granting permission relaxing that prohibition affects only that single owner's intellectual property. No copyright owner, however, may relax either of the anti-trafficking rules (for access controls and use controls),[41] however,

---

[38] See: 17 U.S.C. § 1201(a)(1)(A), quoted in part in N.36 *supra* (prohibition on circumventing "technological measure that effectively controls access to a work"); 17 U.S.C. § 1201(a)(3)(B), as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, 105th Cong., 2d Sess. § 103(a), 112 Stat. 2860, 2865 (Oct. 28, 1998) (defining "technological measure that 'effectively controls access to a work' as one that, "in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work"). The definition insures that technological protection, in order to receive legal protection, must have been installed under the copyright owner's authority.

[39] Although the Digital Millennium Copyright Act was designed primarily to protect *copyrighted* works, the provisions for access controls apply to any "work protected under this title," i.e., Title 17 of the United States Code. 17 U.S.C. § 1201(a)(1)(A) (anti-circumvention rule, quoted in relevant part in N.36 *supra*); 17 U.S.C. § 1201(a)(2)(A), (B), (C) (same phase—"technological measure that effectively controls access to a work protected under this title"—in all three subparagraphs). In addition to copyrighted works, this includes, for example, unfixed performances of live music protected by so-called "performer's rights" under 17 U.S.C. § 1101. See Dratler and McJohn, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 6.01[7] (Law Journal Press 1991). The reference to the copyright owner's authority for installing technological protection, see N.38 *supra*, however, presupposes that at some point the work becomes "fixed"—and therefore copyrighted—under the performers' authority. See Dratler and McJohn, *supra,* at § 5.03[a] (discussing fixation in tangible medium a prerequisite for copyright protection).

[40] An owner of copyright, see Ns.38, 39 *supra,* may relax the anti-circumvention rule (which applies only to access controls, see N.38 *supra*) because the concept of "circumvention" that those rules prohibit depends on the copyright owner's authorization. See 17 U.S.C. § 1201(a)(3)(A), as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, 105th Cong., 2d Sess. § 103(a), 112 Stat. 2860, 2865 (Oct. 28, 1998) (defining "to 'circumvent a technological measure'" as "to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, *without the authority of the copyright owner"*). (Emphasis added.) As a result of this definition, defeating a technological access-control measure *with* the copyright owner's authorization does not constitute circumvention, and therefore does not violate the anti-circumvention rule. (There is no anti-circumvention rule for use controls, only an anti-trafficking rule. See Dratler, *Cyberlaw: Intellectual Property in the Digital Millennium* §§ 2.03, 2.05 (Law Journal Press 2000).

[41] For use controls, this point is explicit in the statute. Unlike the anti-circumvention rule and the anti-trafficking rule for access controls, the anti-trafficking rule for use controls depends on definitions that make no reference to anyone's authorization. See: 17 U.S.C. § 1201(b)(2)(A), as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, 105th Cong., 2d Sess. § 103(a), 112 Stat. 2860, 2865 (Oct. 28, 1998) (definition of "circumvent protection afforded by a technological measure," containing no mention of authorization or lack thereof); 17 U.S.C. § 1201(b)(2)(B), as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, 105th Cong., 2d Sess. § 103(a), 112 Stat. 2860, 2865 (Oct. 28, 1998) (definition of technological measure that "effectively protects a right of a copyright owner under this title" as one that, "in the ordinary course of its operation, prevents, restricts, or otherwise limits the exercise of a right of a copyright owner under this title").

For access controls, the point is more subtle. Since the concept of circumvention for access controls depends on the copyright holder's lack of authorization, see N.40 *supra,* a copyright owner may bless what otherwise would be such circumvention by authorization, but only with respect to the work or works of that copyright owner to which the authorization applies. Such authorization thus may increase the number of lawful uses of the circumvention technology, as

because doing so might affect the interests of third parties, namely, those who have exclusive rights to the other uses[42] and owners of copyright in different properties included in a database or similar collection.[43] The statute confirms this point, albeit indirectly, by defining the concept of circumvention as including nonauthorization by the copyright owner in the case of the anti-circumvention rule and the anti-trafficking rule for access controls,[44] but not in the case of the anti-trafficking rule for use controls.[45]

The second category of unlicensable intellectual property comprises rights for which licensing is explicitly precluded by statute. For example, the right

---

compared to unlawful uses, thereby changing the application of the three alternative standards for "secondary liability" in subsection (a)(2)(A), (B) and (C), 17 U.S.C. § 1201(a)(2)(A), (B), (C), as added by Digital Millennium Copyright Act, Pub. L. No. 105-304, 105th Cong., 2d Sess. § 103(a), 112 Stat. 2860, 2864-2865 (Oct. 28, 1998), discussed in Dratler, *Cyberlaw: Intellectual Property in the Digital Millennium* § 2.05 (Law Journal Press 2000). In this way, a single copyright owner's authorization for circumventing protective technology with respect to one or a class of copyrighted works that he or she owns may affect a court's judgment as to whether trafficking in the same technology used to circumvent that protection violates the "secondary liability" criteria of the statute. Unless the permitted uses of the circumvention technology are significant in numbers, proportions, purpose or effect, however, they should not appreciably decrease the purveyor's potential liability for trafficking in technology used to defeat the protective technology of others who have not given their permission. (For a general discussion of the new standards of "secondary liability" for trafficking in circumvention technology under the Digital Millennium Copyright Act, see Dratler, *supra,* at § 2.05.)

[42] Copyright is "divisible" in the sense that different exclusive rights contained in the general bundle of rights under copyright may be owned by different persons See: § 8.02[2] *infra;* Dratler and McJohn, 3 *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 6.02[2] (Law Journal Press 1991). For example, A might own the exclusive rights of reproduction and distribution, see 17 U.S.C. § 106(1), (3), while B owns the rights of public performance, see 17 U.S.C. § 106(4). If A authorized a consumer who lawfully obtained access to a work to defeat technological protection and make a copy of that work—which by hypothesis would be within A's rights—A might have no control over that consumer's further use to make a public performance of the work using the lawfully made copy. In other words, A's authorization of the consumer's circumvention of technological protection might, as a practical matter, facilitate the consumer's unlawful invasion of B's exclusive rights.

[43] Unlike access controls, which are presumed to be particular to each copyrighted work, see Ns.38, 40 *supra,* use controls may apply to an entire collection of different copyrighted works. For example, the purveyor of a database may receive licenses from the owners of copyright in various copyrighted materials for inclusion in the database. The purveyor may control access to each copyrighted element separately, with a separate and different account number and monetary charge assessed for access to each. However, the purveyor also (perhaps as required under licenses from the various copyright owners) may use a common technology to limit use of each element after lawful access is obtained.

For example, the database purveyor might include technology designed to allow users of the database to view search-selected contents of its various elements on their computer screens but not to download or copy the contents on a permanent basis. If the owner of copyright in one element of the database purported to authorize circumvention of this technology, the resultant circumvention might affect not only the rights of that owner, but also those of all other owners of copyright in different material contained in the database. Of course, each access to the other elements would still be subject to the access controls, but, once accessed, the other copyright owners' works could be used in an unauthorized way by virtue of the "permitted" circumvention of the use controls.

[44] See N.40 *supra*.

[45] See N.41 *supra*.

of a prior user of a patented method to defend against a patent action[46] cannot be licensed except in connection with "a good faith assignment or transfer for other reasons of the entire enterprise or line of business to which the defense relates."[47] The amendments creating this defense,[48] which were adopted and became effective in 1999,[49] are explicit on this point.[50]

Yet such explicit prohibitions on transfer or licensing are rare. Their scarcity confirms the general rule: that all rights in intellectual property may be licensed unless the statute creating the rights states otherwise, or unless (as is becoming more common) the statutory scheme is incompatible with licensing. Indeed, the very same statute that created the prior-user defense to claims of infringement of method patents[51] also created interim rights to reasonable royalties between the application publication date in the United States and the patent issue date for certain patent applications published abroad[52] that are also published before issuance in the United States.[53] That

---

[46] See 35 U.S.C. § 273, as added by First Inventor Defense Act of 1999, Subtitle C (First Inventor Defense) of Tit. IV (American Inventors Protection Act of 1999), §§ 4301-4303, of Intellectual Property and Communications Omnibus Reform Act of 1999, Pub. L. No. 106-113, Division B, Appendix I (S.1948), 106th Cong., 1st Sess., 113 Stat. 1501A-521, 1501A-555 through 1501A-557 (Nov. 29, 1999).

[47] See 35 U.S.C. § 273(b)(6), N.46 *supra*:

> "(6) Personal defense. The defense under this section may be asserted only by the person who performed the acts necessary to establish the defense and, except for any transfer to the patent owner, the right to assert the defense shall not be licensed or assigned or transferred to another person except as an ancillary and subordinate part of a good faith assignment or transfer for other reasons of the entire enterprise or line of business to which the defense relates."

[48] See N.46 *supra*.

[49] See First Inventor Defense Act of 1999, Subtitle C (First Inventor Defense) of Tit. IV (American Inventors Protection Act of 1999), § 4303, of Intellectual Property and Communications Omnibus Reform Act of 1999, Pub. L. No. 106-113, Division B, Appendix I (S.1948), 106th Cong., 1st Sess., 113 Stat. 1501A-521, 1501A-557 (Nov. 29, 1999) (amendments take effect on date of enactment but do not apply to pending and adjudicated claims).

[50] See N.47 *supra*. See also, 35 U.S.C. § 273(b)(7), N.46 *supra* ("A defense under this section, when acquired as part of a good faith assignment or transfer of an entire enterprise or line of business to which the defense relates, may only be asserted for uses at sites where the subject matter that would otherwise infringe one or more of the claims is in use before the later of the effective filing date of the patent or the date of the assignment or transfer of such enterprise or line of business").

[51] See American Inventors Protection Act of 1999, §§ 4001-4808, Title IV of Intellectual Property and Communications Omnibus Reform Act of 1999, Pub L. No. 106-113, Division B, Appendix I (S.1948), 106th Cong., 1st Sess., 113 Stat. 1501A-521, 1501A-552 through 1501A-591 (Nov. 29, 1999).

[52] See 35 U.S.C. § 154(d), as added by Domestic Publication of Foreign Filed Patent Applications Act of 1999, Subtitle E (Domestic Publication of Patent Applications Published Abroad) of Tit. IV (American Inventors Protection Act of 1999), § 4504, of Intellectual Property and Communications Omnibus Reform Act of 1999, Pub. L. No. 106-113, Division B, Appendix I (S.1948), 106th Cong., 1st Sess., 113 Stat. 1501A-521, 1501A-564 (Nov. 29, 1999).

[53] See 35 U.S.C. § 122(b), as added by Domestic Publication of Foreign Filed Patent Applications Act of 1999, Subtitle E (Domestic Publication of Patent Applications Published Abroad) of Tit. IV (American Inventors Protection Act of 1999), § 4502, of Intellectual Property and Communications Omnibus Reform Act of 1999, Pub. L. No. 106-113, Division B, Appendix I (S.1948), 106th Cong., 1st Sess., 113 Stat. 1501A-521, 1501A-561 through 1501A-562 (Nov.

this portion of the statute—unlike that creating the prior-user defense to method patents[54]—contains no limitation on licensing strongly suggests that interim rights in published patent applications are licensable, as indeed is the general rule for intellectual property rights.

29, 1999) (providing generally for publication of each United States patent application after the expiration of eighteen months from its earliest filing date for which benefit is sought, unless application is not pending, is subject to a secrecy order, or is a provisional or design patent application, or unless the applicant certifies that no counterpart application is or will be filed in a jurisdiction that requires publication after eighteen months).

For a discussion of the pre-issuance publication of United States patent applications under the 1999 amendments, see Dratler and McJohn, 1 *Intellectual Property Law: Commercial, Creative and Industrial Property* §§ 1.06[1] (generally), 2.05[4][d] (provisional rights) (Law Journal Press 1991).

[54] See the text accompanying Ns.45-50 *supra*.

§ 1.02 Innovation and Licensing in a Worldwide Marketplace

Progress in technology, creativity in entertainment, and advances in marketing are continuously occurring throughout the world. Individuals, firms, and nations strive to develop new ideas for products, services, and markets in order to create new sources of wealth, stimulate economic growth, and improve trade balances. Intellectual property law is supposed to protect the fruits of this innovation, and, by so doing, encourage further advances. Indeed, providing incentives for innovation is perhaps the primary goal of intellectual property protection. Yet certain kinds of protection—principally of trademarks and trade secrets—address additional or alternative goals, which both shape these forms of protection and give them distinct and special characteristics. The result is a complex mosaic of differing principles even within a single country, such as the United States. For example, foreign licensors may be subject to U.S. bankruptcy law, including the provisions governing intellectual property licenses.

Outside the United States, the complexity of the picture only increases. National intellectual property laws generally have little or no effect beyond the boundaries of the nations that enact them, and the laws of the United States are no exception to this rule.[1] Consequently, international licensing depends upon a patchwork of varying and inconsistent national laws, including the laws of supranational organizations, such as the European Union.[2] International intellectual property conventions attempt to rationalize this picture by prohibiting discrimination against foreign nationals, providing priority for certain foreign filings, and harmonizing a few substantive norms of protection. The level of substantive harmonization, however, is still low, although negotiations for further harmonization are ongoing in the field of patents and, if ratified, the Agreement on Trade-Related Aspects of Intellectual Property Rights—a part of the results of the Uruguay Round of Multilevel Trade Negotiations restructuring the General Agreement on Tariffs and Trade (GATT)—promises substantial progress in several fields. As a consequence, licensing in the international marketplace requires great sensitivity to local variations in law and practice, and often resort to local counsel as well.

[1]—Two Paradigms of Intellectual Property Law

Although different nations' intellectual property laws vary considerably in detail, they all have similar features. All follow one of two general paradigms. The first paradigm is that of copyrights and patents, which give innovators strongly exclusive rights, for limited times, to exploit their innovations commercially. In the United States, this paradigm derives from the Copyright Clause of the Constitution, which authorizes Congress "to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and

(Text continued on page 1-9)

[1] For elaboration of this statement, see Dratler, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 1.09 (Law Journal Seminars-Press 1991).

[2] For a summary of antitrust and licensing principles of the European Union, see: §§ 5.03, 7.01[2] *infra*.

Inventors the exclusive Right to their respective Writings and Discoveries[.]"[3] According to the Supreme Court, the constitutional language imposes two substantial limitations on U.S. copyright and patent laws: (1) the protection they provide must lapse after a limited time, and (2) they must not provide protection without regard to social benefit, for example, by removing pre-existing material from the public domain.[4] The Supreme Court, however, has given considerable deference to Congress. The Court has held that Congress has broad powers to grant copyrights under any reason rationally related its constitutional power and that First Amendment scrutiny of copyright statutes is unnecessary as long as the statutes continue to provide two "built-in" First Amendment safeguards, fair use and the non-protection of ideas.[4.1] The second general paradigm is that of trademarks, unfair competition law and trade secrets, which provide weaker rights of potentially unlimited duration.[5]

Laws following the first paradigm—that of copyrights and patents—can provide substantial economic rewards for innovators who are diligent enough to exploit their innovations commercially. Yet the purpose of these laws is to provide *incentives* for innovation; the actual economic rewards are only a byproduct of this central purpose.[6] After the limited term of legal protection

---

[3] U.S. Const., Art. I, § 8, cl. 8.

[4] See, e.g.: Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 146, 109 S.Ct. 971, 103 L.Ed.2d 118 (1989); Graham v. John Deere Co., 383 U.S. 1, 5-6, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966).

[4.1] Golan v. Holder, _ U.S. _, 132 S.Ct. 873, 181 L.Ed.2d 835 (2012).

[5] There is no general limit on the duration of trademark or trade secret protection. Protection of a trademark "may be extended in perpetuity," In re Mogen David Wine Corp., 328 F.2d 925, 929 (Cust. & Pat. App. 1964), and the same is true of trade dress protection, Truck Equipment Service Co. v. Fruehauf Corp., 536 F.2d 1210, 1215 (8th Cir.), *cert. denied* 429 U.S. 861 (1976) (*dictum*). As long as a trademark is used in commerce and not abandoned, there is no limit to the number of times a federal trademark registration may be renewed. See 37 C.F.R. § 2.181.

Similarly, legal protection of trade secrets has indefinite duration. See *Restatement of Torts* § 757, Comment a (1939) (trade secret protection is greater than patent protection "in that it is not limited to a fixed number of years").

[6] See, e.g.: Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 480, 94 S.Ct. 1879, 40 L.Ed.2d 315 (1974) ("The patent laws promote . . . progress by offering a right of exclusion for a limited period as an incentive to inventors to risk the often enormous costs in terms of time, research, and development"); Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 229, 84 S.Ct. 784, 11 L.Ed.2d 661 (1964) ("Patents are not given as favors, as was the case of monopolies given by the Tudor monarchs, . . . but are meant to encourage invention by rewarding the inventor") (Citation omitted.); Mazer v. Stein, 347 U.S. 201, 219, 74 S.Ct. 460, 98 L.Ed. 630 (1954) ("The economic philosophy behind the clause empowering Congress to grant patents and copyrights is . . . encouragement of individual effort by personal gain"); United States v. Paramount Pictures, Inc., 334 U.S. 131, 158, 68 S.Ct. 915, 92 L.Ed. 1260 (1948) ("The copyright law, like the patent statute, makes reward to the owner a secondary consideration. . . . [R]eward to the author or artist serves to induce release to the public of the products of his creative genius") (Citations omitted.); United States v. Line Material Co., 333 U.S. 287, 316, 68 S.Ct. 550, 92 L.Ed. 701 (1948) (concurring opinion) ("the public interest comes first and reward to inventors second"); Fox Film Corp. v. Doyal, 286 U.S. 123, 127, 52 S.Ct. 546, 76 L.Ed. 1010 (1932) ("The sole interest of the United States and the primary object in conferring the [copyright] monopoly lie in the general benefits derived by the public from the labors of authors").

The United States Supreme Court has reached similar conclusions with regard to intellectual property rights arising under state law. See Zacchini v. Scripps-Howard Broadcasting Co.,

expires, the innovations fall into the "public domain," where they become common property, available for the use of all.[7] Intellectual property laws of this first kind thus provide incentives for innovation and, by limiting the duration of protection, insure that innovations eventually become available for use by everyone—perhaps to serve as the basis for further progress.

Intellectual property laws based on the second paradigm have mixed purposes. Although they may encourage innovation, they have other, more important goals. Trademark law protects the public against the confusion and deception of unfettered use of similar marks by competitors, enhances competition by facilitating comparison shopping, preserves the investment of trademark owners in their reputation and goodwill associated with their marks, and helps avoid unfair and deceptive means of competition.[8] Similarly, trade secret law helps "maintain standards of commercial ethics"[9] and promotes economic efficiency by discouraging the need for wasteful and inefficient practical measures to ensure actual secrecy.[10] Since these laws

---

433 U.S. 562, 573, 576, 97 S.Ct. 2849, 53 L.Ed.2d 965 (1977) (state right of publicity encouraged "investment" of stunt performer's time and effort).

[7] See, e.g.:

Supreme Court: Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 480-481, 484, 94 S.Ct. 1879, 40 L.Ed.2d 315 (1974) (patents); Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 230, 84 S.Ct. 784, 11 L.Ed.2d 661 (1964) (right to make patented article passes to public on expiration of patent); Compco Corp. v. Day-Bright Lighting, Inc., 376 U.S. 234, 237-238, 84 S.Ct. 779, 11 L.Ed.2d 669 (1964) (unpatentable mechanical and utilitarian design of article are in public domain); Brulotte v. Thys Co., 379 U.S. 29, 33-34, 85 S.Ct. 176, 13 L.Ed.2d 99 (1964) (license agreement requiring payment of patent royalties after expiration of patent is unenforceable.

Fifth Circuit: Boston Professional Hockey Ass'n, Inc. v. Dallas Cap & Emblem Manufacturing, Inc., 510 F.2d 1004, 1013-1014 (5th Cir.), *cert. denied* 423 U.S. 868 (1975). (contrasting trademark and copyright law).

