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Technology Transfers of Patent/Data Rights in the Commercial Sector: A Primer

by *A. Jason Mirabito**

I. INTRODUCTION

The purpose of this paper is to describe the means and mechanisms by which U.S. technology holders transfer their technology abroad, with a primary focus on the international transfer of technology through a foreign licensing agreement. The paper describes the categories of technology which are transferred abroad. The "traditional" types of technology transferred, such as patents and trade secrets, are discussed and, in light of the emerging growth of the computer software industry in this country, the legal implications of transferring software abroad are explored. Finally, this paper examines both the existing U.S. and foreign legal systems which control or attempt to control or regulate the technology transfer process.

The business and process of licensing has always been important to technology-based companies, but today it is all the more so because technology transfer is a method of exploiting foreign markets where the technology owner's product may not be competitive with foreign goods due largely, at the present time, to the great strength of the dollar vis-a-vis foreign currencies. Technology transfer is also important in the "new" industries providing know-how, services, and computer software. In these industries, technology is licensed simply because a sale or transfer of a product is not the main object in the commercial exploitation of, for example, computer software.

II. WHAT IS LICENSED IN THE COMMERCIAL SECTOR?

The term "foreign licensing agreement" describes the contractual arrangement under which one party (the licensor) essentially leases to another party in another country (the licensee), usually for some form of remuneration,¹ the

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1. The remuneration paid by the licensee to the licensor is termed a royalty. The royalty may be paid using many different formats, but the usual method used is that of a running royalty, which is a royalty paid periodically and is based upon a certain percentage of the gross or net sales price of the licensed technology. Also, the licensee may be required to pay a "down payment" fee for the license and/or a minimum royalty to the licensor. In some instances, in lieu of a running royalty, the licensee may pay for the technology "up front," through a one-time fixed fee. In yet other licenses, there may be no royalty paid at all. In a cross-license, for example, the consideration for a license granted may be a license by the

rights contained in the licensor's patented or unpatented technology. These transfers may occur between related companies as well as between unrelated parties.²

Until the high technology explosion of the 1940s, the typical foreign licensing agreement was a simple contract extending to the licensee the bare legal right to use the licensor's foreign patents, trademarks, or other industrial property rights. Since that time, however, the "simple" patent or trademark license has been replaced by comprehensive contractual arrangements under which, in addition to patents or trademarks, proprietary trade secrets are transferred to the licensee. The technology transfer may be made person-to-person, through the supply of technical, architectural and engineering services, or machine-to-machine by the growing transfer of information embodied in computer software.

The major categories of transferred technology are patents, trademarks, and unpatented technology. Unpatented technology includes know-how, trade secrets, technical data, and computer software.

A. *Patents*

Patents are defined as national grants by a government, usually nonrenewable, giving the holder certain exclusive rights. In the United States, a patent grants the exclusive rights to prevent others from making, using, or selling the patented invention.³ The owner of the patent right (the patentee) is usually permitted to divide the exclusivity rights and to allow others to practice under the patent as a licensee.⁴

licensee to the licensor of the licensee's proprietary technology. See Travaglini, *Foreign Licensing and Joint Venture Arrangements*, 4 N.C.J. INT'L L. & COM. REG. 159, 165 (1979).

2. While it is often the case that a license may be between the unrelated parties, licensing also occurs between related parties, such as between a U.S. parent and its foreign subsidiary or joint venture company. In the related-company situation, the U.S. parent may receive royalties from its subsidiary as consideration for its transfer of rights in technology. Thus, the parent may receive royalties in addition to dividend income. Certain developing countries such as Brazil, however, may prohibit such royalty payments from a Brazilian subsidiary to its foreign parent. See U.S. INTERNATIONAL TRADE COMMISSION PUB. NO. 935, *INTERNATIONAL TECHNOLOGY TRANSFER: A REVIEW OF RELATED LEGAL ISSUES* 41 (1979).

3. Under U.S. law, the patent statute grants the patentee the right, for a seventeen year period, to "exclude others from making, using, or selling the invention throughout the United States." 35 U.S.C. § 154 (1982). One who, without authority of the patent holder (patentee), makes, uses, or sells the patented invention in the United States, may be sued for infringement of the patent. 35 U.S.C. § 271 (1982). Other countries' laws vary as to the duration of the patent right as well as to the rights of the patentee. See Travaglini, *Protection of Industrial Property Rights Abroad*, in *FOREIGN BUSINESS PRACTICES* 39 (U.S. Department of Commerce 1981). Since the U.S. patent grant entitles the patentee to protection against others making, using, or selling the patent invention without authorization within the United States, the patentee can bring an infringement action against the infringer under 35 U.S.C. § 271 (1982). Also, the patentee may be able to bring an unfair competition action against the infringer under section 337. 19 U.S.C. § 1337 (1982). U.S. patent holders have increasingly used this latter statute against persons importing goods into the United States which infringe on U.S. patent rights. See Kaye & Plaia, *The Filing and Defending of Section 337 Actions*, 6 N.C. J. INT'L & COM. REG. 463 (1981).