[8] See: Park N' Fly, Inc. v. Dollar Park & Fly, Inc., 469 U.S. 189, 198, 105 S.Ct. 658, 83 L.Ed.2d 582 (1985). See also: S. Rep. No. 515, 100th Cong., 1st Sess. 4 (May 12, 1988), reprinted in 1988 U.S. Code Cong. & Admin. News 5577, 5580 (report on Trademark Law Revision Act of 1988); S. Rep. No. 627, 98th Cong., 2d Sess. 2 (Sept. 20, 1984), reprinted in 1984 U.S. Code Cong. & Admin. News 5708, 5719, quoting "Hearing on S. 1990 Before the Subcomm. on Patents, Copyrights and Trademarks of the Senate Judiciary Comm.," 98th Cong., 2d Sess. 25 (Feb. 1, 1984) (statement of United States Trademark Association on Trademark Clarification Act of 1984); S. Rep. No. 1333, 79th Cong., 2d Sess. 1 (May 14, 1946), reprinted in 1946 U.S. Code Cong. & Admin. News 1274, 1274 (report on original Lanham Act). For a more complete discussion of the policies underlying trademark protection, see Dratler, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 9.02[1] (Law Journal Seminars-Press 1991).

[9] Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 480-481, 94 S.Ct. 1879, 40 L.Ed.2d 315 (1974). See also:

Minnesota: Jostens, Inc. v. National Computer Systems, Inc., 318 N.W.2d 691, 701 (Minn. 1982) ("Trade secret law seeks to maintain standards of loyalty and trust in the business community").

Ohio: Valco Cincinnati, Inc. v. N & D Machining Service, Inc., 24 Ohio St. 3d 41, 492 N.E.2d 814 (1986).

[10] See, e.g.:

Supreme Court: Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 485-487, 493, 94 S.Ct. 1879, 40 L.Ed.2d 315 (1974).

Fifth Circuit: E.I. Du Pont de Nemours & Co. v. Christopher, 431 F.2d 1012, 1016 (5th Cir.), *cert. denied* 400 U.S. 1024 (1970) (applying Texas law) (trade secret protection avoids economic waste of building roof over unfinished chemical plant simply to conceal plant's design from unauthorized aerial reconnaissance by competitors).

serve purposes other than providing incentives for innovation, they do not necessarily obey the same principles as patent, copyright, and semiconductor chip protection.

Other features of laws based on the second paradigm also prevent them from impeding progress through overprotection: the protection they provide is considerably weaker than that of copyright or patent law. The law protects trademarks only against a likelihood of confusion under all the circumstances,[11] and it protects trade secrets against discovery only by "improper means," not by such proper means as genuine independent discovery or reverse engineering.[12] The law in these fields provides less absolute protection against copying or imitation in the abstract than do patent, copyright and semiconductor chip protection laws and is therefore less likely to impair free competition.[13]

For elaboration of these points and more complete discussion of the economic basis of trade secret protection, see Dratler, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 4.01[2] (Law Journal Seminars-Press).

[11] Trademark law does not protect trademarks or other trade symbols in the abstract, but only as used in the marketplace, and then only if use of the allegedly infringing symbols causes a likelihood of confusion as to the source of products or services or the sponsorship or affiliation of their producers. Whether there is sufficient likelihood of confusion to merit legal relief depends upon all the circumstances. See, e.g.:

Second Circuit: Mother's Restaurants Inc. v. Mother's Bakery, Inc., 498 F. Supp. 847, 855 (W.D.N.Y. 1980) ("all of the relevant factors must be taken into account ... and no one factor is determinative").

Fifth Circuit: Conan Properties, Inc. v. Conans Pizza, Inc., 752 F.2d 145, 150 (5th Cir. 1985).

Seventh Circuit: Schwinn Bicycle Co. v. Ross Bicycles, Inc., 870 F.2d 1176, 1184 (7th Cir. 1989) (infringement depends on "totality of circumstances").

Ninth Circuit: J.B. Williams Co. v. Le Conte Cosmetics, Inc., 523 F.2d 187, 190 (9th Cir. 1975), *cert. denied* 424 U.S. 913 (1976) (same).

Eleventh Circuit: AmBrit, Inc. v. Kraft, Inc., 812 F.2d 1531, 1543 (11th Cir. 1986).

Moreover, confusion among the public must be probable; a mere possibility of confusion is not enough. See, e.g.:

Ninth Circuit: First Brands Corp. v. Fred Meyer, Inc., 809 F.2d 1378, 1384 (9th Cir. 1987); HMH Publishing Co. v. Brincat, 504 F.2d 713, 717 (9th Cir. 1974).

Tenth Circuit: Jordache v. Hogg Wyld, Inc., 828 F.2d 1482, 1485, 1487-1488 (10th Cir. 1987) (mere possibility that consumers of Jordache's high-fashion jeans would confuse them with "Lardashe" jeans for heavy women was not enough).

Federal Circuit: Bongrain International (American) Corp. v. Delice de France, Inc., 811 F.2d 1479, 1486 (Fed. Cir. 1987).

For a more complete discussion of the likelihood of confusion standard for trademark infringement, see Dratler, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 10.01 (Law Journal Seminars-Press 1991).

[12] See: *Restatement of Torts* § 757, Comment a (1939); Uniform Trade Secrets Act § 1 & Commissioners Comment, reprinted in 14 Uniform Laws Annot. See also, Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 476, 94 S.Ct. 1879, 40 L.Ed.2d 315 (1974); 416 U.S. at 490 ("Where patent law acts as a barrier, trade secret law functions relatively as a sieve").

[13] The right of publicity appears also to reflect this looser, second paradigm. Its duration is not fixed and may vary from state to state. *Compare* Factors Etc., Inc. v. Pro Arts, Inc., 652 F.2d 278, 283 (2d Cir. 1981), cert. denied 456 U.S. 927 (1982) (right of publicity under Tennessee law lasts for subject's lifetime only and is not descendible), relying on Memphis Development Foundation v. Factors Etc., Inc., 616 F.2d 956, 957, 960 (6th Cir.) *cert. denied* 449 U.S. 953 (1980) (same), *with* Lavery v. Automation Management Consultants, Inc., 234 Va. 145, 360 S.E.2d 336, 337 n.1, 342 (1987) (right of publicity under Virginia law is descendible and lasts for twenty years after subject's death). Moreover, its goals include protecting the personality

Whatever their paradigm or primary purpose, however, all intellectual property laws have the effect, if not the primary purpose, of encouraging two types of innovative activity. First, they promote the individual human effort needed to conceive, create and exploit innovations, whether they be new technologies (patents, mask works, or trade secrets), new forms of enlightenment or entertainment (copyrights), or new forms of marketing (trademarks and right of publicity). The effort that they encourage includes both the thought that goes into mental conception and the labor of embodying a new conception in tangible form and bringing it to the marketplace.[14] Second, intellectual property laws encourage the investment of risk capital that underlies, supports and organizes the labor of individuals. Without risk capital to provide salaries, work places, and management, not to mention supplies, material, and access to pre-existing technology or creative works, innovation might languish at the conceptual stage and never reach the marketplace. At least with respect to patents, courts in the United States have consistently recognized that intellectual property laws serve to promote investment of risk capital, as well as the individual effort of inventors.[15] The same conclusions follow with respect to creative works covered

---

and privacy of the individual, as well as fostering commercial exploitation. See generally, McCarthy, *The Rights of Publicity and Privacy* §§ 2.1-2.3 (1987). Thus, like trademarks and trade secrets, the right of publicity has somewhat indefinite duration, and its purposes are not limited to encouraging innovation and creativity.

[14] The process of innovation has at least nine stages: (1) recognition of the need to be fulfilled; (2) committing resources; (3) planning the innovative process; (4) imaginative conception; (5) "selling" the idea; (6) developing a pilot or prototype; (7) refinement; (8) production; and (9) marketing. In terms of human effort, the "imaginative conception" stage may be relatively unimportant, not only for purposes of technological innovation, see Dratler, "Incentives for People: the Forgotten Purpose of the Patent System," 16 Harv. J. Legis. 129, 160-171 (1979), but for creative works as well. In television production, for example, the creative conception may be but a small part of the effort required to put together a pilot or teleplay and bring it to the marketplace.

[15] See, e.g.:

Supreme Court: Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 480, 94 S.Ct. 1879, 40 L.Ed.2d 315 (1974), quoted in N.6 *supra*.

Second Circuit: SCM Corp. v. Xerox Corp., 645 F.2d 1195, 1206 n.9 (2d Cir. 1981), *cert.denied* 455 U.S. 1016 (1982) ("Investors ... play a key role, if not an indispensable one today, in both the inventive process and commercialization of inventions. And it is fair to say, we think, that the contribution of the investor in both the funding of research that leads to inventions and the promotion that necessarily must follow to achieve successful commercialization is of comparable value"). (Citation omitted.)

Third Circuit: Mannington Mills, Inc. v. Congoleum Industries, Inc., 610 F.2d 1059, 1070 (3d Cir. 1979) (purpose of patent grant is "to provide an incentive for private enterprise to devote resources to innovative research, to make the investment required to put new inventions into practice, and to make the benefits of the invention available to a wider public"). (Citation omitted.)

Federal Circuit: Fromson v. Western Litho Plate & Supply Co., 853 F.2d 1568, 1575 (Fed. Cir. 1988) ("Corporations don't invent; people do. Yet, the patent system also encourages corporations and investors to risk investment in research, development and marketing without which the public could not gain the full benefit of the patent system"); Patlex Corp. v. Mossinghoff, 758 F.2d 594, 599, *modified on other grounds* 771 F.2d 480 (Fed. Cir. 1985), quoted with approval in Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 876 (Fed. Cir. 1985) ("The encouragement of investment-based risk is the fundamental purpose of the patent grant").

by copyright[16] and semiconductor chip protection laws,[17] and, to the extent consistent with their mixed purposes, trade secret and trademark law.

The foundational views of intellectual property law, and their conflicts, are sometimes reflected in the difficulty in assessing remedies for breach. Lost royalties are more often a measure of damages in patent cases than copyright case. *Oracle USA Inc. v. SAP AG*[17.1] provides guidance on how courts may address the issue in copyright. A jury awarded Oracle some $1.3 billion as damages for copyright infringement. The trial court, however, overturned the damages award. The court reasoned that Oracle had not presented sufficient evidence on which to calculate the lost licensing revenue. Oracle was entitled to whatever licensing fee the parties would have agreed to in a hypothetical transaction, but "offered no evidence of the type on which plaintiffs ordinarily rely to prove that they would have entered into such a license, such as past licensing history or a plaintiff's previous licensing practices."[17.2] Oracle did not show "actual use of the copyrighted works, and objectively verifiable number of customers lost as a result."[17.3] Nor did Oracle show another basis for calculation, such as licensing practices by other companies in the industry. *Oracle*, however, provides guidance for future litigants, by showing the sort of evidence that will support a damages verdict.[17.4]

Sony BMG Music Entertainment v. Tenenbaum[17.5] also involved a rejection of a damages award. The jury had awarded $675,000 in statutory damages ($22,500 per song) against the defendant for downloading and distributing thirty songs online. The trial court reduced the award to $67,500 (a mere $2,250 per song), on the grounds that the jury award was so excessive as to offend due process. The appellate court did not reject that reasoning. Rather, it held that, before using reducing a jury award as unconstitutional, the trial court should have fully considered the application of common law remittitur.

Intellectual property laws are thus a vital part of the engine that drives innovation. Without a guarantee of some sort of exclusionary power, few would make the effort or invest the money to record, develop and perfect their innovations, to bring them to the point of practical application and to introduce them to the marketplace. In order to make a profit, an innovator must recover the costs of research and development in new technology, or

---

[16] In the modern entertainment industry, the cost and risk of bringing a major dramatic production to market in the form of a teleplay or movie can be comparable to the cost and risk of research and development toward a major technological advance.

[17] The cost of developing new semiconductor chips can run to hundreds of millions of dollars. See Dratler, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 8.01[5] (Law Journal Seminars-Press 1991).

[17.1] Oracle USA Inc. v. SAP AG, 2011 U.S. Dist. LEXIS 98816 (N.D. Cal., Sept. 1, 2011).

[17.2] *Id.* at *22-23.

[17.3] *Id.* at *6.

[17.4] See also, Mirror Worlds LLC v. Apple Inc., 784 F. Supp.2d 703 (E.D. Tex. 2011) (overturning $625 million jury award against Apple for patent infringement, on ground that evidence did not support the verdict).

the costs of preparing and producing a creative work. Normally the innovator does so by amortizing the costs of innovation or creative production over the life of the resulting product, for example, an advanced appliance or a videotape containing a creative work. Since copying an existing product requires no expense for research and development or for preparing and producing the creative work it contains, a copier could sell the same product at a lower price, excluding the amortized expense of innovation. (This assumes that the innovator's and copier's costs of manufacturing the product itself are comparable.) If the law allowed copiers to take such a "free ride" on innovators' investments in innovation by copying and selling their new products without paying royalties, copiers could undercut innovators' prices and drive the innovators out of business. A legal environment that permitted this sort of "free riding" would encourage few to undertake the expense and risk of innovation in the first place. In authorizing Congress to grant authors and inventors exclusive rights in their creations for limited times, for the explicit purpose of promoting "the Progress of Science and useful Arts,"[18] the United States Constitution reflects this pragmatic view of human nature.

[2]—Innovation in the International Marketplace

In the modern world, strong protection in a single nation may not be enough to ensure an adequate return on investment in innovation and creativity. The progress of Europe and Japan in science, technology and the exploitation of creative works, as well as the rapid industrialization of the Pacific Basin, have made the world a "global village" insofar as innovation is concerned.[19] Firms in many nations now have the financial and technological capability to copy and even to improve others' innovations and creative productions quickly and economically. If firms in foreign countries are free to copy and exploit others' innovations without payment, each nation's innovations in practice will be limited to its domestic market, and incentives to innovate will be dramatically reduced.[20]

To be sure, foreign nations inevitably have a certain incentive to maintain strong intellectual property protection within their own borders. A nation's lack of protection against internal piracy of intellectual property may impede development of indigenous technology by drying up sources of risk capital

---

[17.5] Sony BMG Music Entertainment v. Tenenbaum, 660 F.3d 487 (1st. Cir. 2011).

[18] U.S. Const., Art. I, § 8, cl. 8.

[19] With respect to Japanese multinational corporations, two well-known commentators conclude: "Perhaps, then, the single most important lesson to be learned from the study of the Kaisha is . . . [that for] a great many products and companies, the competitive arena has become the world market." Abegglen and Stalk, *Kaisha, the Japanese Corporation* 277 (1985). See also: Abegglen and Stalk, *supra*, at 242-288; Zimmermann, *How to Do Business with the Japanese* Part 3 (1987).

[20] For example, see U.S. International Trade Commission, *Foreign Protection of Intellectual Property Rights and the Effect on U.S. Industry and Trade, Report to the United States Trade Representative, Investigation No.332-245, under Section 332(g) of the Tariff Act of 1930* 4-1 to 4-2 (January 1988, declassified February 26, 1988) (estimating 1986 aggregate worldwide losses of United States firms from inadequate protection of intellectual property as $23.8 billion).

and discouraging both importation of technology and local innovation. Nevertheless, intellectual property law is largely territorial in nature,[21] and the protection that a patented invention, copyrighted work, semiconductor chip design, trademark, or trade secret receives in each nation depends on that nation's own domestic law. Accordingly, international protection of intellectual property, upon which international licensing depends, in turn relies on a patchwork of national law and practice varying considerably from nation to nation.

Because intellectual property issues may involve parties in other jurisdictions, secondary liability issues can be key in transnational disputes. The Supreme Court, across the fields of intellectual property, has given various guidance on the issue of when should one be liable for infringement by another. The patent statute requires knowledge of the infringement for secondary liability. In a case with definite implications for copyright law as well, *Global-Tech Appliances, Inc*. v. *SEB S.A.*,[21.1] the Supreme Court held that "willful blindness" to infringement is sufficient to meet the knowledge requirement. The petitioner did not know that its fryer infringed the respondent's fryer. Indeed, its attorney had not discovered any patents that that the petitioner's fryer infringed. But, had the attorney been advised that the fryer was copied from respondent's, it's much more likely the attorney would have looked at respondent's patent and advised otherwise. After deliberately insulating itself from knowledge of patent infringement, the petitioner could now not argue that lack of knowledge protected it from infringement liability.

Over the last hundred years or so, however, the nations of the world have sought uniformity and harmony in intellectual property matters by negotiating a series of multilateral international conventions. The United States is party to four of the most important of them.[22]

The oldest and perhaps the most important of the multilateral international conventions is the International Convention for the Protection of Industrial Property, better known as the "Paris Convention."[23] It covers patents, utility models, industrial designs, trademarks, and unfair competition. With respect to all of these, it requires "national treatment" (i.e., nondiscriminatory treatment) of the intellectual property of foreign nationals,[24] and it prescribes a priority period (twelve months for patents and utility models and six months for industrial designs and trademarks) for filing

---

[21] By and large, each nation's intellectual property laws operate solely within its own borders and have little or no effect outside them. See Dratler, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 1.09[1] (Law Journal Seminars-Press 1991).

[21.1] Global-Tech Appliances Inc. v. SEB S.A., __ U.S. __, 131 S.Ct. 2060, 179 L.Ed.2d 1167 (2011).

[22] For more detailed discussion of the various international conventions to which the United States is party, as well as complete citations to the various revisions and lists of signatory nations, see Dratler, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 1.09[2] (Law Journal Seminars-Press 1991).

[23] International Convention for the Protection of Industrial Property, done at Paris on March 20, 1883, 25 Stat. 1372, TS No. 379, as revised at Stockholm on July 14, 1967, 21 U.S.T. 1629, TIAS 6923 (Paris Convention, Stockholm text).

[24] See *id*., Paris Convention, Art. 2(1) (Stockholm text, July 14, 1967).

additional applications for protection in any Convention country after the first filing in any such country.[25] Thus, for example, if an inventor files a patent application in any Convention country, the Convention gives him a twelve-month priority period within which to file corresponding patent applications in other Convention countries; applications filed within the priority period will relate back to the date of the first Convention application. The Convention also provides a few limited uniform norms of substantive protection.[26]

The next most important international convention on intellectual property to which the United States is party is the Convention for the Protection of Literary and Artistic Works, better known as the "Berne Convention."[27] This Convention—the primary international copyright convention—had been in existence for over 100 years when the United States first acceded to it on March 1, 1989.[28] Like the Paris Convention, it requires "national treatment" (i.e., nondiscriminatory treatment) of the works of foreign nationals,[29] and it establishes a limited number of minimum norms for copyright protection.[30] The Universal Copyright Convention,[31] to which the United States has been party since 1952, has a shorter minimum term of copyright protection[32] and less stringent exclusive rights[33] and therefore remains of interest primarily with respect to those nations that are parties to it but not to the Berne Convention.[34]

---

[25] *Id*., Paris Convention, Art. 4(C)(1) (Stockholm text, July 14, 1967).

[26] See *id*., Paris Convention, Art. 5 (limitations on compulsory licensing and forfeiture of patents, industrial designs, and trademarks), Arts. 6ter and 6quinquies (limitations on subject matter of trademark registration), Art. 10bis (minimum protection against unfair competition), Arts. 9-11 (minimum remedies for trademark infringement and certain kinds of unfair competition) (Stockholm text, July 14, 1967).

[27] Convention for the Protection of Literary and Artistic Works, done at Berne, Switzerland, on September 9, 1886, as revised at Paris, July 24, 1971 (Paris Act).

[28] See: Berne Convention Implementation Act of 1988 §§ 3, 13(a), Pub. L. No. 100-568, 102 Stat. 2852, 2861 (Oct. 31, 1988) (Berne Convention was to take effect only as implemented by statute; statute was to take effect when Berne Convention entered into force for United States); 53 Fed. Reg. 48748 (Dec. 2, 1988) (Convention was to enter into force on March 1, 1989) (Berne Convention).

[29] See Berne Convention, N.27 Art. 5(a) (Paris Act, July 24, 1971) *supra*.

[30] The Berne Convention, Art. 7 (Paris Act, July 24, 1971), prescribes the minimum duration of copyright for certain kinds of works, and other provisions prescribe a minimum level of exclusive rights for various kinds of works (Arts. 2bis, 8, 10bis, 11, 11bis, 11ter, 12-14, 14bis, 14ter).

[31] Universal Copyright Convention, done on September 6, 1952, UNTS No. 2937, as revised at Paris on July 24, 1971, 25 U.S.T. 1341, TIAS 7863, 216 U.N.T.S. 132 (Paris text) (Universal Copyright Convention).

[32] *Compare* Berne Convention, N.27 *supra*, Art. 7 (Paris Act, July 24, 1971) (life of author plus fifty years generally; other duration for certain kinds of works), *with* Universal Copyright Convention, N.31 *supra*, Art. IV (Paris text, July 24, 1971) (life of author plus twenty-five years generally; other durations for certain kinds of works).

[33] *Compare* Berne Convention, N.27 *supra* (Paris Act, July 24, 1971), *with* Universal Copyright Convention, N.31 *supra*, Arts. IVbis, V, Vbis, Vter, Vquarter (Paris text, July 24, 1971) (exclusive rights for certain kinds of works).

[34] There are approximately twenty-six such nations—most of them in Latin America and Africa. See Dratler, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 1.09[2][d] (Law Journal Seminars-Press 1991).

The next important multilateral convention to which the United States is party is the Patent Cooperation Treaty.[35] This treaty provides a single system for filing and international preliminary examination of patent applications. A single international filing under the Treaty provides a priority date for later prosecution at the "national stage" in the separate patent office of each designated country.[36] The Treaty, however, provides no harmonization of norms of patent protection. Rather, it allows the definition of prior art and the substantive conditions of patentability to be governed by local law.[37]

Although it adheres to these important substantive conventions, the United States is not a party to every multilateral convention of international importance. It is a party to the European Patent Convention,[38] the only international convention that provides substantial harmonization of substantive norms of patent protection.[39] U.S. nationals may also seek European Patents by filing patent applications in the European Patent Office[40] or by designating that Office in an international filing under the Patent Cooperation Treaty.[41] The United States is a party to the Madrid Protocol,[42] which provides for international applications to register trademarks in a number of countries[43] in much the same way that the Patent Cooperation Treaty provides for international filing of patent applications. By adhering to the three most important international conventions regarding intellectual property—the Paris Convention, the Berne Convention, and the Madrid Protocol—the United States assures its nationals substantial protection of their patents, industrial designs, trademarks, and copyrights abroad, and foreign nationals of many countries substantial protection of their similar intellectual property at home.

Other areas of intellectual property may require different tactics. In the field of semiconductor chip protection, the United States has relied primarily on principles of reciprocity. Under the Semiconductor Chip Protection Act of 1984, foreign countries must demonstrate that U.S.-origin integrated circuit designs will be protected within their borders before designs from those

---

[35] Patent Cooperation Treaty, done at Washington on June 19, 1970, 28 U.S.T. 7645, 7652-7676, TIAS 8733, with regulations at 28 U.S.T. 7813.

[36] See *id*., Patent Cooperation Treaty, Art. 11.

[37] See *id*., Patent Cooperation Treaty, Art. 27.

[38] Convention on the Grant of European Patents, signed at the Munich Diplomatic Conference for the setting up of a European System for the Grant of Patents on 5 October 1973 (European Patent Convention), reprinted in 2K Sinnott, *World Patent Law & Practice* EPC (1991).

[39] See *id*., European Patent Convention, Art. 52 (patentable subject matter), Arts 54, 55 (novelty), 52(1), 57 ("industrial application"), Arts. 52(1), 56 ("inventive step"), Arts. 58-62 (inventorship), Art. 63(1) (duration of patent protection), Art. 69 (rules of claim interpretation).

[40] There is no nationality requirement for filing a European patent application. See European Patent Convention, N. 38 *supra*, Art. 58.

[41] See 2L Sinnott, *World Patent Law & Practice* Patent Coop. Treaty 2.2 (1991).

[42] Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks, 15 U.S.C. § 1141a(b) (2004).

[43] See *id*.

foreign countries will be protected here.[44] The United States has used the promise of protected access to its huge marketplace for electronic products as a goad to encourage rapid development of reciprocal legislation abroad. So far, this approach has been a stunning success. By 1994, the Member States of the European Community, Japan, and six other nations had legislation in place extending—on the basis of either national treatment or reciprocity—semiconductor chip protection to nationals and domiciliaries of the United States.[45]

In the absence of applicable international conventions and effective foreign legislation, the United States has exerted direct diplomatic pressure on certain foreign nations to strengthen their intellectual property laws. For example, in 1986, President Reagan exercised his power under Section 301 of the Trade Act 1974, as amended,[46] to influence Korea to strengthen its patent and copyright laws. As a result of this "Section 301 action," Korea (among other things) lengthened its patent term, extended patent coverage to agrichemicals and pharmaceuticals, and provided legal protection for computer programs and works first published outside of Korea.[47] Similar discussions, backed by the threat of trade sanctions, have pressured Thailand[48] and have caused China[49] to strengthen their respective internal protection of intellectual property.

Perhaps the United States' most comprehensive and serious attempt to push for strong international protection of intellectual property was multilateral in nature. During the Uruguay Round of multilateral talks on the General Agreement on Tariffs and Trade (GATT), the United States was a principal proponent of what eventually became Annex 1C of the Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. Formally entitled "Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods," this Annex is better known by the acronym "GATT TRIPs Agreement." Among other

---

[44] See: 17 U.S.C. § 902(a)(1)(A)(ii) (reciprocity pursuant to treaty); 17 U.S.C. § 902(a)(2) (reciprocity pursuant to presidential proclamation); 17 U.S.C. § 914(a) (reciprocity by order of Secretary of Commerce for foreign nations "making good faith efforts and reasonable progress" towards treaty status or enacting comparable reciprocal legislation).

[45] See 59 Fed. Reg. 30773, 30775 (June 15, 1994) (effective June 30, 1994, extending interim orders under Section 914 of the Chip Act protecting mask works from Australia, Austria, Canada, Denmark, Member States of European Community, Finland, Japan, Switzerland, and interim orders to expire July 1, 1995).

[46] 19 U.S.C. § 2911.

[47] See 52 Fed. Reg. 3369 (Feb. 3, 1987) (U.S. Trade Representative's notice of Korean patent law amendments and instructions for compliance with favorable transition provisions).

[48] See, e.g.: 57 Fed. Reg. 5029 (Feb. 11, 1992) (United States Trade Representative's request for public comment on investigation of Thailand under section 302(a) of the Trade Act of 1974, as amended, pursuant to petition of Pharmaceutical Manufacturers' Association alleging that Thailand denies adequate and effective patent protection to pharmaceutical products); "Thailand 4; Pressure from U.S.," Financial Times (London), at 34 (Dec. 3, 1991).

[49] See, e.g.: 57 Fed. Reg. 3084 (Jan. 27, 1992) (United States Trade Representative's notice of termination of Section 302 investigation after China agreed "to make significant improvements in the protection of patents, copyrights, and trade secrets and also agreed to effectively enforce intellectual property rights"); "U.S. Calls Off Trade War as China Agrees to Halt Piracy," Washington Times, at A1 (Jan. 17, 1992).

things, it provides minimum standards for protection of copyrights, trademarks, designations of geographic origin, industrial designs, patents, semiconductor chip designs and confidential information; and it requires both national treatment and most-favored nation treatment for the nationals of all member nations.[50] As but one part of the GATT Agreement, however, the GATT TRIPs Agreement, as of October 1994, was still pending ratification, and even ratification by the United States is by no means assured.

In addition to seeking stronger protection of intellectual property abroad, the United States has strengthened its own laws to better protect its domestic markets from piracy of intellectual property. In 1984, Congress amended the federal trademark statute and related criminal statutes to increase civil sanctions and add criminal penalties for trademark counterfeiting,[51] and in 1988 it amended the federal trademark statute to permit United States firms, like their foreign competitors, to register trademarks based on intent to use, rather than actual use.[52] In 1988 Congress also enacted legislation to implement the Berne Convention in the United States[53] and amended the patent statutes to prohibit unauthorized importation of products made abroad by processes patented in the United States, even if the products themselves were not patented.[54] By participation in multilateral international relations, careful use of reciprocity, judicious application of trade pressure, and strengthening its own laws, the United States has tried to prepare for the advent of a "post-industrial society," in which the value of innovation, information, and intellectual property ultimately may rival the economic value of manufactured goods. All of this activity is directly relevant to licensing because intellectual property is the raw material of licensing and licensing is becoming an increasingly international enterprise.

As a result of the accession of the United States to Berne and to international trade agreements, Congress restored millions of copyrights to foreign authors, greatly expanding the scope of copyright licensing. That legislation was upheld by the Supreme Court in *Golan v. Holder*.[54.1] The question in *Golan* was whether there was such a non-traditional expansion of copyright

---

[50] See Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, Annex 1C, Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Arts. 1(3) (members' obligations), 2(1) (national treatment), 4 (most-favored-nation treatment), MTN/FA Special Distribution (UR-93-0246) (December 15, 1993), 33 *International Legal Materials* 9, 83, 84-86 (Jan. 1994).

[51] See Trademark Counterfeiting Act of 1984, Pub. L. No. 98-473, 98th Cong., 2d Sess., 98 Stat. 1837, 2178-2183 (Oct. 12, 1984), codified at 15 U.S.C. §§ 1116-1118, 18 U.S.C. § 2320. Among other things, amendments provided for mandatory recovery of treble damages and attorneys' fees by a successful plaintiff in a civil action for trademark counterfeiting, absent "extenuating circumstances." Lanham Act § 35(b), 15 U.S.C. § 1117(b).

[52] See Lanham Act § 1(b), 15 U.S.C. § 1051(b), as added by the Trademark Law Revision Act of 1988, Pub. L. No. 100-667, 100th Cong., 2d Sess., Tit. I, 102 Stat. 3935 (Nov. 16, 1988), effective November 16, 1989.

[53] See N.28 *supra*.

[54] See 35 U.S.C. §§ 154, 271(g), as amended by the Process Patent Amendments Act of 1988, Title IX, Subtitle A, §§ 9001-9007, of the Omnibus Trade and Competitiveness Act of 1988, Pub. L. No. 100-418, 100th Cong., 2d Sess., 102 Stat. 1107, 1563-1567 (Aug. 23, 1988), amending 35 U.S.C. §§ 154, 271 and 287 and adding 35 U.S.C. § 295.

[54.1] Golan v. Holder, __ U.S. __, 132 S.Ct. 873, 181 L.Ed.2d 835 (2012).

that was sufficient to trigger First Amendment scrutiny. *Golan* addressed the constitutionality of the restoration provisions.[54.2] Unlike extending the term of existing copyrights, the restoration provisions actually grant copyright to works that had been in the public domain. The restoration provisions restore copyright protection to foreign works that fell into the public domain in the U.S. for failure to meet formality requirements, such as the requirement of a copyright notice or the requirement to renew copyrights to gain the full term. Because restoration takes works out of the public domain, the question arose whether it violated the First Amendment. *Golan* held that the statute was not subject to First Amendment scrutiny. The *Golan* Court interpreted its earlier decision in *Eldred*[54.3] very narrowly. It held that the Progress Clause gave considerable latitude to Congress in addressing copyright, and was not strictly limited to provisions which gave an incentive to created works, as opposed to provisions like the restoration provisions, which gave a more general support to the distribution of works. The Court further held that the First Amendment did not bar the statute, even though it might restrict speech by removing works from the public domain. Rather, as long as Congress continued to maintain the "traditional contours" of copyright, which *Golan* interpreted to mean only the doctrine of fair use and the non-protection of ideas (as opposed the more general shape of copyright, such as the practice of generally not taking works out of the public domain), then those internal protections for freedom of expression made First Amendment scrutiny unnecessary. After *Eldred*, it seemed as though any new sort of copyright protection might trigger First Amendment scrutiny. But, after *Golan*, as long as Congress retains the bulwarks of fair use and the non-protection of ideas, the balancing analysis of First Amendment law will not come into play.

The bounds of intellectual property (and therefore licensing) are being reexamined with the expansion of information and biological technology. The Supreme Court, while rejecting categorical exclusions, has emphasized the place of the subject matter limitations, due to the role that the bar against patenting abstract ideas plays in preventing preemption of concepts, as opposed to patents on applications of concepts.[54.4]

Innovation functions quite differently in specific industries. The cost of research and development varies enormously between sectors.[55] "The R&D, drug design, and testing of a new drug can take a decade or more and cost, on average, hundreds of millions of dollars."[56] A new generation of semiconductors, with a new fabrication facility, entails years and likely four billion dollars.[57] Software is likely to cost less. The days of garage start-ups may be over, but developing a new software package is likely to be an

---

[54.2] See 17 U.S.C. § 104A.

[54.3] Eldred v. Ashcroft, 537 U.S. 186, 123 S.Ct. 769, 154 L.Ed.2d 683 (2003).

[54.4] See Bilski v. Kappos, _ U.S. _, 130 S. Ct. 3218, 177 L. Ed. 2d 792 (2010).

[55] Burk and Lemley, *The Patent Crisis and How the Courts Can Solve It* 38 (2009). See also, McJohn, "Leverage," 3 Indian Journal of Intellectual Property Law (2010).

[56] *Burk and Lemley,* N. 55 supra, at 39.

[57] *Id*. at 39.

investment of a different order of magnitude, some millions of dollars.[58] In some industries (software, biotech, manufacturing), the costs of innovation are coming down with the use of automated design tools.[59] Likewise, advances in gene-sequencing and bioinformatics have dramatically lowered the cost of innovation in some areas of biotechnology.[60] Variations among industries also include the importance of being first to market, as opposed to the importance of having a product that cannot be copied, which reduces the importance of being the first mover.[61] Generally, innovation is now less frequently the work of the prototypical inventor working alone in her lab or garage, rather innovation now comes from collaboration among teams, often requiring considerable laboratory and other resources.[62]

An applicant is entitled to a patent only if the invention is "new." The meaning of "new" is complex and changed under the 2011 amendments to the Patent Act. To give a broad outline, under the 1952 Act's first-to-invent scheme, the novelty requirement looks to several different critical dates.[63] An applicant is not entitled to a patent if the invention had been in the public knowledge (such as published, patented, sold, or in public use) at the date of invention. If two applicants claimed the same invention, the patent goes to the first to invent. Depending on the evidence of inventive activity, the date of invention could be the time the inventor conceived the invention, the time the inventor actually made the invention (reduction to practice, in patent parlance), or the date the inventor filed the patent application. Novelty under the 1952 Act has a second component, a one-year grace period from when an invention had been made public. An applicant was not entitled to a patent if the applicant did not file a patent application no later than one year after the invention was made public (by the applicant or by anyone else). The 2011 Act shifted to a simpler, first- to-file system. An applicant is not entitled to a patent if, on the effective filing date of the application, another inventor had already filed an application claiming the same invention or the invention had been made public. The 2011 Act retains a narrower one-year grace period. The applicant is still entitled to a patent if the applicant files no later than one year after the applicant herself makes the invention public knowledge. The 2011 Act applies only to applications filed after March 16, 2013. So, the 1952 Act will continue to govern existing patents and patents filed before March 17, 2013. The 1952 Act's rules will continue to play a large rule in patent law for several decades, alongside the cases governed by the 2011 Act. In addition, the 2011 Act relies heavily on the terminology and structure of the 1952 Act, so the cases under the 1952 Act will be important in interpreting the analogous provisions of the 2011 Act.

---

[58] *Id*. at 40.
[59] *Id*. at 40.
[60] *Id*. at 40.
[61] *Id*. at 43-44.
[62] *Id*.at 40-41.
[63] Leahy-Smith America Invents Act, Pub. L. No 112-29, § 2, 125 Stat. 284-341 (Sept. 16, 2011), codified at 35 U.S.C. §§ 102 *et seq*.

§ 1.03 Business Advantages of Licensing

Firms often grant licenses because they do not have the resources to achieve full commercial exploitation of their intellectual property by themselves or because others can perform tasks more efficiently. For example, a book publisher might have no facilities for recording, manufacturing, or distributing of audiocassettes. To address the audiocassette market, it might give a cassette manufacturer the right to manufacture and distribute audiocassettes of its books.[1] Alternatively, a computer software developer might license a computer manufacturer to distribute the developer's software in order to take advantage of the computer manufacturer's greater resources for marketing and product distribution. Similarly, by licensing a large drug company to use its proprietary bioengineering processes, a small biotechnology research firm might take advantage of the larger company's manufacturing plant, experience in obtaining federal regulatory approval, and greater resources for clinical testing, marketing, and distribution.

Perhaps in an ideal world, each manufacturing firm might achieve full "vertical integration." That is, each firm by itself might perform all of the operations required to exploit its intellectual property, including research and development, product refinement, testing, production, distribution, marketing, sales, and service. If a firm so integrated were efficiently run and sufficiently large to penetrate all available markets for its products, it would have little reason to grant licenses to others. By granting another a manufacturing license, for example, a vertically integrated firm would only create competition for its own manufacturing operations. If its own production were efficient and capable of satisfying available markets, the vertically integrated firm would be unlikely to realize greater profit by licensing competitive production than by manufacturing products itself. Indeed, at the margin, a competing producer would not be able to afford to pay the vertically integrated firm any royalty and still remain price competitive.[2]

In practice, however, very few firms achieve full vertical integration, at least with respect to all of their products. Large firms often have separate groups or divisions that perform separate business operations, and those groups often handle certain products better than others; vertical integration may be lacking or ineffective for some products. Even a firm with full vertical integration for specific product lines often has insufficient resources to satisfy the demands of all significant geographic and product markets. It may

(Text continued on page 1-21)

---

[1] The examples in this section assume that the licensor has ownership of the intellectual property (in this case copyright in the book), or at least a license with the necessary sublicensing rights. In the example in text, the publisher, at a minimum, would have to have the right to authorize others to copy its books in audiocassette form and to distribute them in that form. See generally, Chapter 2 *infra*.

[2] If the two firms' production facilities were equally efficient, their marginal costs of production and marketing would be the same. While the innovator was recovering its expenses of innovation, its average total cost would exceed these marginal cost. During that period, the licensee could stay price competitive by paying a royalty no greater than the innovator's amortized per unit cost of innovation. Once the innovator had fully recovered its expenses of innovation, however, its total cost of production and marketing presumably would not exceed the similar total cost of an equally efficient licensee. Such a licensee could not meet the innovators' prices if it had to pay a royalty in addition to these costs.

be able to serve only a particular geographic market or to produce only a portion of the product lines that its intellectual property could control. By licensing its intellectual property to others, such a firm can expand its geographic markets, its product lines, or both.

For small companies, licensing is often a necessity. Very few small companies are vertically integrated. In fact, small firms generally have resources for only a few of the operations that a vertically integrated operation might perform. Many "start-up" companies are research and development boutiques with little resources for production, distribution, and marketing. Even start-up companies with some productive capacity often have insufficient resources for effective marketing, distribution, and service on a nationwide, or even regional, basis. In these situations, the small firm must grant licenses to others to help exploit its intellectual property and to bring its products or services to market. Through licensing, the small firm in effect becomes part of a larger, vertically-integrated enterprise that transcends the bounds of its own size limitations, albeit with the aid of separate legal entities.

Timing certainly plays an important role in licensing. A firm may have to delegate responsibility for particular operations, or for particular geographic or product markets, only for limited periods of time. For example, a firm desiring early entry into a market while developing full productive capacity might permit a custom parts house to manufacture parts for it under license. Later, the firm might bring that manufacturing back "in house" in order to maintain control over the manufacturing process, to assure better quality, or to integrate manufacturing more fully with its research and development operations.

More frequently, smaller firms and start-up companies use independent distributors and service organizations to support their sales and field service functions, or to expand their markets geographically while they develop national or regional sales and service forces of their own. In these cases, long-range plans are important to ensure that the delegated responsibilities dovetail properly with the firm's developing capabilities and that the governing agreements provide for amicable and timely termination of the delegation.

In some fields, both large and small companies grant licenses because the nature of their business requires licensing. Unless software developers also produce computers, they can market the computer programs they develop only by granting others the rights to use them. Similarly, unless a movie producer owns theaters, television stations or videocassette production facilities, it must license others to perform, broadcast, or distribute its movies.