4. 35 U.S.C. § 261 (1982).

It should be noted that the patent's exclusivity right does not reach beyond the borders of the national territory of the government granting the patent. Thus, the patent usually has no extraterritorial force.⁵ For example, a patentee in the United States desiring protection outside the United States must secure similar patents in other countries. When a U.S. licensor licenses a French company to manufacture and sell its invention in France, the license would be granted under the U.S. licensor's corresponding French patent. The ability to grant licenses under foreign patents demonstrates the importance of obtaining patent protection abroad. A foreign patent granted to a U.S. company enables that company to license the invention to companies of the foreign patenting state as well as to prevent other non-licensed companies from infringing on the patent right. Many large U.S. companies routinely seek protection abroad for their technology through foreign patents. Smaller companies, however, because of expenses or otherwise, may neglect foreign patent protection.⁶

B. Trademarks

Trademarks are marks, logos, symbols, letters, or designs adopted by companies to distinguish their goods in trade and to indicate the source and quality of those goods.⁷ Trademarks are also licensed, either in conjunction with a patent license or without regard to a related patent right. In fact, for certain industries,⁸ the licensor's trademark may be more important than a patent right. Like a patent, a trademark is national in scope, requiring national registrations and applications, and grants the trademark owner the right to utilize that trademark in that country for a particular line of goods.⁹ Unlike a patent,

5. This territorial limit of U.S. patents is derived from the phrase "an exclusive right under . . . patents . . . [in] the United States." 35 U.S.C. § 261 (1982). The U.S. Supreme Court recently confirmed the territorial limitations of U.S. patent law in *Deepsouth v. Laithram Corp.*, 406 U.S. 518 (1972).

6. It is often the case that a small business may not consider the expense of prosecuting foreign patent applications to be cost effective in what the small business may erroneously consider a U.S. market product. By neglecting to protect their inventions abroad, however, small businesses may lose opportunities to license the foreign patent as well as opportunities to protect the foreign market for their own exports. Because of various time limits that a U.S. company may encounter under foreign patent laws, a company that waits too long may never be able to obtain foreign patent protection, no matter how novel the invention may be. For examples of foreign patent laws, see Travaglini, *supra* note 3, at 39.

7. 15 U.S.C. § 1052 (1982). For a discussion of the protection available under U.S. trademark law, see A. MILLER & M. DAVIS, *INTELLECTUAL PROPERTY* 145 (1983).

8. Examples of such industries include the cosmetic and fast food industries. In addition, a trademark is extremely important for industries in which the technological content is high, such as the computer and photocopier industries.

9. The federal trademark law provides for registration of trademarks used in interstate commerce, and such registration provides constructive notice to all persons who may later use the registered mark. 15 U.S.C. § 1072 (1982). The law also provides for an action by the trademark owner against those infringing on its federally-registered mark. 15 U.S.C. § 1117 (1982).

however, a trademark may be granted for an indefinite period of time and is usually renewable.¹⁰

C. *Unpatented Technology*

Unpatented technology consists of two broad categories. One category comprises know-how, trade secrets, and technical data, while the other category comprises computer software.

1. Know-how, Trade Secrets, and Technical Data

Know-how, trade secrets, and technical data include unpatented and perhaps unpatentable technical expertise that the licensor has accumulated in its manufacturing operations and in which it has proprietary rights. This category may include scientific, engineering, or technical documentation in the form of plans, blueprints, designs, quality control techniques, or manuals. It may also include technical assistance, guidance, and advice communicated to the licensee through the licensor's engineering, technical, or service personnel.¹¹

Know-how and trade secret licensing are very important components in the technology transfer process and are often utilized in conjunction with patent licensing. While the patent license may grant the bare legal right to the licensee to practice the invention, the know-how or trade secret license may involve the transfer of the information necessary to manufacture a particular product. This transfer of technology may be accomplished with documentation (including computer-based information) or on a human-to-human level. Governments, however, grant no statutory exclusivity in the know-how or trade secret, other than to prevent improper disclosure. Therefore, protection of trade secrets and know-how relies primarily upon the contractual promise of confidentiality on the part of the licensee not to disclose such information to third parties.

2. Computer Software

Computer software is information, usually encoded on some media such as tapes, diskettes, cards, or integrated circuit chips, which, when loaded onto computer hardware, will enable the computer to perform certain tasks.¹² Computer software, or programs, are usually licensed by the software owner to a

10. 15 U.S.C. § 1059 (1982).

11. A trade secret is perhaps best defined by reference to the RESTATEMENT OF TORTS § 757, comment b (1939), which states that "[a] trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it."