For firms that cannot achieve full vertical integration quickly, the only alternative to licensing is to selling their intellectual property outright. For example, a software developer might sell (rather than license) its computer software to a computer manufacturer, along with all related intellectual property rights. Or the movie producer might sell its movies and their copyrights to a television network or theater chain. Through such a sale, however, the firm would lose control over its products and, in essence, would abdicate a large portion of its business to the buyer. Consequently, most firms consider the business advantages of licensing before either seeking full vertical integration or abdicating control through a sale.

Patent licensing is driven by patent rights, which have differential impacts among industries. The importance of patent protection depends in part on the availability of other incentives to innovate. If there are other incentives (such as peer recognition or prizes for scientists, or alternative forms of intellectual property protection, such as trade secrets for manufacturing processes), then the impact of patent protection may be diminished.[3] Innovators also vary by industry with respect to how much the value of their innovation they can capture in a market, and how much of that value flows to the public without monetary compensation ("spillover effects," a term that captures the idea that intellectual property law need only provide incentive to innovate, rather than allow innovators to capture all the market value of their innovation-and also the idea that externalized benefits are better than deadweight losses).[4] Perhaps the biggest different between industries lies in the amount of cumulative innovation: pharmaceuticals tend "to be a stand-alone process generating a single finished product.[5] By contrast, software products "will be incrementally improved over time."[6] In different industries, innovation also poses different negative risks: impeding standardization in markets requiring overall coordination, such as information technology; decreasing stability of existing products, especially in software; and risks to health and safety in areas such as biotech and nanotechnology, where the long-term risks of innovations are not immediately apparent.[7]

An open question is to what extent intellectual property protection will extend to new technologies, or new ways of exploiting technologies that exist in nature. The bar on patent protection for natural phenomena would seem to bar patents on genes that exist in nature. Tens of thousands of gene patents have been issued, however, on the theory that by isolating the gene, the inventor has identified something that is different from the gene as it exists in nature. The Federal Circuit has repeatedly held gene patents valid, although without directly addressing the subject matter issue.[8] However, the Southern District of New York rejected this reasoning.[9] The court invalidated patents on two genes related to breast and ovarian cancer, along with patents on methods to detect cancer by analyzing and comparing a person's DNA.[10] The case presents a conflict between deep policies: the policy of providing an incentive for socially valuable innovations (such as discovering genes linked to disease) and the policies of leaving natural phenomena open to scientific research and preventing ownership of natural phenomena—especially acute where the ownership is of human genes. In that vein, the issue presents a tough distinction between discovering natural phenomena and inventions that apply that knowledge.

---

[3] Burk and Lemley, *The Patent Crisis and How the Courts Can Solve It* 42-44 (2009).
[4] *Id.* at 46-47.
[5] *Id.* at 47.
[6] *Id.* at 47.
[7] *Id.* at 47-48.
[8] See, e.g., In re Deuel, 51 F.3d 1552 (Fed. Cir. 1995).
[9] See Assoc. for Molecular Pathology v. United States Patent and Trademark Office, 702 F. Supp.2d 181 (S.D.N.Y. 2010).
[10] *Id.,* 702 F. Supp.2d at 238.

[1]—"Leveraging" Resources

The primary business advantage of granting a license is "leveraging" business resources. By adding its licensees' resources for particular business operations to its own, a licensor can address markets that it otherwise could not hope to serve. For example, small firms and start-up companies often do not have enough salespeople or offices to serve nationwide, let alone worldwide, markets. By granting others the right to market and distribute their products, they can penetrate geographic or products markets otherwise completely beyond their reach.

This occurred, for example, when International Business Machines Corporation chose Microsoft Corporation's "MS-DOS" operating system software as the platform upon which to build the "PC-DOS" operating system for IBM's personal computer. Overnight, Microsoft obtained the benefit of IBM's massive marketing and sales in forces distributing its products. Although the effect is seldom so dramatic as in this example, "leveraging" of resources is one of the primary advantages of granting licenses.

The ability to leverage resources is restricted by limits on the patent rights. The patent exhaustion doctrine, in particular, restricts the ability of the patentee to control sales beyond the first sale of a patented product, or a product embodying a patented process.[11] Because of this rule, a patent holder cannot exercise unlimited rights over an invention once embodiments of the invention have been sold.[12] Rather, if he sells devices embodying the invention, or permits others to sell such devices, he will have limited control over what the buyers do with those devices because they take the items purchased free of the patent claims.[13]

In the sphere of copyright, a similar question is whether a rights holder can rely on digital rights management systems to protect against not just copyright infringement, but also other, non-infringing access to copyrighted works.[14] Circumvention to permit use beyond the scope of a license may violate the protections for access controls (because it permits unauthorized access), even if it does not cause infringement of copyright (because the users had a license, even though the circumvention allows them to use the software beyond the scope of the license).[15]

Even while sensitive military or intelligence technology is subjected to secrecy orders by the United States government,[16] it is important to seek

---

[11] Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617, 128 S.Ct. 2109, 170 L.Ed.2d 996 (2008).

[12] *Id.*

[13] *Id.*

[14] See 17 U.S.C. §§ 1201, 1202.

[15] See MDY Industries, LLC v. Blizzard Entertainment, Inc., 629 F.3d 928(9th Cir. 2010).

[16] The United States' federal government reserves the right to sequester patent applications covering technology with national security implications (principally military and intelligence technology) by issuing secrecy orders. See 35 U.S.C. §§ 181-188, discussed in Dratler and McJohn, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 2.09[2] (Law Journal Press 1991).

licensees while patent applications are sequestered.[17] If the patent applicant does not do so, it may have no basis for an otherwise valid claim for compensation from the United States government for the adverse effects of a secrecy order.[18]

[2]—Broadening Geographic Markets

As the world becomes a "global village," product markets that used to be regional or national are rapidly becoming worldwide. Few except the largest firms, however, have the personnel or resources to address worldwide markets successfully. One reason is that most products require some "translation" for foreign markets. Labels and instructions may need translation into foreign languages, goods may require physical modification to comply with local laws and regulations, and advertising and marketing programs may have to be adjusted to satisfy local customs and tastes.

If a firm wishes to enter foreign markets but does not have ready marketing and distribution channels in foreign countries, it has only four alternatives. First, it can set up foreign branches, which may subject it to direct taxation abroad. Second, it may set up separate subsidiaries or affiliates in foreign countries. This may avoid direct foreign taxation of the parent company, although the foreign subsidiary will be subject to foreign income tax. Yet whether a branch or subsidiary, establishing of a foreign office requires time, energy, and money in order to complete the necessary legal work, put management and physical plant in place, and hire and train appropriate personnel.

The third alternative for firms wishing to expand into foreign markets is a joint venture. If a joint venture is taxed as a separate entity, as is often the case,[19] the tax consequences of this alternative are similar to those of establishing a foreign subsidiary. However, formation of a joint venture also involves resolving difficult questions of control, management, and communication that often consume considerable time and resources. If the joint venture is more than a shell—if it will have separate physical plant, employees, and a separate existence—its formation may be as complex as the establishment of a new business enterprise in the foreign country.

---

[17] Secrecy orders may be drafted to allow foreign patent applications and discussions with prospective business partners, domestic and foreign, under appropriate security precautions. See N. 5 *infra*.

[18] See: Weiss v. United States, 37 Fed. Appx. 518, 523, 2002 U.S. App. LEXIS 10678 (2002) (Fed. Cir. 2002) (affirming finding of no damages from secrecy order where, "[a]lthough the secrecy orders did delay the issuance of the Weiss patent, appellants presented no evidence that they were damaged by the delay"); 37 Fed. Appx. at 523:

> "Although appellants were permitted to disclose the . . . invention to foreign nationals, they presented no evidence of any actual or potential customers, domestic or foreign. They also did not attempt to patent the invention in any foreign country, even though the secrecy orders allowed them to do so. In addition, appellants presented no evidence that they ever attempted to license the invention or that anyone was interested in licensing the invention."

[19] For reasons of both taxation and potential liability, foreign joint ventures are often organized in corporate form, so that they are legal entities separate and distinct from their parents.

The fourth alternative for expansion into foreign markets is, of course, licensing. By licensing a foreign entity to help exploit its intellectual property, a firm can take advantage of a preexisting organization, with personnel in place and established channels, resources, and procedures for production, marketing, and distribution. The firm need not establish any new entity because the licensee normally uses existing personnel and resources, or at least an existing management and business structure, to perform the delegated operations. By licensing a foreign concern to exploit its intellectual property in foreign markets, a firm also can use the foreign concern's familiarity with foreign markets, customs, and needs. Because licensing takes advantage of these preexisting resources and capabilities, it is often the fastest route to the foreign marketplace.

This advantage of licensing, however, is not limited to the international sphere. A firm in one state or region of the United States that wishes to expand its markets into another state or region has the same four alternatives as a firm wishing to expand abroad.[20] Very often the firm can achieve the most rapid penetration into new geographic markets simply by granting licenses to a firm already there.

[3]—Broadening Product Markets

Just as licensing can broaden geographic markets, it can broaden product markets. A firm may have the resources to exploit its intellectual property through one product, but its intellectual property may be applicable to other products or services.

The video industry is an excellent example. There is now a tremendous market for entertainment programs for home use. Yet independent producers of movies and television shows often do not have the resources for mass production and distribution. To take advantage of this market, they license their intellectual property—namely, the copyrights in their movies and television shows—to firms that manufacture and distribute the videos.

In the biotechnology industry, research firms have developed a number of monoclonal antibodies to be used outside the body as testing and diagnostic tools. Because the process of regulatory review is relatively simple for products used outside the body, these firms can take those products to market quickly. To exploit their technology fully, however, they may wish to develop drugs and biologicals for internal use. The approval process for these products takes much longer and requires much greater expense, as well as clinical expertise and familiarity with the regulatory process. Lacking the requisite resources, smaller biotechnology firms often license their technology to large drug companies for that purpose.[21]

---

[20] For a domestic business, however, tax considerations may not loom as large as in international business because federal taxes are uniform throughout the nation. The choice of regional business entity (branch, subsidiary, or joint venture) normally affects only state taxes, which are generally substantially lower than federal taxes.

[21] The licensing may or may not be part of a corporate "partnership" or "affiliation" arrangement in which the larger company invests in the smaller firm or forms a joint venture for a specific project.

Licensing for the purpose of expanding product markets, however, has disadvantages. By granting others the right to use its intellectual property to develop new products, a firm may lose control over those new products.[22] Where a party authorizes another to sell the invention, buyers will be protected by first sale, even if the seller fails to pay the agreed royalties to the patent owner.[22.1] Any other rule would make the buyer of goods or services subject to disputes over which the buyer has neither control nor knowledge. That uncertainty would in turn add transaction costs to such sales. So the rule aids both patentees and ultimate buyers, by facilitating transactions. Unless it has access to improvements made by its licensees, it may quickly find itself left in a backwater of technology, at least insofar as the new product market is concerned.[23] It also may incur some risk of liability for damage caused by defects in its licensee's products,[24] or even for breach of contract[25] or miscellaneous torts.[26]

Nevertheless, for many firms, this sort of licensing is an important source of additional revenue. With appropriate provision for cooperation in the licensing agreement, a firm may stay in touch with the exploitation of its intellectual property and at the same time exploit that property in market areas that it could never hope to penetrate using only its own resources.

The patent exhaustion doctrine may prevent a patentee from controlling patent markets beyond the first market which a patented product enters.[27]

---

[22] See § 1.04[1] *infra*.

[22.1] Tessera, Inc. v. International Trade Commission, 2011 WL 1944067 (Fed. Cir. May 23, 2011).

[23] See § 1.04[8] *infra*.

[24] Because trademarks directly affect the public's perception of responsibility for product quality, franchisors and other trademark licensors bear the greatest risk. See, e.g.:

Sixth Circuit: Kosters v. Seven-Up Co., 595 F.2d 347, 350, 352-353 (6th Cir. 1979) (applying Michigan law) (holding franchisor vicariously liable for injuries caused by exploding soft drink bottle that slipped from carton, where franchisor controlled distribution system and approved carton design).

Ninth Circuit: Torres v. Goodyear Tire & Rubber Co., 901 F.2d 750, 751, 752-753 (9th Cir. 1990)(theory of enterprise liability under Arizona common law permitted suit against U.S. corporate parent and trademark licensor for injuries arising from allegedly defective tire made by its subsidiary-licensee abroad, when parent maintained power to control its multinational subsidiaries in design, distribution, quality, and marketing of tires sold under its trademark).

State Courts:

California: Kasel v. Remington Arms Co., 24 Cal. App. 3d 711, 725, 101 Cal. Rptr. 314,317-318, 323 (1972) (imposing enterprise liability on trademark and know-how licensor for Mexican licensee-affiliate's defective shotgun shell).

See also, the concurring opinion in *Torres, supra*, 901 F.2d at 754-756 (reviewing authority in other jurisdictions and scholarly commentary).

[25] See Nichols v. Arthur Murray, Inc., 248 Cal. App.2d 610, 615-617 & n.3, 56 Cal. Rptr. 728, 732-733 (1967) (applying agency theory and imposing liability on franchisor for breach of contract for dancing lessons, when franchisor's control far exceeded level needed to protect trade name, and franchisor completely deprived franchisee of control over its business).

[26] See Clark v. Texaco, Inc., 55 Mich. App. 100, 222 N.W.2d 52, 53 (1974) (applying "agency by estoppel" theory and reversing summary judgment for service station franchisor sued by invitee bitten by dog at service station).

[27] Quanta Computer, Inc. v. LG Electronics, Inc., ___ U.S. ___, 128 S.Ct. 2109, 170 L.Ed.2d 996 (2008).

Where the holder of several chipset patents licensed the patents to a microprocessor and chipset manufacturer, the patentee was barred by patent exhaustion from pursuing infringement claims against the licensee's customers.[28] The sale of authorized products embodying the patents terminated the patent rights in those products, meaning that the purchasers were free to incorporate them into otherwise infringing products.[29] The patentee may thus be limited to the first of several markets. Likewise, the patentee may be unable to discriminate finely between markets, by licensing one seller in one market and another seller in a second market. Because of patent exhaustion, someone buying from the licensee in the first market takes free of the patent rights, and may sell the device in the second market.

One of the most important issues in the courts with respect to the scope of control over licensed goods has been the interpretation of the first sale doctrine in copyright law.[30] In copyright, first sale is closely tied to other interests, such as the right of attribution. For intellectual property, the rights of attribution and control have deep roots.[31] For physical property, people instinctively feel an attachment. One could argue that the USSR fell because its economic system failed to account for the importance of property to humans. As Frank Zappa succinctly put it, "Communism doesn't work because people like to own stuff." Someone can own a piece of stuff that embodies someone else's intellectual property. The personal property owner would like to do whatever she wants with her stuff, while the intellectual property owner would like to control what happens with stuff embodying her protected ideas.

First sale has been a doctrine that struck a balance.[32] Someone that owns a copyrighted work (whether the original or an authorized copy) can distribute it to the public or display it to the public, the copyright owner's exclusive rights of public display and distribution notwithstanding.[33] The person cannot necessarily make more copies, or adapt the work, or perform the work publicly, which rights remain under the copyright owner's control.[34] Patent and trademark have similar rules, often traveling under the name "exhaustion," the theory that sale of an authorized object exhausts the rights in that particular object, but does not allow the buyer to make more.

First sale in copyright, however, has been shrinking rapidly on several fronts. Many works, especially software, are sold under license agreements that provide, in effect: "We authorize you to use this work under the following terms. We provide a copy, but the copy does not belong to you." If those license terms are effective, then first sale does not apply, because the

---

[28] *Id*., 128 S.Ct. at 2121.
[29] *Id*., 128 S.Ct. at 2117-2121.
[30] See 17 U.S.C. § 109 .
[31] See McJohn, "Top Tens in 2010: Patent, Trademark, Copyright and Trade Secret Cases," NW. J. Tech. & Intell. Prop. (Jan. 2011).
[32] 17 U.S.C. § 109 .
[33] *Id*.
[34] 17 U.S.C. §§ 106, 109.

licensee does not own the copy, merely possesses it.[35] Works in digital form may also be wrapped in copying and access controls. Someone who owns a copy may nonetheless be unable effectively to do anything other than what the copyright owner has permitted. If he or she circumvents the controls, that may violate the anti-circumvention provisions of the Digital Millennium Copyright Act.[36] A more refined reduction in first sale comes from the increasing internationalization of copyright law. The European Union has pressed for wider recognition of rights for authors to control their works subsequent lives. The resale right, for example, requires that artists receive a percentage of subsequent sales of their artworks. Certain moral rights apply more broadly, limiting the ability of others to modify works even where they hold the copyright.

For many copyright owners, case law on importation makes first sale, as some have noted, optional. Someone that owns a "lawfully made" copy may import it, because importation is included in the definition of distribution.[37] But some courts have held that a copy made outside the United States is not "lawfully made" under the Copyright Act.[38] Courts reason, because it was made beyond the reach of the Copyright Act, the copy is not lawfully made or unlawfully made, even if authorized by the copyright owner.[39] If I bought a painting overseas, and brought it into the U.S., I would potentially infringe copyright if I sold it, or displayed it in public. In fact, even importing it would potentially infringe. On a broader scale, copyright owners may opt out of first sale. If foreign-made copies are not subject to first sale, then a copyright owner could arrange for all her books (or DVD's, or CD's) to be made outside the United States and so not subject to first sale.

Intellectual property is statutory law, often dealing with fast-changing technology. But the law often seems to change in the ways similar to the common law. The pressures on the first sale doctrine push it to its logical extreme. As Cardozo put it: "Every new case is an experiment; and if the accepted rule which seems applicable yields a result which is felt to be unjust, the rule is reconsidered."[40] Where limits on first sale seem to eliminate people's ownership of what they have "bought," there is the doctrinal pressure as Cardozo describes. Beyond the courts, the market may likewise be responding. Apple began offering music DRM free (for a higher price).[41-45]

---

[35] See, e.g., McManis, "The Privatization (or "Shrink-Wrapping") of American Copyright Law," 87 Cal. L. Rev. 173 (1999).

[36] See 17 U.S.C. §§ 1201-05 .

[37] See 17 U.S.C. §§ 109, 602(a). Quality King Distributors v. L'Anza Research International, 523 U.S. 135, 118 S.Ct. 1125, 140 L.Ed.2d 254 (1998).

[38] See, e.g., Omega S.A. v. Costco Wholesale Corp., 541 F.3d 982 (9th Cir. 2008), *affirmed by an equally divided Court* 131 S.Ct. 565 (2010)..

[39] *Id*.

[40] Cardozo, *The Nature of the Judicial Process* 23 (1921), (quoting Smith, *Jurisprudence* 21 (1909)).

[41-45] See, e.g., Stone, "Want to Copy iTunes Music? Go Ahead, Apple Says," New York Times (Jan. 6, 2009).

[4]—Obtaining Early Market Entry

"Timing is everything!" goes the old saw. A first mover often has a market edge. Both in the United States and abroad, personnel, capital, and other resources for research and development are becoming increasingly nimble. As a result, worldwide competition is growing in ferocity, and market timing is often decisive.

In less than ten years, the biotechnology industry spawned more than 200 companies.[46] In the computer industry, many small companies manufacturing personal computers were formed, prospered and then disappeared through bankruptcy or acquisition within the span of a few years in the early 1980s. With increasing sophistication on the part of management and investors in the various fields of "high technology," this process is likely to accelerate. For a firm in the crucible of this fierce competition, a delay of only a few months, or even weeks, in introducing a new product may spell the difference between success and failure.

One of the major business advantages of licensing is that it permits a firm to shorten the time required to take its products or services to market. If a firm has insufficient capital or personnel to enter the market quickly, it may speed its entry by delegating responsibility for certain operations to others having greater resources. While the others are entering the market, the licensor can build its own resources in the hope of bringing the delegated operations "in house" at a later time.

The biotechnology industry again provides a good example. Obtaining federal regulatory approval for new drugs requires the development of test protocols and rigorous clinical trials over a period of years.[47] This rigorous testing process requires skills and clinical expertise that are not often found in research and development scientists. There is nothing to prevent start-up companies from developing this expertise "in house," but it takes considerable time to do so. Unlike small research and development "start-ups," however, large drug companies often have ready-made internal organizations with considerable experience in clearing regulatory hurdles as quickly as possible. Accordingly, many small biotechnology companies license their intellectual property to large drug companies, or form joint ventures with them, not only to address broader markets, but also to beat their competitors to the marketplace.

[5]—Increasing Market Penetration Through Complementary Products

Some products sell best when they are incorporated in, sold for use with, or marketed with others. For example, an electronic fuel injection system

---

[46] See Olsen, *Biotechnology, an Industry Comes of Age* 84 (1986).

[47] For a layperson's overview of the process, see Pines, *A Primer on New Drug Development*, FDA Consumer Publication (HEW Pub. No. (FDA) 74-03021) (re-issued Nov. 1979). The new drug approval process can occupy a significant portion of the seventeen-year patent term. For this reason, Congress allowed innovators to extend the patent term for certain new drugs to compensate for the period of regulatory approval. See 35 U.S.C. § 156.

will have a larger market if sold as original equipment in new automobiles, rather than in the aftermarket. Similarly, software operating systems for computers are best supplied when the hardware is first delivered, rather than as optional "add-ons." If the company that supplies the fuel injection system or the operating system does not itself make automobiles or computers, it can obtain the benefit of this synergy by granting manufacturing and distribution licenses to firms that do.

This sort of synergy occurred at two levels when Microsoft Corporation granted IBM a license to use Microsoft's "MS-DOS" operating system software for the IBM personal computer. At the first level, IBM's choice of Microsoft made sure that Microsoft's product was available with every IBM personal computer, thereby multiplying Microsoft's product market. The second level of synergy involved independent, third-party software developers. Encouraged by IBM's rapidly increasing share of the personal computer market, many of these independent firms wrote computer software for use with the "MS-DOS" operating system, and the popularity of their software grew with the popularity of IBM-compatible personal computers. Since their software required the Microsoft operating system, however, users of their products became "locked into" that operating system. If they were to buy another computer, they would have to have an "IBM-compatible" computer (that is, a computer using a version of Microsoft's operating system), or else they would have to get new software and perhaps learn to use it all over again. This "lockin" effect helped create the "IBM-compatible" personal computer industry and make Microsoft's "MS-DOS" operating system an industry standard.

In some cases, patent exhaustion may bar using patent rights in a product with apparently complementary products.[48] The Supreme Court has held that the doctrine of patent exhaustion applied to "method patents" as well as patents for an apparatus.[49] Unless the infringement goes to a combination invention, patent exhaustion may limit the ability to seek separate licensing fees in related markets.[50] Rather, buyers that purchase in one market may

---

[48] Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617, 128 S.Ct. 2109, 170 L.Ed.2d 996 (2008).

[49] *Id.,* 128 S.Ct. at 2117-2118.

> "Eliminating exhaustion for method patents would seriously undermine the exhaustion doctrine. Patentees seeking to avoid patent exhaustion could simply draft their patent claims to describe a method rather than an apparatus. Apparatus and method claims "may approach each other so nearly that it will be difficult to distinguish the process from the function of the apparatus." . . . By characterizing their claims as method instead of apparatus claims, or including a method claim for the machine's patented method of performing its task, a patent drafter could shield practically any patented item from exhaustion. (Footnote omitted.)

[50] *Id.*, 128 S.Ct. at 2120-2121.

sell the product in the second market. This would undercut the patentee's ability to charge different prices in the two markets. If the price in market one is higher than the price in market two, then buyers may have an arbitrage opportunity—buy in market two and sell in market one—undercutting the patent holder's ability to maintain the price differential.

[6]—Obtaining Additional Revenue

Some firms grant intellectual property licenses simply to make extra money. In licensing for this purpose, they often address fields outside their own fields of primary interest. For example, a developer of computer software for mainframe computers might grant other firms licenses to adapt its software to personal computers. Similarly, a biotechnology firm operating in the health care field might license its proprietary cloning techniques to chemical companies for use in developing new plastics or new bacteria for cleaning up oil spills.

Licensing for this purpose works best when the licensor has no interest at all in exploiting its intellectual property in the licensed field. For example, the software developer might have no interest in developing software for the personal computer market and might have no expertise outside the field of mainframe systems. Similarly, the biotechnology company's scientific and marketing personnel might be oriented towards doctors and hospitals, and not toward plastics or oil spill control. If the licensed field is closely allied to the main field of operations of the licensor's business, however, licensing for revenue may inadvertently create undesired competition in the licensor's principal markets.[51] By making copyrighted works available for licensing, a rights holder makes it less likely that unauthorized use would be fair use.[51.1]

[7]—Technology "Barter"

A licensee often has valuable intellectual property of its own that the party granting the license profitably might use. The licensor then may propose an exchange of licenses in which each party grants the other specified rights. This technology "barter" can take many forms. Most common is a "grantback" of improvements, that is, a requirement that the licensee grant back to the licensor rights to improvements in the licensed intellectual property that the licensee may make during the license term.[52]

Technology "barter" is not limited to improvements. Often two firms will grant cross licenses, allowing each other to use their respective technology under similar terms and conditions. When both firms are in the same field of commerce, cross-licensing allows each firm to take advantage of the other's progress in research and development. Cross-licensing can create the same sort of synergy as a joint research and development project, or even a joint

---

[51] See § 1.04[3], [5], [8] *infra*.

[51.1] Grimmelmann, "Inside the Georgia State Opinion," available at laboratorium.net/archive/2012/05/13/inside_the_georgia_state_opinion (last visited Nob. 26, 2012).

[52] See generally, § 7.09 *infra*.

venture, without the inconvenience and delay of establishing joint business operations. This sort of "barter," however, must be handled carefully to avoid unwanted competition, particularly if either party to the licensing agreement is later acquired by a third party with greater resources or different goals.[53]

Whether barter occurs depends in part on the characteristics of the industry. These differences are reflected in the different ways industries make use of the patent system. Whether to seek patent protection at all is a much different decision with respect to pharmaceuticals, where companies depend on patents to exclude competition for their overall product, and computer-related industries, where one patent will not protect a product, but a bulging patent portfolio may be necessary to keep up with the competition.[54] Patent prosecution also shows marked differences. Pharmaceutical, chemical, and biotech applications appear to receive more thorough scrutiny, with more prior art cited, more time spent on examinations, and more actions by the applicants during the process.[55] Computer-related inventions, especially software, show considerably fewer prior art references, perhaps because the sources of such information are less accessible in those areas; rather than appearing in patents and professional journals, prior art may simply be embodied in products or user manuals.[56] The value assigned to patents depends on the sector as well. Pharmaceutical patents are more likely to have a predictable value, whereas software patents are likely to be subject to a higher range of valuations, where such a patent could prove worthless or could a money-spinner if its technology is incorporated in a best-selling product or industry standard.[57] The scope of patents is also highly technology-specific:

> "In some industries, such as chemistry and pharmaceuticals, a single patent normally covers a single product. . . . In industries such as semiconductors, by contrast, new products are so complex that they can incorporate hundreds and even thousands of different inventions— inventions frequently patented by different companies."[58]

In such industries, a valuable asset is a patent portfolio; a mass of patents is worth more than their sum, because the portfolio owner is less likely to be sued by an industry competitor, who would fear a counterstrike.[59] Accordingly, the companies receiving the most patents are all in the computer hardware and electronics industries.[60]

Licensing practices, including litigation to protect licensing markets, vary depending on the industry. The vast majority of patents are never litigated.[61]

---

[53] Cross-licensing for the purpose of avoiding competition of course raises antitrust questions, but cross-licensing is generally governed by the rule of reason and often deemed permissible. See §§ 6.05[2][a][i], 8.03[2] *infra*.

[54] Burk and Lemley, *The Patent Crisis and How the Courts Can Solve It* 50-51 (2009).

[55] *Id*. at 50.

[56] *Id*. at 51.

[57] *Id*. at 49-50.

[58] *Id*. at 54-55.

[59] *Id*. at 55.

[60] *Id*. at 55.

[61] *Id*. at 55.

Litigation in pharmaceuticals is likely to involve a dispute over who can market the most popular drug in a market. Litigation in software is more likely to involve application of an outdated patented technology to a newer generation of software, given the quick turnover in software products and the slow process of patenting.[62] Likewise, the value of patents as a part of the overall company varies with respect to pharmaceuticals, where a single patent could cover a multibillion dollar market, and information technology, where a company is more likely to point to a patent portfolio.[63]

[8]—Enhancing Reputation and Goodwill

Granting licenses is one method of "spreading the word" about a company and its technology, products, or services. The advertising value of licensing obviously works best when the licensor's trademark or trade name is licensed for use in the marketplace along with its intellectual property. Then the licensee's marketing efforts inure to the benefit of the licensor's reputation, at least as long as the licensee maintains an appropriate level of quality in its products, sales, and service.

Yet unless the licensing agreement actually *prohibits* use of the licensor's trademark or trade name, the licensor's goodwill may be enhanced even if the licensee does not widely use the licensor's trademark or trade name. For example, as a newcomer to the computer industry, AT&T gained significant publicity among computer specialists by licensing its proprietary UNIX operating system software (later sold to another firm) to a number of computer makers for use with a variety of different types of personal computers. Although many end users of the computer systems were unaware of the source of the operating system, technical personnel within the industry were aware of it and respected AT&T for its contribution. As in this case, it is sometimes enough that those in the know within the industry—for example, technical specialists—are aware of the source of the licensed technology, even if the public is not.

[9]—Controlling Exploitation

In the process of granting licenses to others, a firm can achieve some degree of control not only over the exploitation of its own innovations, but also over the direction of development in its industry. An innovator naturally retains some control simply by virtue of the fact that it is the source of the licensed innovations and of any improvements, technical information, and support that it provides. In addition, an innovator can to some extent control the evolution of its intellectual property through negotiated limitations in the licensing agreement.[64] Through both its "natural" control and any contractual limitations it is able to negotiate, a firm can influence how other companies use its technology in the marketplace, and hence how that technology develops.

---

[62] *Id*. at 57.
[63] *Id*. at 57.
[64] For legal limitations on use restrictions, see generally: §§ 7.04, 7.05 *infra*.

Third parties not bound by licensing agreements are always free to develop the same or similar technology independently, if the technology is not patented.[65] Accordingly, if a prospective competitor appears eminently capable of entering a particular field on its own—and particularly if it seems about to do so—granting it a license with whatever contractual controls can be negotiated may be the best method for allowing the licensor to control the direction of development in the field and to protect its competitive interests.[66]

The end result, if not the motive, of this control is apparent in the case of Microsoft's licensing IBM to market and distribute the "MS-DOS" operating system. If there had been no such license, IBM might have developed its own unique personal computer operating system, and that operating system might have been very different from Microsoft's. By licensing IBM and its many customers, Microsoft not only obtained access to a huge market for its software, but also managed to make sure that one of the largest markets for personal computers would use Microsoft's own operating system technology. Thus Microsoft achieved a continuing influence on the basic features and the development of that technology. Without such influence, Microsoft might have been left with a smaller market and much less impact on the development of the personal computer industry as a whole.[67]

Licensing practices can have effect in later litigation. In reckoning a reasonable royalty, a court will not be bound by one party's policies. For example, after infringing the copyright in sculpture by using it on a stamp, the United States Postal Service argued that its liability was capped at $5,000, the most that its policies permitted it to pay for image licensing.[67.1] The court rejected that unilateral approach, holding that a reasonable royalty would be determined by a hypothetical negotiation in which both parties

---

[65] Only patents protect intellectual property against truly independent creation, while trade secret and copyright laws do not. See, e.g.: Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 490, 94 S.Ct. 1879, 40 L.Ed.2d 315 (1974) (contrasting patent and trade secret protection); Mazer v. Stein, 347 U.S. 201, 218, 74 S.Ct. 460, 98 L.Ed. 630 (1954) (contrasting patent and copyright protection: "[a]bsent copying there can be no infringement of copyright").

Although independent development does not provide a complete defense to an action for trademark infringement, it does constitute one of the factors that helps to defeat such a claim. See, e.g.:

First Circuit: Pignons S.A. de Mecanique de Precision v. Polaroid Corp., 657 F.2d 482, 487,491 (1st Cir. 1981).

Third Circuit: Scott Paper Co. v. Scott's Liquid Gold, Inc., 589 F.2d 1225, 1230 (3d Cir. 1978).

See also, 17 U.S.C. § 906(a) (explicit statutory authority for reverse engineering of semiconductor chips). See generally, § 1.05[1] *infra*.

[66] Licensing for this purpose, however, may have antitrust overtones. See generally: §§ 7.04, 7.06, 7.08 *infra*.

[67] IBM's subsequent difficulties with its next-generation operating system, called OS/2, show the advantages of early control over the direction of a new technology. Because so many personal computers and application software programs had been designed for use with MS-DOS, customers failed to see the benefits of the new OS/2 operating system, and early marketing results for OS/2 were disappointing, notwithstanding the fact that both Microsoft and IBM backed the marketing effort. See, e.g.: "The Waiting Game that Microsoft Can't Lose," Business Week, at 104 (Sept. 12, 1988); "'Big Blue' No Longer Sings the Big Blues," Los Angeles Times, Pt. 4, p. 1 (Oct. 2, 1988).

[67.1] See Gaylord v. United States, 678 F.3d 1339 (Fed. Cir. 2012).

were willing to bargain. Otherwise, a party could effectively immunize itself against liability by announcing a policy of not paying for rights it used.

The Supreme Court has applied a strong reading of the patent exhaustion doctrine, one that sharply limits the ability to control exploitation of the invention in successive markets.[68] In that case, where the holder of patents in microprocessor and chipset technology licensed a manufacturer to make and sell microprocessors and chipsets, the patentee was unable to bring

(Text continued on page 1-35)

[68] Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617, 128 S.Ct. 2109, 170 L.Ed.2d 996 (2008).

infringement claims against the manufacturer's customers that included the microprocessors and chipsets in computers that fell within the scope of the patents.[69]

With respect to trademark licensing, the trademark owner must maintain some control over the use of the licensed intellectual property in order for the mark to remain distinctive, although it is a rare case holding that a mark holder failed to control use of the mark sufficiently and therefore lost trademark protection.[70] Trademark protection, unlike copyright and patent, requires the holder to control the use of the mark. A trademark serves to distinguish one source of goods or services from other sources. If the mark holder allows others freely to use the mark, then the mark does not serve to identify a source, and so is not a valid mark. Courts, however, generally apply a relatively lax standard. As long as a mark holder retains some ability to control use of the mark, the mark remains valid, even if license widely to others. *FreecycleSunnyvale v. Freecycle Network*[71] was that rare case where the mark holder did not even exercise that level of control. The court held that the licensor engaged in "naked licensing," thereby abandoning the mark. The court held that the licensor did not retain express contractual control or actual control over its licensees' quality control measures, and was unreasonable in relying on the licensee's quality control measures. By licensing the mark without retaining control over its use, the mark owner surrendered its right to exclude others from using the mark. *FreecycleSunnyvale* reminds mark owners not to take on the benefits of licensing the mark without retaining some control over their licensee's use of the mark.

---

[69] *Id*., 128 S.Ct. at 2121-22.

[70] See McJohn, "Top Tens in 2010: Patent, Trademark, Copyright and Trade Secret Cases," NW. J. Tech. & Intell. Prop. (Jan. 2011).

[71] FreecycleSunnyvale v. Freecycle Network, 626 F.3d 509 (9th Cir. 2010).

§ 1.04 Business Disadvantages of Licensing

Whatever its advantages, licensing cannot compare with complete vertical integration. A firm can best exploit its intellectual property if it has the financial and physical resources to perform for itself all of the business operations needed to develop, refine, test, produce, distribute, market, sell, and service its products. Few firms, however, have such complete vertical integration, so most must consider licensing as an option at some time. Those that do must weigh the business disadvantages of granting licenses against the advantages.

[1]—Loss of Control Over Exploitation

The primary disadvantage of granting licenses is loss of control over further exploitation of one's intellectual property. By granting a manufacturing license, for example, a licensor surrenders direct control over the details of the manufacturing process and the quality of the products. Similarly, by granting a marketing and distribution license, the licensor surrenders control over advertising, promotion, channels of distribution, and the licensee's pricing policies.

Licensors often try to maintain some control through negotiated terms of the licensing agreement,[1] but this contractual control is seldom fully effective for three reasons. First, licensees ordinarily resist provisions for strong control; the terms that licensors desire often are watered down in the give and take of negotiation. Second, the antitrust laws restrict the degree of control that a licensor may exercise over the licensee's business, particularly with respect to pricing policy.[2] Third, no matter what the agreement says, as a practical matter, it is the licensee, and not the licensor, that performs the delegated operations. The licensee necessarily has greater control than the licensor simply because the licensee is the one doing the job.

A licensee also has rights. For example, a buyer of goods may bring a claim if a third party has a "rightful claim" of infringement.[2.1] Just as a seller warrants that the goods are merchantable and that they are the seller's to sell, the seller warrants that the buyer will be able to use them without the risk of a third party claiming that the use infringes a patent. Otherwise, buyers could expect to own the goods but not necessarily to use them. The *Uniform Commercial Code*, however, does allow the parties to allocate the risks between them, as with other warranties, such as by excluding warranties or limiting remedies.[2.2]

---

[1] See § 1.03[9] *supra*.

[2] Direct control over a licensee's pricing is generally forbidden by the antitrust laws. See: §§ 6.05[1][b], [2][b], 7.10 *infra*. Even control over the *nonprice* aspects of a licensee's distribution policy is subject to the rule of reason. See: §§ 6.05[1][a], [2][a], [c], 7.02-7.11 *infra*.

[2.1] Phoenix Solutions, Inc. v. Sony Electronics, Inc., 637 F. Supp.2d 683 (N.D. Cal. 2009).

[2.2] *Id*.

This surrender of control requires confidence in the licensee. The licensor must trust the licensee to maintain an interest in commercializing the licensed intellectual property aggressively[3] and must believe that the licensee has the technical and business ability to do so at an acceptable level of quality. The licensor must also respect the licensee's integrity and business ethics, or at least believe that the licensee's approach in these areas is not too different from the licensor's own. Finally, the licensor must trust the licensee not to misappropriate the licensed subject matter or make unauthorized changes in it. Although agreements can provide some comfort on all of these points, a licensor's best protection is familiarity with the licensee—at least enough to be comfortable with the licensee's abilities and intentions.

The patent exhaustion doctrine may reduce the ability to control exploitation of the patent in secondary markets.[4] Where the holder of patents in microprocessor and chipset technology licensed a manufacturer to make and sell microprocessors and chipsets, the patentee was unable to bring infringement claims against customers of the manufacturer that included the microprocessors and chipsets in computers that fell within the scope of the patents.[5]

With respect to trade secrets, the rights owner must exercise control over the intellectual property licensed or risk loss of rights in information that loses its status as secret. Despite the incentives of business transactions and mutual trust, informality may not be forgiven where it undercuts the relevant policy for protection.[6] Trade secret law helps those who help themselves. Valuable information, unknown to competitors who could derive value from it, may not be a trade secret. To have the legal protection of trade secret law, a party itself must take reasonable measures to keep the information secret. In *R.C. Olmstead v. CU Interface, LLC*,[7] the court held that a user interface not a trade secret, because the claimant showed it to others without requiring a confidentiality agreement or imposing restrictions against third party access. To have trade secret protection, one cannot simply rely on the discretion of others. Legal and practical restrictions must be used to trigger the additional protection of trade secret law.

A trademark licensor may be liable for defective products sold by the licensees. Under the "apparent manufacturer" doctrine, the trademark owner may be liable for injuries caused by goods bearing its licensed mark, provided that it participated substantially in the design, manufacture, or distribution of the products. Thus, a defendant elevator company was liable for

---

[3] Contractual terms in the licensing agreement may obligate the licensee to be diligent in exploiting the licensed subject matter commercially. See § 8.07[2][3] *infra*. In addition, the law will imply obligations of diligence in many contracts. See § 8.07[1] *infra*.

[4] Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617, 128 S.Ct. 2109, 170 L.Ed.2d 996 (2008).

[5] *Id*., 128 S.Ct. at 2122 (2008).

[6] See McJohn, "Top Tens in 2010: Patent, Trademark, Copyright and Trade Secret Cases," NW. J. Tech. & Intell. Prop. (Jan. 2011).

[7] R.C. Olmstead, Inc. v. CU Interface, LLC, 606 F.3d 262 (6th Cir. 2010).

injuries caused by an escalator made by an overseas joint venture, where defendant provided its marks and technology under a license.[7.1] This rule is increasingly important in an era when licensing transactions are increasingly common and trademark owners frequently rely on manufacturers who can produce the goods at lower costs, sometimes in other jurisdictions. Trademark owners must be cognizant that a licensing transaction is not simply an agreement that brings in revenue; it also brings in legal risks analogous to those that the trademark owner would have if it manufactured the goods itself—legal risks created by products liability, breach of warranty, and consumer protection law. In short, a trademark owner is not simply able to take the benefits of commercializing a symbol on which consumers rely, without taking responsibility for how that symbol is used to communicate with consumers.

[2]—Loss of Contact with Customers

Business experience has stressed the importance of continuous contact with customers in discerning trends in the marketplace and in producing innovations in products and services.[8] When a firm delegates part of its operations to others through licensing, it may lose contact with its ultimate customers, the "end users," and thereby lose its best source of competitive ideas.

For example, a biotechnology company that licenses its gene splicing techniques to drug companies may have no contact with the drug stores, hospitals, doctors, and patients that ultimately supply and use its products. Similarly, a computer software house that markets its software through computer manufacturers may have little direct contact with end users of the software. In these cases, information from the "end users" regarding product flaws, customer needs, changes in the marketplace, and suggestions for improvement will flow to the drug companies or computer manufacturer and may never reach the licensor. The resulting loss of new ideas for products and services may reduce the licensor's ability to compete.

[3]—Loss of Incentive for Expansion

Many firms license their intellectual property for the purpose of entering new geographic[9] or product[10] markets, or for the purpose of achieving earlier market entry.[11] To the extent that granting licenses helps achieve these goals, it is of course beneficial.

[7.1] Lou v. Otis Elevator Company, 77 Mass. App. Ct. 571, 933 N.E.2d 140 (Mass. App. 2010).

[8] See Waterman and Peters, *In Search of Excellence* 193-198 (1982) ("The excellent companies are better listeners. . . . Most of their real innovation comes from the market").

[9] See § 1.03[2] *supra*.

[10] See § 1.03[3] *supra*.

[11] See § 1.03[4] *supra*.

However, there is another side to the coin. By delegating approaches to new geographic or product markets to others, a firm reduces its own incentive and ability to compete in those markets. Over time, it may lose (or fail to generate) the capability of addressing those markets itself.

A licensor may even lose valuable personnel or resources to its licensees. For example, research specialists in licensed product areas or marketing personnel with regional proclivities may gravitate to licensees that operate in those product areas or regions. As a result, the licensor's ability to foresee and address new markets may atrophy. In any event, its ability to address new markets may be adversely affected by competition for personnel and resources—or competition in the marketplace—with its own licensees.

[4]—Loss of Incentive for Vertical Integration

Licensing also may reduce a licensor's incentive to achieve full vertical integration. If a firm delegates a significant fraction of operations to others through licensing, it may ultimately lose the incentive or ability to perform those operations itself. For example, if a firm delegates production through licensing, it may fail to attract technical and managerial personnel with interests and expertise in manufacturing, or it may lose the ones it has. Even if it performs some manufacturing, delegation of a significant fraction of production may dry up the stream of ideas that flows from actual trial-and-error experience. After a period of time, the firm may be in a poor position to assume delegated manufacturing operations even if it has the financial resources to do so. If a firm delegates significant portions of its production, marketing or distribution, it may never develop the synergy or economies of scale of a vertically integrated concern and therefore may be uncompetitive.

The patentee, in considering whether the license the patent, should consider the loss of control over vertical markets.[12] According to the Supreme Court, when a patentee licenses a manufacturer to make and sell a product, the patentee thereby loses the right to enforce the patent against those that use those authorized products, even if they incorporate them into otherwise infringing products.[13] Where the holder of microprocessor and chipset patents licensed their manufacture, the patentee could not enforce the patent against the licensee's customers, who incorporated the microprocessors and chipsets into computers.[14] In short, by licensing into one market, the paten-

(Text continued on page 1-39)

---

[12] Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617, 128 S.Ct. 2109, 170 L.Ed.2d 996 (2008).

[13] *Id.*, 128 S.Ct. at 2122.

[14] *Id.*

tee effectively integrated its own licensing rights, because the license effectively covered vertical markets (the market for microprocessors and chipsets and the underlying market for computers incorporating microprocessors and chipsets). The Court, however, did not address the extent to which patent holders may use restrictions in the license agreement to keep the markets separate.

[5]—Loss of New Business Opportunities

Developments in technology and the creative arts are often synergistic, particularly in today's "global village." Nearly simultaneous developments of similar or complementary technologies in different parts of the world are becoming common, and advanced communication has made possible international trends in the arts, literature, and entertainment. In exploiting its intellectual property, or in cooperating with others in related fields, a firm may discover opportunities for expansion of its business, improvement of its products or services, or both. The same opportunities, however, may not appear to a firm that is not actively present in the marketplace, or that has delegated important business operations to others. Thus granting licenses may reduce the number of new business opportunities that come to the attention of the licensor.

[6]—Dependence on Others for Revenue

When a firm grants licenses to others, it depends on their efforts to generate revenue from licensed activities. This raises what economists call the principal / agent problem. If the license delegates responsibility for an entire business operation, the dependence may be complete; the licensee's failure to manufacture, for example, may kill a product and deprive the licensor of any revenue.

This dependence may be less significant if the license is non-exclusive. If a manufacturer licenses a distributor to market and distribute patented products on a nonexclusive basis, the manufacturer also may appoint other distributors, or may itself enter the marketplace if the distributor does not perform well.

If the license is exclusive, however, the dependence is more acute. In the extreme case, a firm granting exclusive, worldwide marketing and distribution rights to its only product is totally dependent upon its licensee for revenue, and ultimately for the success of its products and its business. If the licensee has other interests, does not have the capability or personnel for effective marketing and distribution, or simply makes too many mistakes, the licensor's business may be ruined through no fault of its own. For this reason, most firms grant exclusive licenses only in limited fields of use,[15] or for limited territories,[16] or in consideration of the licensee's agreement to meet specified performance criteria.[17]

---

[15] See generally, § 7.04 *infra*.
[16] See generally, § 7.11 *infra*.
[17] See § 8.07[3] *infra*.

Even when a licensing agreement is not exclusive by its terms, the facts of life in a particular industry may make it exclusive in practice. For example, suppose a small computer software developer negotiates a nonexclusive license for nationwide marketing and distribution of its sole product by one of several major software publishing houses. Since major publishing houses usually require exclusivity, other major publishing houses are unlikely to accept similar arrangements, even though the software developer may have a legal right to enter into them. On the other hand, small publishing houses may be reluctant to enter similar nonexclusive arrangements with the software developer for fear of competition from the major house. As a result, the licensee may have what is in fact an exclusive relationship without the licensee's commitment to the performance criteria and other terms that normally accompany such a relationship.[18] In that case, a firm granting a nonexclusive license may have the worst of both worlds.

[7]—Risk of Piracy

One of the primary risks of licensing is the danger that licensed intellectual property will be used or disclosed without authorization. Unauthorized use may constitute willful "piracy," or it may be inadvertent. A licensee or its customers may deliberately copy mask works or copyrighted television programs, or may use technology or manufacture goods inadvertently, in ways not authorized by the licensing agreement.

To some extent, the risk of piracy increases with the size and scope of an enterprise, whether or not its operations are delegated to others. However, the delegation of business operations through licensing increases the risks of piracy by reducing the licensor's control over both the manner in which intellectual property is exploited and the precautions used to prevent unauthorized use and disclosure. Many licensing agreements necessarily permit the licensee to provide the intellectual property to its employees, consultants, suppliers, and customers, over whom the licensor normally has little control.

Other risks arise out of the licensee's changes and improvements in the licensed intellectual property. A licensee may market products or services that are similar to, but not recognizably the same as, the subject matter of the licensing agreement. This may make it hard for the licensor to "police" the use of that subject matter and detect unauthorized use of it. For example, an article sold in the marketplace may give no hint of the patented process by which it was produced, or a computer software developer may hide another's work product in the complex binary code for its software without real fear of detection in the ordinary course of business. Because detection of unauthorized changes and improvements may be difficult, each firm that grants licenses must rely to some extent upon the integrity of its licensees.

Even if new uses of the licensed intellectual property are not hard to detect, it may be difficult to define precisely what portion of the changes and improvements belong to the licensor, and at what point they are so substan-

---

[18] See: § 8.07[1] *infra* (implied obligations); § 8.07[2], [3] *infra* (explicit obligations).

tial that they constitute a "new product" not covered by the licensing agreement. These issues are common subjects of intensive discussion in license negotiations, but they are seldom capable of precise and completely satisfactory resolution. Consequently, they may provoke dispute over who receives credit for the improvements, whether and when royalties are due, and the scope of the licensing arrangement long after it is signed. To avoid these disputes, some licensing agreements, particularly those in the entertainment industry, specify in great detail what changes the licensee can and cannot make in the licensed intellectual property.

[8]—Loss of Technological "Edge"

When it delegates responsibility for research and development or product improvements to others, a firm may lose its technological "edge." Know-how is a key aspect of a firm's intangible assets. Modern industries seldom delegate responsibility for research and development or creative endeavors, but granting a license may have the same effect. For example, if a biotechnology company licenses its proprietary cloning techniques to a large drug company, the drug company may create new internal research and development programs to explore wider application of the techniques. By granting a license with a broad field of use, the biotechnology company may in effect commission a powerful competitor in the same area of research.

The same may be true in the entertainment field. If, for example, a music publisher grants others permission to adapt and produce all of its music, it may lose control of modern trends in music, or at least may remain unaware of them. In any event, its reputation as a trend setter may suffer. This in turn may affect its ability to procure or develop new musical properties and thereby to remain in the forefront of the industry.

Licensing also may deprive the licensor of the information, experience, and access to ideas that result from controlling or participating in exploitation of the intellectual property more directly, either alone or in a joint venture. Over time, the licensor may lose trained personnel who see better career opportunities with the licensee or elsewhere. While these effects can be ameliorated by suitable restrictions in the licensing agreement, they are important points for any licensor, particularly a start-up company, to consider.

[9]—Loss of Public Recognition

Unless a licensor receives advertising credit for its contribution to a licensee's products or services, its contribution may be hidden. Then the benefits of public recognition, enhanced reputation, and goodwill flowing from the intellectual property may accrue to the licensee, rather than the licensor. Indeed, some licensees may use economic leverage to insist upon the right to take credit in the marketplace for intellectual property developed by their licensors.

Sometimes, however, there is more than one "public" to be addressed. For example, there may be a "public" consisting of unsophisticated consumers, and another "public" consisting of knowledgeable insiders in the industry. A licensor may be able to achieve recognition among insiders in the industry without insisting upon advertising credit in the larger marketplace.

§ 1.05 The Subject Matter of Licensing: Bundles of Intangibles

The subject matter of licensing is "intellectual property"—any type of intellectual property. A licensing agreement may cover patents, copyrights, mask works, trade secrets, trademarks, confidential information, intangible rights under state law, and any new forms of intellectual property that Congress, state courts or legislatures, or foreign nations may create.[1] Each type of intellectual property provides its own "bundle of rights," which may be granted or withheld by a licensing agreement in whatever permutations and combinations suit the parties' business needs.

[1]—"Bundles" of Rights in Intellectual Property

In licensing, each type of intellectual property provides a "bundle" of more or less exclusive rights defined by statute, common law, or contract. For example, a patent provides the rights to exclude others from making, using, selling, offering for sale, or importing the patented invention[2] for a term beginning when the patent issues and ending twenty years after the relevant patent application date.[3] A copyright provides six exclusive rights specified in the statute: the rights to reproduce, distribute, publicly perform, and publicly display the copyrighted work, to prepare derivative works based on it, and, "in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission." See 17 U.S.C. § 106. The digital audio transmission right for sound recordings is conditioned by complex limitations and provisions for compulsory licensing under 17 U.S.C. § 114(d).[4] Similarly, the owner of a United States mask work has the exclusive rights to reproduce the mask work, to manufacture semiconductor chip products using it, and to import those products into and distribute them in the United States.[5] Every legal category of intellectual property has its own "bundle" of exclusive rights to be transferred or licensed, separately or together.

The character of the rights in each area varies, in accordance with the underlying policies. Fair use is key to copyright, for example, because it provides a safety valve that prevents overly formalistic application of the exclu-

---

[1] See § 1.01 *supra*.

[2] See 35 U.S.C. § 154(a)(1); 271(a). See generally, Dratler, *Intellectual Property Law*: *Commercial, Creative, and Industrial Property* § 2.05[1] (Law Journal Seminars-Press 1991). If the invention is a process, the patent also provides the right to exclude others from using, selling, offering for sale, or importing products of the patented process. See: 35 U.S.C. §§ 154(a)(1), 271(g); Dratler, *supra*, at § 3.01.

[3] See 35 U.S.C. § 154(a)(2). See generally, Dratler, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 2.05[2][a], [c] (Law Journal Seminars-Press 1991). Any patent's term may be extended for certain reasons, usually for up to five additional years, see 35 U.S.C. §§ 154(b), 155, 155A, and the terms of patents for regulated drugs, medical devices, food additives and color additives may be additionally extended for up to five years to compensate for delays in federal pre-marketing regulatory review. See: 35 U.S.C. § 156; Dratler, *supra,* at § 2.05[2][b].

[4] See 17 U.S.C. § 106. The digital audio transmission right for sound recordings is conditioned by complex limitations and provisions for compulsory licensing under 17 U.S.C. § 114(d).

[5] See 17 U.S.C. § 905.

sive rights of a copyright holder.[6] It also provides room for expressive use of works, thus making copyright compatible with the First Amendment.[7] But, fair use remains a difficult rule to apply to any new set of facts because of its multi-factor, case-specific analysis. By contrast, in patent and trademark, such expressive interests do not require the broad brush approach of fair use.

The rights that a license conveys, however, need not match precisely one of the "sticks" in the relevant "bundle" of intellectual property rights. It is enough if the rights conveyed fall generally within the scope of the more or less exclusive rights provided by statute or common law.[8] New technology usually falls within the scope of existing intellectual property protection, and requires licensing for commercial exploitation, even though its existence may not have been contemplated at the time the relevant legal principles were adopted by statute or developed at common law.[9] Were this not the

---

[6] See McJohn, "Top Tens in 2010: Patent, Trademark, Copyright and Trade Secret Cases," NW. J. Tech. & Intell. Prop. (Jan. 2011).

[7] See generally, Eldred v. Ashcroft, 537 U.S. 186, 219-220, 123 S.Ct. 769, 154 L.Ed.2d 683 (2003).

[8] An example is so-called "synchronization," or "synch" rights under copyright law, which comprise the rights to use a copyrighted musical combination in synchronization with an audio-visual work, as in preparing a movie sound track. See ABKCO Music, Inc. v. Stellar Records, Inc., 96 F.3d 60, 62 n.4, 40 U.S.P.Q.2d (BNA) 1052 (2d Cir. 1996) ("The Copyright Act does not explicitly confer synchronization rights, but courts have held that the synch right is derived from the exclusive right of a copyright owner, under 17 U.S.C. § 106(1), to reproduce his work"). (Citations omitted.) See also, Fred Ahlert Music Corp. v. Warner/Chappell Music, Inc., 958 F. Supp. 170, 172, 42 U.S.P.Q.2d (BNA) 1716 (S.D.N.Y. 1997) "(A synchronization license allows a film company to use a song in a movie in synchronization with an on-screen image").

[9] See, e.g.:

Supreme Court: Diamond v. Chakrabarty, 447 U.S. 303, 316, 100 S.Ct. 2204, 65 L.Ed.2d 144 (1980) (patent law should be broadly construed to cover living organisms); Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 57-58, 60, 4 S.Ct. 279, 28 L.Ed. 349 (1884) (upholding copyright protection for photograph although it represented new technology at time).

First Circuit: Digital Equipment Corp. v. Altavista Technology, Inc., 960 F. Supp. 456, 475-476, 478 (D. Mass. 1997) (granting preliminary injunction against trademark infringement on defendant's World Wide Web home page, after finding likelihood that defendant breached trademark license and that its doing so constituted trademark infringement).

Second Circuit: ABKCO Music, Inc. v. Stellar Records, Inc., 96 F.3d 60, 62 & n.4, 40 U.S.P.Q.2d (BNA) 1052 (2d Cir. 1996) (producers and distributors of karaoke versions of songs require synchronization licenses to reproduce and distribute video images of lyrics, as well as other video images, along with sounds of songs).

Ninth Circuit: Cohen v. Paramount Pictures Corp., 845 F.2d 851, 854 (9th Cir. 1988) (license, made before invention of videocassettes, to record and copy motion picture and exhibit it "by means of television" did not include right to distribute it in videocassette form).

Cf:

Seventh Circuit: Intermatic, Inc. v. Toeppen, 947 F. Supp. 1227, 40 U.S.P.Q.2d (BNA) 1412, 1419, 1423-1424 (N.D. Ill. 1996) (by summary judgment enjoining defendant "cybersquatter" from claiming or using plaintiff's trademark as Internet domain name on grounds of federal and state trademark dilution, but denying both parties summary judgment on trademark infringement and unfair competition claims).

Ninth Circuit: Panavision International, L.P. v. Toeppen, 945 F. Supp. 1296, 1304, 40 U.S.P.Q.2d (BNA) 1908 (C.D. Cal. 1996) (enjoining "cybersquatter" on grounds of federal and state trademark dilution, and refusing to reach trademark infringement and unfair competition claims).

case, intellectual property protection would be emasculated, for its very purpose is to encourage invention or creation of things that are unknown, unplanned, and unforeseen.[10] The Supreme Court reaffirmed that there are no categorical exemptions from patentable subject matter, rejecting proposed exclusions for patents on business methods or on inventions that are not tied to a particular machine or that transform an article.[11] So novel and unknown subject matter of all stripes may be within patent subject matter. This principle applies with particular force to the copyright statute, which was consciously drafted to insure coverage of future technology.[12]

Every kind of intellectual property has its own peculiar bundle of exclusive rights. The strength of those rights depends strongly on the kind of intellectual property at issue—in particular, on whether it derives from the "limited term" paradigm of patents and copyrights or the "unlimited term" paradigm of trade secrets, trademarks, and unfair competition.[13] Patents provide nearly absolute exclusionary rights[14] for a relatively short period of time.[15] Copyrights protect against infringement of six specified exclusive

---

[10] See Diamond v. Chakrabarty, 447 U.S. 303, 316, 100 S.Ct. 2204, 65 L.Ed.2d 144 (1980) ("[a] rule that unanticipated inventions are without protection would conflict with the core concept of the patent law that anticipation undermines patentability . . . . Congress employed broad general language in drafting § 101 [of the Patent Act] precisely because [pioneering] inventions are often unforeseeable").

[11] See Bilski v. Kappos, _ U.S. _, 130 S.Ct. 3218, 177 L.Ed.2d 792 (2010).

[12] Under 17 U.S.C. § 102(a), copyrighted works may be fixed in any "tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." See also: 17 U.S.C. § 101 (definitions of "copies" and "phonorecords," containing similar language); H.R. Rep. No. 1476, 94th Cong., 2d Sess. 52 (Sept. 3, 1976), reprinted in 1976 U.S. Code Cong. & Admin. News 5659, 5665 (stating purpose of language: to make copyright protection independent of current technology). See generally, Dratler, *Intellectual Property Law: Commercial, Creative, and Industrial Property* § 5.03[1][a] (Law Journal Seminars-Press 1991).

[13] See § 1.02[1] *supra*.

[14] A patentee has the legal right to refuse to license the patented invention, and indeed to suppress it, for the term of the patent. See 35 U.S.C. § 271(d)(4) (refusal to license or use any rights to patent does not constitute patent misuse or illegal extension of patent right). See also: Dawson Chemical Co. v. Rohm & Haas Co., 448 U.S. 176, 214-215, 100 S.Ct. 2601, 65 L.Ed.2d 696 (1980) (when nonstaple chemical had no known use other than as herbicide, patentee of method for using chemical as herbicide could control manufacture and sale of chemical by others and could refuse to grant licenses in order to arrogate market for chemical to itself); Special Equipment Co. v. Coe, 324 U.S. 370, 379-380, 65 S.Ct. 741, 89 L.Ed. 1006 (1945) (patent holder could enforce patent on subcombination of patented combination, even though patent holder had never used or manufactured subcombination by itself); Continental Paper Bag Co. v. Eastern Paper Bag Co., 210 U.S. 405, 428-429, 28 S.Ct. 748, 52 L.Ed. 1122 (1908) (when expense of modifying existing plant to practice patent would have been considerable, even if old machines could have been altered, suppression of patent to preserve investment in plant, which did not diminish supply or raise prices, was not unreasonable or unlawful, even though use of invention might have produced better products).

See generally, § 3.02[2], [4] *infra* (discussing refusal to license and suppression of patents).

[15] In the United States, the patent term for utility and plant patents is generally twenty years from the relevant application date, subject to extension, see the text accompanying Ns.2-3 and N.3 *supra*; and for design patents it is fourteen years, without extension, see: 35 U.S.C. §§ 154, 173.

rights,[16] and their term, although finite, is much longer.[17] On the other hand, protection of trade secrets and trademarks, although potentially infinite in duration, prohibits only misappropriation by "improper means" and likelihood of confusion, respectively. The protection does not provide exclusive rights in any absolute sense.[18] Yet in each case, it is the intellectual property owner's right to exclude others—no matter how limited—that permits the owner to demand consideration, such as royalties, for the license.

An exclusive licensee has standing, even if other licensees have authority to sublicense their exclusive or nonexclusive rights.[18.1] By definition, the exclusive licensee has control over one domain of the patent rights and therefore may enforce those rights, even though other domains may have been carved up among multiple parties. The rights to exclude are limited to the exclusive rights held, so the exclusive licensee cannot enforce infringement of rights held by others, even those infringements may have indirect effect on the exclusive licensee, by making the practical value of its rights lessen.

If there is no valid intellectual property, the license agreement may fail for lack of consideration.[19] Moreover, if a party attempts to exact royalties from a weaker party by insisting on a "licensing agreement" for material that is in the public domain, there may be a violation of the antitrust laws.[20] If the would-be licensor contacts customers or suppliers of the potential licensee, claiming exclusive rights in the subject matter to be "licensed" while knowing no valid intellectual property exists, he may also be liable for business torts.[21] Unless otherwise stated, the discussions in this book assume

---

[16] See 17 U.S.C. § 106. See also the text accompanying Ns. 3-4 *supra* and N. 4 *supra*. Copyrights do not protect against genuinely independent creation of the same form of expression. See, e.g.:

Supreme Court: Mazer v. Stein, 347 U.S. 201, 218, 74 S.Ct. 460, 98 L.Ed. 630 (1954) ("Absent copying there can be no infringement of copyright"). (Footnote omitted.)

Second Circuit: Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, 54 (2d Cir. 1936) (L. Hand, J.) (*dictum:* fortuitous independent creation of Keats' "Ode on a Grecian Urn" would merit separate copyright protection).

See also: § 1.03[9] *supra*; § 2.02[1][b][i] *infra* (discussing economic effects of relative weakness of copyright protection).

[17] In the United States, the copyright term depends on a number of factors, including who is the author. See 17 U.S.C. §§ 302-305. For works created after 1977 by identified, individual authors, it lasts for the lifetime of the last surviving author, plus seventy years. See 17 U.S.C. § 302. Thus, for example, if an author writes a novel when she is fifteen and lives to be ninety-five, her copyright will subsist for 150 years.

[18] See § 1.02[1] *supra*.

[18.1] WiAV Solutions LLC v. Motorola Inc., 2010 WL 5256801 (Fed. Cir. 2010).

[19] While this possibility exists in theory, failure of consideration is rare in practice. Since contract law looks only to the existence of consideration, and not its amount, any colorable intellectual property normally provides sufficient consideration to validate a license agreement as a matter of contract law. Moreover, license agreements often cover several different types of intellectual property, and some provide consideration (such as goods or services) other than the intellectual property itself. Under these circumstances, invalidation of the intellectual property, or part if it, does not cause a total failure of consideration. See: § 2.03[1][a] *infra*.

[20] See § 2.04 *infra*.

[21] See § 2.05 *infra*.

that the licensor (or someone father up the chain of licensing) has valid intellectual property rights to support the licensing agreement.

The value of the bundle of rights depends on whether the courts will enforce them. The Federal Circuit, the court in the United States that hears patent appeals (subject to occasional review by the Supreme Court) has applied patent law differentially. The starkest examples are in the contexts of biotechnology and software.[22] In the biotechnology context, the court has applied a strict written description requirement (such as requiring disclosure of genetic sequences, as opposed to functional descriptions, even where the description lays out a clear plan to get the sequence) and a relatively low obviousness requirement (by stressing the biotechnology is an unpredictable art, so inventions are risky and therefore not obvious).[23] In the software context, the court has applied a lax written disclosure requirement, accepting functional descriptions, on the theory that writing the software code to implement them is well within the typical skill in the art. The court has, however, applied a higher obvious requirement for software, if not always consistently.[24]

Shifting to enforcement under federal copyright law, the bundle of rights can also become a bundling of separate copyright, such as where rights are aggregated for the purposes of enforcement. A thorny area of implied license (and application of copyright's fair use doctrine) involves the use of take down notices sent to Internet service providers. One reason that fair use remains an unsettled doctrine is that it must constantly be adapted to new types of infringement cases. To discuss an important case, Righthaven has a Tolkienesque name, but is a business built on the convergence between copyright and the Internet, that world-wide machine for making and distributing copies.[25] Righthaven identifies Web sites that have posted material copied from other sites. It purchases the rights to the copied material, and sues for infringement. The question raised is one endemic on the Web: what is the scope of fair use? The court in *Righthaven* held that it was fair use, where a real estate company copied some eight sentences from a newspaper article.[26] The court gave great weight to the factual nature of the text. Factual works have much thinner protection that creative works, because facts themselves are not copyrighted. Another strong factor was that the copying was not a market substitute for the originals. In fact, the copier linked to the original story, so may have actually increased its readership. So the enforcement of the bundle of rights will depend on the nature of the underlying content.

---

[22] Burk and Lemley, *The Patent Crisis and How the Courts Can Solve It* 60-61 (2009).

[23] *Id*. at 60-61.

[24] *Id*. at 61.

[25] See Righthaven v. Realty One Group Inc., 2010 WL 4115413 (D. Nev. Oct. 19, 2010). See McJohn, "Top Tens in 2010: Patent, Trademark, Copyright and Trade Secret Cases," NW. J. Tech. & Intell. Prop. (Jan. 2011).

[26] *Righthaven v. Realty One Group, Inc*., N. 25 *supra* at *3.

Patent theory responds to this industry diversity with a diversity of theories. Prospect theory suggests that patents should be sufficiently strong to protect not just invention, but the entire process of investing in innovation, and "coordinating the development, implementation, and improvement of an invention."[27] Competitive innovation theory suggests that patents do not provide a monopoly (as is often thought), but rather serve to foster competition by giving parties rights in competing inventions.[28] Cumulative innovation theory looks to balancing incentives to inventors against the costs of their patent to other inventors, using "tailored incentives" to encourage both initial inventors and improvers.[29] Anticommons theory raises concerns that patents can result in economic inefficiencies, such as where many different technologies must be aggregated for innovation, raising hazards of holdouts, rent-seeking, and transaction costs.[30] Closely related to that is the idea of the patent thicket, where so many patents have been awarded within an industry that innovation is slowed by the uncertainty and costs of resolving and licensing the competing claims.[31]

In defining the bundles of rights implicated by intellectual property law, it is worth giving an example of the issues that patent ownership and inventorship raise when they intersect with commercial law. *Sky Technologies* addressed a key issue in the intersection between intellectual property and commercial law.[32] Possession had played a comical role in *In re Coldwave Systems*.[33] A lender had not filed to perfect its security interest in a patent given as collateral for a loan. The creditor creatively, if vainly, argued that it need not file, because it had possession of the patent certificate, just as a pawnshop perfects by possession of the jewelry in its safe. *Coldwave* reflects a great uncertainty in the intersection between commercial law and intellectual property. Courts have struggled to rule whether a creditor should file in the federal office (the USPTO or the Copyright Office) or in the relevant state Uniform Commercial Code filing system.[34] *Sky Technologies* addressed a related uncertainty: whether federal law or state law governs the procedure for sale of the collateral, if the lender forecloses and sells the patent. The Federal Circuit held that state law governs. That meant that state foreclosure law could apply, and the patent sold subject to the same procedures and protections that govern other types of collateral. The case illustrates well that federal inventorship rules govern initial patent rights, but inventors must also contend with the thicket of state commercial law and property rules.

---

[27] *Id*. at 69-71.
[28] *Id*. at 72-73.
[29] *Id*. at 73-75.
[30] *Id*. at 75-77.
[31] *Id*. at 77-78.
[32] Sky Technologies v. SAP, 576 F.3d 1374 (Fed. Cir. 2010).
[33] In re Coldwave, LLC, 368 B.R. 91, 98 (Bankr. D. Mass. 2007).
[34] See In re Cybernetic Services. Inc., 252 F.3d 1039, 1045 (9th Cir. 2001) (holding security interest in patents perfected by state law filing); In re Peregrine Entertainment, Ltd., 116 B.R. 194, 199-200 (C.D. Cal., 1990) (holding federal filing required for copyrights).

[2]—Combining Bundles of Rights

Licensing agreements seldom cover only one type of intellectual property. Normally they describe business arrangements, and business arrangements rarely dovetail precisely with abstract legal categories. In many cases, the "bundle of rights" covered by a licensing agreement consists of rights under several legal categories of intellectual property.

For example, consider a license to manufacture and market a computer system using new computer architecture. If the computer architecture or particular circuits in the computer are patentable, the license may include patent provisions. If the system uses computer software, the license also may cover copyright in the software. If the software uses trade secrets, or if the process used to manufacture the computer system involves trade secrets not disclosed by the system itself, then they too must be licensed and properly protected. If the computer uses specialized integrated circuitry, the license also may cover mask works for that circuitry. Finally, if the licensor has a valuable trademark, the agreement may grant the right to use the trademark to promote and market the computer systems. For each type of intellectual property, the licensing agreement must specify what rights in the "bundle of rights" are granted to the licensee, and what rights are reserved for the licensor.[35] A proper licensing agreement for this transaction therefore would cut across most of the available legal categories of intellectual property.

Complex agreements are not confined to computer technology, or even to complex technology. A licensing agreement for a biotechnology product, for example, might include patents on new life forms or biologically active molecules,[36] trade secrets with respect to unpatentable production processes, and valuable trademarks useful in marketing. In the entertainment field, licenses to "publish" audiovisual programs in laser disk form might cover patents on the laser disks, secret but nonpatentable production technology, copyright in the entertainment material, and trademarks.[37]

Licensing agreements in the real world generally comprise bundles of rights in a number of distinct items of intellectual property, and it therefore makes little sense to divide discussion of them strictly along conceptual lines, based on abstract legal categories. Consequently, this book is organized primarily by types of contract terms, using terminology likely to be familiar both to lawyers and to business people.

---

[35] See: § 1.01[2] *supra*; §§ 1.06[1], 3.04[1] *infra*.

[36] New life forms may be patentable. See, e.g.:

Supreme Court: Diamond v. Chakrabarty, 447 U.S. 303, 305 & ns. 1, 2, 309, 100 S.Ct. 2204, 65 L.Ed.2d 144 (1980) (bacterium engineered to digest oil spills are patentable subject matter).

Board of Patent Appeals and Interferences: Ex Parte Allen, 2 U.S.P.Q.2d (BNA) 1425, 1426-1427 (Board of Pat. App. & Int. 1987) (oysters with artificially induced polyploidism were patentable).

[37] Commonly the production technology and the entertainment material are licensed separately, but a sublicensing agreement (for example, to a foreign manufacturer) might include both.

Insofar as contract and tort doctrines affect those terms, the effect is often independent of the type of intellectual property at issue, so distinctions based on abstract categories are unnecessary. Insofar as those terms are subject to antitrust law and related misuse doctrine, the effect of the law may depend upon the type of intellectual property at issue. Intellectual property protection on the patent-copyright paradigm, which provides strongly exclusive rights for limited times, creates greater danger to free competition than that built on the weaker paradigm of trade secrets, trademarks, and unfair competition.[38] Therefore licensing agreements covering patents and copyrights are likely to merit a greater degree of antitrust and misuse scrutiny than those involving unlimited-term intellectual property. Similarly, because patents protect against independent creation while copyright does not, patent licenses merit greater antitrust and misuse scrutiny than licenses of copyright.[39]

---

[38] See § 1.02[1] *supra*.

[39] *Compare*, § 2.02[1][a][ii] *infra* (discussing economic effects of strength of patent protection), with § 2.02[1][b][i] *infra* (discussing economic effects of weaker copyright protection).

§ 1.06 Open Source Licensing

A growing movement seeks to keep copyrighted works effectively within the public domain by the use of licenses that ensure continued public access to the works. The leading edge was in software, but the idea has carried over to other types of works, especially literary and visual works. Someone who writes software can give the world permission to use it for free, subject to certain restrictions, by using an open source license (also known as a free software license). Open source software is not in the public domain. The software is kept under copyright but licensed under one of various open source licenses, such as the General Public License ("GPL"), the certification mark, "OSI Certified," or the Artistic License.[1] Likewise, for a novel, video, or image, one could license the work for free use by others using the Creative Commons license.[2]

Although an open source license typically grants considerable rights without asking for payment in return, its restrictions are enforceable, as the Federal Circuit confirmed in a case of first impression in 2008.[3] If a user does not abide by the restrictions, the copyright holder can recover for copyright infringement, (on the theory that unauthorized use beyond the conditions in the license took the licensee beyond the scope of the nonexclusive license) and is not limited to an action for breach of license.[4] Courts will reject the failure to give attribution argument, as that would merely be a breach of the licensing contract, not copyright infringement.[5] Where a company downloaded open source code and incorporated it into a commercial product without giving any the required attribution to the author, that was infringement of the copyright in the open source code.[6] Open sources licenses are enforceable contracts, not gifts. So open source licenses can be a tool to encourage the use of the subject matter but control the manner in which it is used. The remedies available for breach of an open source license, however, remain unclear. Because the breach does not involve loss of royalties or of exclusive use of the material, courts may be less apt to grant damages or injunctions than with respect to licenses that are more purely commercial in nature.[7]

The copyright management information rules give force to open source software licenses. Open source software is frequently provided without charge but subject to copyright license terms. If a party downloads software and strips out the terms, in order to use the software in a way inconsistent

---

[1] See McJohn, "The Paradoxes of Free Software," 9 Geo. Mason L. Rev. 25 (2000).
[2] See http://creativecommons.org (last visited March 17, 2009).
[3] Jacobsen v. Katzer, 535 F.3d 1373 (Fed. Cir. 2008).
[4] *Id*., 535 F.3d 1373.
[5] *Id*., 535 F.3d 1373.
[6] *Id*., 535 F.3d 1373.
[7] See Jacobsen v. Katzer, 2009 WL 29881, 89 U.S.P.Q.2D (BNA) 1441 (N.D. Cal Jan. 5, 2009) (holding that injunctive relief was not appropriate where open source licensor did not show specific harm beyond unauthorized use of software).

with the license, that violates the rules against removing CMI. By contrast, if photo credit is removed without intention to facilitate infringement (such as by an automated process), then there is no CMI violation.[7.1]

The open source software movement poses a profound challenge to the way that software is made and distributed.[8] Some of the best known pieces

(Text continued on page 1-51)

[7.1] William Wade Waller Co. v. Nexstar Broadcasting, Inc., 2011 WL 2648584 (E.D. Ark. July 6, 2011).

[8] See, e.g., *Open Sources: Voices From The Open Source Revolution* (DiBona, Ockman & Stone eds. 1999) (collection of essays on the history, theory and practice of open source software); On software law generally, see Lemley, Menell, Merges & Samuelson, *Software And Internet Law* (2000). See also, Haynes, "Black Holes of Innovation in the Software Arts," 14 Berkeley Tech. L.J. 567 (1999). The site http://Slashdot.org (last visited March 17, 2009), and the copyright listserve cni-copyright@cni.org, run by the Coalition for Networked Information, often have good discussions of both legal and social issues concerning open source software.

of software are open source: Linux, which runs many Internet servers and is the likeliest competitor to the scaled-up version of Windows;[9] Netscape Navigator, the browser that popularized the World-Wide Web; [10] Apache (a widely used Web server program); Sendmail (a common email server program); and the Perl programming language.[11] Open source software, also known, with somewhat different connotations, as "free software"[12] or "open code,"[13] differs in two key ways from most proprietary software. First, the holder of a copy of some open source software is free to make as many more copies as she pleases, to modify the code, and to distribute copies. Second, to enable the foregoing, open source software is distributed with access to the source code, not just the executable code version.[14]

Open source software has been used increasingly by commercial enterprises. The widely adopted Linux operating system is perhaps the most significant piece of open source software. Because so many people were involved in developing Linux and because of its complex relationship with the functionally similar proprietary system, Unix, the intellectual property rights in Linux have been disputed.[14.1] The very openness of open source makes it susceptible to ownership claims, because its source code, unlike proprietary software, is available for any claimant to view freely. There are several incentives for such litigation, such as genuine claims of infringement, strategic attempts to extract licensing revenue, and anti-competitive measures to slow down acceptance of open source software. The complex nature

---

Berkeley Tech. L.J. 567 (1999). The site http://Slashdot.org (last visited March 17, 2009), and the copyright listserve cni-copyright@cni.org, run by the Coalition for Networked Information, often have good discussions of both legal and social issues concerning open source software.

[9] Good places to start for information on Linux are http://www.linuxdoc.org (the Linux Documentation Project) (last visited March 17, 2009) or http://www.linuxjournal.com (Linux journal) (last visited March 17, 2009). For academic commentary, see, e.g.: Benkler, "Coase's Penguin, or, Linux and The Nature of the Firm," 112 Yale L. J. 369 (2002); Dusollier, "Open Source and Copyleft: Authorship Reconsidered?" 26 Colum. J.L. & Arts 281 (2003); McGowan, "Property Challenges In The Next Century: Legal Implications Of Open-Source Software," 2001 U. Ill. L. Rev. 241 (2001); Miller, "Allchin's Folly: Exploding Some Myths About Open Source Software," 20 Cardozo Arts & Ent. L.J. 491 (2002).

[10] See http://mozilla.org (Netscape's open source browser) (last visited March 17, 2009).

[11] See, e.g., Harmon, "A Surge in Popularity of Software That Unlocks the Code," N.Y. Times Sec. C, p. 18 (January 4, 1999).

[12] See: http://www.gnu.org (last visited March 17, 2009) or http://www.fsf.org (home of the Free Software Foundation and the GNU project, source of some of the best-known pieces of free software and containing links to discussions of the philosophy behind free software) (last visited March 17, 2009). "Free software" is a better term than "open source" in some respects. This article uses "open source" simply for descriptive reasons, to focus on the legal implications of permitting access to the source code.

[13] See http://www.opencode.org (consortium devoted to supporting the open code development model, associated with the Berkman Center for Internet and Society at Harvard Law School) (last visited March 17, 2009). The Berkman Center has also taken the open source approach in the litigation context with its Open LawProject for *pro bono* litigation, in which it seeks to "develop arguments, draft pleadings, and edit briefs in public, online." See http://www.berkmancenter.org/ (last visited March 17, 2009).

[14] *Id*.

[14.1] See Zittrain, "Normative Principles For Evaluating Free And Proprietary Software," 71 U. Chi. L. Rev. 265-287 (2004) (describing history of disputes involving Linux and discussing their root causes).

of software development promises to make litigation of such claims a difficult affair, while leaving considerable uncertainty as to the rights of both owners and users.

[1]—The Legal Status of Open Source Software

[a]—Copyright and Trademark

Open source software is not in the public domain. Rather, a combination of copyright law and trademark law serves to permit the free distribution of open source software, while keeping the software open source. The software is kept under copyright, but freely licensed under one of various open source licenses. The certification mark, "OSI Certified," may be affixed to a copy of the software to show quickly that it is open source. Anyone who takes a copy of the software can use it, change it, make and distribute more copies, even sell copies (without paying royalties to the original author). The open source license requires little but nevertheless does not abandon the copyright.

Open source licensing can be a means to give the right to use intellectual property away, while requiring others to give proper attribution.[14.2] This has been somewhat formalized. Free software (known as open source software to some) is distributed almost free of copyright.[14.3] If Ada writes some code and distributes it under the GNU General Public License,[14.4] she allows anyone who wants to make copies, use the software, adapt the software and distribute the adaptations.[14.5] But Ada does not abandon her copyright. She distributes copies subject to the license terms. Those terms are far more permissive than the terms that accompany almost any other service or product. But they usually do have two big requirements.[14.6] First, the taker cannot impose restrictions on the copies of the software that she distributes. This means that the software remains free, in the sense that it will not be encumbered by restrictions against use, adaptation, or making more copies. Second, if Ada is like most free software licensors, she will require attribution. Anyone that adapts or redistributes the software must give her credit (and avoid attributing modifications to her, which also protects her reputation).[14.7] There has not been much litigation involving open source licenses,[14.8] because

---

[14.2] See Graham and McJohn, "Thirty Two Short Stories about Intellectual Property," 3 Hastings Sci. & Tech. L. J. 1(2011).

[14.3] See McJohn, "The Paradoxes of Free Software," 9 Geo. Mason. L. Rev. 25 (2000).

[14.4] See GNU General Public License, http://www.gnu.org/copyleft/gpl.html (last visited Oct. 22, 2010).

[14.5] Gomulkiewicz, "General Public License 3.0: Hacking the Free Software Movement's Constitution," 42 Hous. L. Rev. 1015 (2005).

[14.6] See Vetter, "Exit and Voice in Free and Open Source Software Licensing: Moderating the Rein over Software Users," 85 Or. L. Rev. 183 (2006).

[14.7] McJohn, N. 14.3 *supra*, 9 Geo. Mason. L. Rev. at 34 ("Open source licenses require licensees to respect the author's right of attribution (to get credit for her work) and her right to avoid misattribution (not to have other people's work ascribed to her).").

[14.8] There has been more litigation about ownership of open source software. See Zittrain, "Normative Principles For Evaluating Free And Proprietary Software," 71 U. Chi. L. Rev. 265-287 (2004) (describing history of disputes involving rights to Linux, an open source operating system).

people tend to sue over more monetized disputes. But the single appellate decision on the issue held that it was copyright infringement to make copies without the required attribution.[14.9]

The idea of free licensing spread to other types of works.[14.10] The best-known free license for distributing books, music and the like is the Creative Commons license.[14.11] Creative Common made it quite easy for artists to create intellectual property licenses. The CC license tool showed a menu to allows the artist to tailor the permission she gave. The artist could choose whether to allow commercial uses of her work, whether to allow others to modify her work, and whether to require others to give her attribution when they used her work. After thousands of artists had used the tool, Creative Commons dropped the no-attribution option. No one ever chose to allow his work to be used without attribution.[14.12] That suggests what is at the core of intellectual property. Authors will cede their exclusive rights to disseminate their work. Authors will allow others to use their work and even modify it. Authors may allow others to make money off their work. But few surrender the right to get credit for what they have created – especially today, where reputation is a key economic factor.[14.13]

The CC licenses, the GPL, and other commons licenses put intellectual property in a new light. Inventors and authors can use their intellectual property to keep their works effectively in the public domain. The parties controlling CC and GNU also guard their own rights of attribution. The CC license, for example, cannot be made revocable. The CC license creation tool drafts an irrevocable license, without the option for the author to authorize use of her work, but to retain the right to withdraw permission.[14.14] Unlike the no attribution option, a termination right might indeed be attractive to many authors. The reason it is not offered is to protect the reputation of CC licenses. If even some CC licenses were terminable, then other creators and distributors would be less likely to rely on CC licensed works. The GNU license likewise guards against variation, relying on copyright. It provides:

> "Copyright © 2007 Free Software Foundation, Inc. http://fsf.org/ Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed."[14.15]

[14.9] See Jacobsen v. Katzer, 535 F.3d 1373 (Fed. Cir. 2008).

[14.10] See generally, Frischmann, et al., "Constructing Commons in the Cultural Environment," Cornell L. Rev. 657 (2010).

[14.11] See Creative Commons, "License Your Work," http://creativecommons.org/choose/ (last visited Oct. 22, 2010).

[14.12] See Fisk, "Credit Where It's Due: The Law and Norms of Attribution," 95 Geo. L.J. 49, 90 (2006).

[14.13] See Fisk, N. 14.12 *supra* , 95 Geo. L.J. at 50 ("Attribution is foundational to the modern economy. The reputation we develop for the work we do proves to the world the nature of our human capital. Credit is instrumentally beneficial in establishing a reputation and intrinsically valuable simply for the pleasure of being acknowledged. Indeed, credit is itself a form of human capital.").

[14.14] See "Before Licensing," http://wiki.creativecommons.org/Before_Licensing (last visited Oct. 22, 2010).

[14.15] GNU Operating System, Gnu General Public License, Version 3, (June 29 2007), gnu.org, http://www.gnu.org/licenses/gpl-3.0.html (last visited Oct. 22, 2010).

Just as manufacturers rely on trademarks and patents to craft a market presence for their product, so free licensing organizations control their creation. There is indeed considerable competition among free licenses.[14.16] Someone ready to give her work away could use the GPL, a CC license, the Artistic License,[14.17] the MIT License,[14.18] or many others—or draft their own license. In some areas, freely shared works may replace proprietary works. Intellectual property law is proving key to encourage the sharing works free of intellectual property.

The two leading rationales for open source are quite different. Some, most notably the Free Software Foundation, see it as an issue of ethics and politics.[15] In this view, software is a form of expression, so to impose restrictions on the expression is wrong, just as it would be to restrict the flow of scientific or artistic discussion.[16] Others see open source simply as a better way to develop software[17] (some even call it a better business model, reflecting a far different world view).[18] If software is closed, then only the proprietor can change the source code. If the software is open source, the argument runs, then other developers are able to find problems or suggest improvements quite easily, leading to better software.[19]

There are various versions of open source licenses.[20] Some open source licenses (such as the BSD license, the MIT license, and the Mozilla license, under which Netscape makes the code to its browser freely available) provide, in effect, that the licensee can do whatever he or she wishes with the software.[21] Other open source licenses require that code be kept open source. Thus, if Beta does change the program and distributes copies of the new version, he or she must make both the executable code and source code available. Such an open source license prevents Beta from restricting the code

---

[14.16] See "Why should I use the GNU GPL rather than other free software licenses?", gnu.org, http://www.gnu.org/licenses/gpl-faq.html#WhyUseGPL (last visited Oct. 22, 2010).

[14.17] See "The Artistic License," http://www.opensource.org/licenses/artistic-license.php (last visited Oct. 22, 2010).

[14.18] The MIT License, http://www.opensource.org/licenses/mit-license.php (last visited Oct. 22, 2010).

[15] See http://www.gnu.ai.mit.edu/philosophy/why-free.html (last visited March 17, 2009).

[16] *Id*.

[17] For "a techie/hacker's case, a businessperson's case, and a customer's case" for open source software, see http://www.opensource.org/ (last visited March 17, 2009).

[18] See http://www.opensource.org/for-suits.html (last visited March 17, 2009).

[19] See http://www.opensource.org/for-hackers.html (last visited March 17, 2009).

[20] For a list of open source licenses, see: http://www.opensource.org/licenses/ (listing The GNU General Public License (known as the GPL) (last visited March 17, 2009); the GNU Library or "Lesser" Public License (LGPL); the BSD license; the MIT license; the Artistic license; the Mozilla Public License (MPL); the Qt Public License (QPL); the IBM Public License; the MITRE Collaborative Virtual Workspace License (CVW License); the Ricoh Source Code Public License; the Python license; the zlib/libpng license; the IJG JPEG library license and the OPL (OpenLDAP Public License)). For a more general discussion of ways to share software, including open source, shareware, or public domain approaches, see http://www.gnu.ai.mit.edu/philosophy/categories.html (last visited March 17, 2009).

[21] For an astute comparison of the legal effects of various open source licenses, see Hecker, "Setting Up Shop: The Business of Open-Source Software," available at http://www.hecker.org/writings/setting-up-shop.html (last visited March 17, 2009).

legally (through licensing restrictions) or practically (by keeping revised versions of the source code under her control). Such licenses include the GNU General Public License (the "GPL," the original open source license and still the most eloquent and thoughtful, which covers, among many things, the Linux operating system) and the Artistic License.

One of the most noted open source programs is the operating system Linux. A key question has been the ownership of the underlying rights. A major victory for Linux and its users occurred when a federal appellate court affirmed a jury's rejection of the claim of SCO Group to own the rights in Unix, on which much of Linux derives its original copyright.[21.1] Had SCO won the rights to Unix, the continuing rights of millions of Linux systems worldwide would have been called into question. The casual manner in which Linux originated, as a small new operating system circulated among software developers for noncommercial purposes, resulted in some uncertainty about the origins of its ownership. Notably, Linux grew exponentially despite some uncertainty. Since the cloud of the SCO claim has been removed, Linux will become even more attractive to commercial users because of its legal, financial, and technical features. The litigation also may have the broader effect of reducing some skepticism about open source software in general, showing that the risks of its adoption may be settled. Indeed, the relatively low level of litigation involving open source software (as opposed to the many lawsuits protecting claims to proprietary software) may be reflected in a more open consideration of its adoption even among risk averse entities. The various licenses that grant access to source code all differ in some details. So what is a true open source license? The Open Source Initiative has offered an answer, in its Open Source Definition.[22] To be an open source license under that definition, a license

(1) must provide both executable and source code;

(2) must allow modification and redistribution (with or without modifications);

(3) must not limit distribution to certain fields of endeavor or products or even limit to use with other free software.[23]

To read a software license and determine whether it complies with those requirements is no easy task, particularly for a layperson who would rather read code than legalese. The Open Source Initiative has provided an easy way for software developers to figure out if a license meets that definition of "open source." The OSI has registered a certification mark, OSI Certified. Anyone that distributes software marked "OSI Certified" represents that the software is being distributed under a license that has been approved as conforming to the Open Source Definition. So, through an elegant combination of copyright and trademark law, software can be easily made and maintained as open source.

[21.1] SCO Group, Inc. v. Novell, 2011 U.S. App. LEXIS 18277 (Aug. 30, 2011).

[22] See http://www.opensource.org/osd.html (last visited March 17, 2009).

[23] *Id*.

An additional provision contained in most open source licenses is a complete disclaimer of warranty and limitation of remedies. In effect, an open source licensor quite reasonably says "I am providing you the source code. You can decide whether this software does what you need it to do." Moreover, most open source is distributed free of charge (as well as free of restrictions), so notions of risk-spreading by placing the cost on the maker are inapplicable.

Open source licenses also address another trademark-related issue: protecting the reputation of the author of the software. Even the most permissive open source licenses provide that, if the licensee distributes the software, he or she must include the copyright notice giving credit for authorship to the original author. Most open source licenses also provide that if the licensee modifies the software, he or she must ensure that the modifications are not attributed to the original author. He or she can do so by listing the changes made, who made the changes, and when they were made. Open source licenses require licensees to respect the author's right of attribution (to get credit for her work) and right to avoid misattribution (to not have other people's work ascribed to her).

[b]—Patent

Thus, open source rests on licensing of copyright and trademark. Most open source licenses do not specifically address the issue of patents. Open source developers are affected by patents as possible inventors or infringers. The legal structure of open source, accordingly, is an elegant and robust use of intellectual property laws. The net result turns the customary use of intellectual property on its head. Intellectual property laws, which normally are used to guard exclusive rights, are instead used to safeguard free access to and use of works.

Some think that software patents may pose the greatest threat to open software.[24] After considerable reduction in the legal obstacles to patenting software, many thousands of software patents have been issued. Open software developers might write code that allegedly infringes such patents. One leader in the free software movement, has likened software patents to a minefield for open source developers.[25]

As some have noted, an open source defendant does have one particular disadvantage, as compared to other software developers who might be potential patent infringers.[26] This risk arises from the very nature of open source software. Suppose someone holds a patent on a process used in software for sorting data or for producing a particular format of output. If a proprietary

---

[24] See, e.g., Stallman, "The GNU Operating System and the Free Software Movement," *in Voices From the Open Source Revolution*, N. 31, at 67 *supra* ("The worst threat we fact comes from software patents, which can put algorithms and features off-limits to free software for up to twenty years.").

[25] Garfinkel, "Patently Absurd," Wired 2.07.

[26] This point is made in discussions of open source and patents on slashdot.com and the cni-copyright discussion list.

program used the patented process, the patent holder might not be able to ascertain that. The process might be used in the program, but not in a way that was evident to a user of the program. One could tell that the program was, at some point, sorting data but would have to go to considerable trouble to figure out how the program was sorting it. Indeed, that would be impossible if one did not have access to a copy of the program. It would be much easier, in some respects, to monitor open source programs for infringement of the patent, for the very two reasons that make them open source. One would be entitled to get a copy of the program, and a copy of the source code at that. So in one respect, open source is peculiarly susceptible to patent monitoring.

Another area in which open source developers could be at a disadvantage is in cross-licensing. Because so many software patents have been issued, and perhaps because the validity and enforceability of many of the patents is rather unclear, patent licensing is quite different in the software area than in other high-tech areas such as biotech. In particular, royalty-free cross-licenses are common in the computer industry. The parties to such licenses agree, in effect, not to attempt to enforce their patents against each other. Such non-aggression pacts protect only the parties to the license. To the extent that open source developers do not seek software patents, it may leave them out of such protection, having nothing to offer as a quid pro quo. However, open source developers may have the other advantages that more than make up for such potential risks. Indeed, the open source software movement may well redirect the course of software patent litigation in several ways. The greatest issue at present in software patent law is the problem of prior art. Patent law provides that an invention is only patentable if one concludes, after examining the prior art, that the invention is both novel (is not already known in the prior art) and nonobvious (would not be obvious to a skilled worker in the field, in light of the prior art).[27] What constitutes prior art is defined rather tortuously in the statute, but one can think of the prior art as being the stuff in the public knowledge.

Computer software, however, is a difficult field in which to locate the prior art, for two reasons.[28] First, as discussed above, software has only gradually been seen as patentable, so there is not a great stock of software patents to provide a source of prior art. Secondly, the prior art in computer science is much less organized than in many other fields. In other new technologies such as biotech, it may be relatively straightforward to check

---

[27] On the special problems of applying nonobviousness analysis in new technological areas, see Kaskan, "Obviousness and New Technologies," 10 Fordham Intell. Prop. Media & Ent. L.J. 159 (1999). See also: Lin, "A Proposed Test for Applying the Doctrine of Equivalents to Biotechnology Inventions: The Nonobviousness Test," 74 Wash. L. Rev. 885 (1999); Oddi, "Beyond Obviousness: Invention Protection in the Twenty-First Century, 38 Am. U. L. Rev. 1097 (1998). On nonobviousness generally, see *Nonobviousness: The Ultimate Condition Of Patentability* (Witherspoon, ed. 1980).

[28] See, e.g., Tocups and O'Connell, "Patent Protection for Computer Software" 14 No. 11 The Computer L. 19, n. 20-21 (1997). See also, Shulman, "Software Patents Tangle the Web," Technology Review (March/April 2000), *available at* http://www.techreview.com/articles/ma00/shulman.htm (last visited March 17, 2009).

scientific journals and other sources to see if a claimed molecule is in fact novel.[29] Computer programming, by contrast, has had much less systematic archiving of knowledge. Much of the knowledge in the trade is in informal form. More recently, much of the knowledge was intentionally kept out of the public domain. One commentator has determined that some 80% of issued software patents make no effective citations of prior art, despite the great amount of published work in computing.[30] Recognizing the special problem of prior art in the area of computer-related inventions, the U.S. Patent Office has begun a project to more systematically organize knowledge in the computer arts, and several private bodies offer help in locating prior art.[31] In addition, the fact that so many software patents have been issued will make a considerable contribution to the amount of prior art that is available to be searched.

Meanwhile, a defendant in a patent infringement action may have a very difficult time proving that a technique was already in the prior art, or was obvious given the prior art. An open source defendant, however, may have a card to play that is unavailable to other defendants. The activity around several controversial patents illustrates how an open source defendant could prove a veritable Hydra of a defendant.[32] Inventors had succeeded in obtaining patent protection on several widespread technologies: fundamental techniques of multimedia,[33] a commonly used hack ("windowing") to fix year 2000 problems in aging software programs, and a privacy protection algorithm that threatened to control a common Internet standard.[34] In each case, widespread publicity about the patent, together with considerable anger that someone claimed to have invented something that other programmers considered old hat, resulted in many examples of invalidating prior art being sent to interested parties and the patent office. In each case, the tide turned-the USPTO took the unusual step of initiating reexamination of the multimedia and Y2K patents, and the privacy patent likewise looked questionable.[35] Open source developers, such as the world-wide Linux network of thousands of software developers, likewise present a formidable resource for locating prior art-and likewise have shown their willingness to spring into action in defense of the movement.

---

[29] See, e.g., Ducor, *Patenting the Recombinant Products Of Biotechnology And Other Molecules* at 15 (1998) (stating that novelty analysis in biotech "is generally not difficult to evaluate.").

[30] Ahorian, Internet Patent New Service (Feb. 10, 2000), available at http://bustpatents.com/archive.htm (last visited March 17, 2009).

[31] In addition to the USPTO, the Software Patent Institute is attempting to build resources for searching prior art in the software area.

[32] See "Privacy Software Patent May Be Challenged by Web Protocol Developers," 58 Bna Patent, Trademark, and Copyright Journal 284.

[33] See "Patent Barred For Compton's," The New York Times, p. 7 (Oct. 31, 1994).

[34] See: "Privacy Software Patent May Be Challenged By Web Protocol Developers," *supra* N. 56; Colen and Kucler, "Re-exam of Y2K Patent: Much at Stake," Nat'l L. J. B10 (March 13, 2000).

[35] *Id*.

If the prior art shows that the invention is not novel, the patent can be invalidated. But even if the invention is novel, it is still invalid if it was obvious, in light of the prior art. This is a particularly difficult determination with new technologies.[36] Here, open source also may benefit from its moral suasion and from the favorable opinions of its many experts. Open source developers could be very sympathetic parties, and courts may lean (given that the technology and the law is likely to be sufficiently complicated not to clearly indicate a result in many cases) toward restricting patent coverage—as opposed to cases where two parties are simply fighting about which one gets to keep the technology out of the public domain. This is hardly a cheery view of judicial decision making—ad hoc result oriented rough justice in patent cases—but may prove a realistic one and, at the least, a reason to avoid opening the Pandora's box of patent litigation.[37] Another possibility would be for open source developers to fight fire with fire, by seeking patents of their own and combining them.[38]

A much publicized issue has been the dispute over copyright to portions of Linux, the best-known piece of open source software. Because of the distributed and informal nature of much open source development, the original author of code may be difficult to determine. Thus, parties may make colorable claims to copyright in open source code. Responding to such claims and formulating norms to reduce such risks will be part of the evolution of open source. Open source software may have a considerable influence on the law of developing technologies—perhaps a greater effect than the law will have on software practices.

---

[36] Rai, "Intellectual Property Rights In Biotechnology: Addressing New Technology," 34 Wake Forest L. Rev. 827 (1999).

[37] On some of the tangled issues in patent litigation law, see: Thomas, "On Preparatory Texts and Proprietary Technologies: The Place of Prosecution Histories in Patent Claim Interpretation, 47 UCLA L. Rev. 183 (1999); Zahralddin, "The Effect of Broad Patent Scope on The Competitiveness of United States Industry," 17 Del. J. Corp. L. 949 (1992).

[38] Carlson, Note, "Patent Pools And The Antitrust Dilemma," 16 Yale J. on Reg. 359 (1999).