12. There are many definitions of what constitutes a program. U.S. copyright law defines a computer program as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101 (1982).

licensee, who is often termed an end-user. Programs are licensed because the licensor wants to exercise control over the use of the programs by requiring confidentiality by the licensee and by limiting the licensee's rights to make copies of the programs. While with other types of technical data and information mere copying of the technical data does not translate automatically into a useful product because the product must be manufactured using the technical data, copying of a computer program almost immediately produces another exact copy which can be loaded onto a computer. It is this relatively simple copying procedure which makes it important for the program owner, by the license, to at least legally prevent the software licensee from making unauthorized copies of the program, a problem that is apparently very great for software producers worldwide.

Programs are often protected by statutory rights, such as under the copyright laws of various nations,¹³ and, at least in the United States, under the patent laws.¹⁴ Additionally, most program licenses contain contractual provisions under which the licensee's rights to disclose the program to others and to make copies of the program are severely circumscribed.¹⁵

III. INTERNATIONAL TRANSFER OF TECHNOLOGY: SELECTED METHODOLOGIES

The categories of technology discussed immediately above are usually transferred by a license agreement. In this section, we will discuss some specific methodologies of technology transfer. Technology transfer may occur through a simple license, or may occur in other, more complex ways, such as technology transfer within the context of a joint venture, or through a company's foreign representatives.

A. *Transfer by License*

A license may be granted by a U.S. company to an unrelated foreign company. In fact many of the existing licenses are between unrelated parties. Under the terms of the license agreement, the U.S. licensor grants the licensee the right to practice under its patents or trademarks in that country, to use the licensor's know-how or trade secrets, or to utilize the licensor's computer program on the licensee's computer.

A company may license for several reasons: first, to produce additional royalties from technologies it already possesses; second, to gain access to foreign markets in which the export of the licensor's product or a foreign investment

13. See Ulmer & Kollé, *Copyright Protection of Computer Programs*, 14 INT'L REV. INDUS. PROP. & COPYRIGHT L. 259 (1983); see also B. NIBLETT, *LEGAL PROTECTION OF COMPUTER PROGRAMS* (1980).

14. *Diamond v. Diehr*, 450 U.S. 175 (1981). See Moskowitz, *The Metamorphosis of Software-Related Invention Patentability*, 3 COMPUTER L. J. 273 (1982).

15. See V. NANDA, *THE LAW OF TRANSNATIONAL BUSINESS TRANSACTIONS* 6.01[3] (1981).

venture is prohibited or circumscribed; third, to gain access to a licensee's technology through a mutual exchange of technology through a so-called cross license; and, fourth, to test a foreign market, through a licensee, to determine the commercial success of a possible future investment in the foreign country.

Licensing may have several drawbacks. The licensor might soon find itself in competition, in the licensee's country and elsewhere, with its own licensee. Further, since the licensee's government may have some type of control over the licensing process, the terms and conditions of the license may be governed not by one-on-one commercial relationships, but by the discretion of the licensee's government.¹⁶ Finally, because the licensee is unrelated to the licensor, the licensor may have few controls over the quality of the goods produced by the licensee. The absence of quality control may in fact have a detrimental effect upon the reputation of the licensor, since the licensee's products may be identified with the licensor. In the event that licenses are entered into between a U.S. licensor and its foreign subsidiary, the licensor can usually exercise control over the licensee's activities because of the overall control the U.S. company can assert over its foreign subsidiary.

B. *Transfer through Joint Ventures*

As a result of many factors in the international marketplace, many transfers of technology occur through joint ventures. These factors include first, the limitations placed by some foreign governments on the ability of foreign companies to establish wholly-owned subsidiaries; second, the desire of a U.S. technology holder to minimize capital input into a foreign investment project and to share the risk of success (or failure) with its foreign venture partner; and, third, to utilize to the greatest extent the finances, real estate, personnel, and nationality of the foreign venture partner in successfully penetrating the foreign market.¹⁷

Often a joint venture will involve the formation of a third company, the joint venture company, whose shares are owned in various proportions by the U.S. company and the foreign venture partner.¹⁸ The U.S. company possessing the technology may be able to contribute that technology, if permitted under the laws of the foreign country, as all or part of its capital contribution for shares of the new company. In addition, the U.S. company would be able to receive license royalties for the transfer of technology. These royalties are added to its proportionate share in the profits of the new company. Because the new company would be owned, at least in part, by the U.S. company, some of the negative aspects of the unrelated license situation are minimized. Moreover, the joint venture would benefit the U.S. company in several ways. The U.S. company

16. Travaglini, *supra* note 1, at 160.

17. See Ross, *The Foreign Joint Venture Corporation: Some Legal and Business Considerations*, 45 DEN. L.J. 4, 7-8 (1968).

18. *Id.* at 6-7.

would be insured of a continuing relationship, rather than a limited period of royalty payments in a straight license. The joint venture also minimizes the likelihood of independent competitors since the partners are seeking jointly to exploit the market in their mutual interests.

Control of the joint venture company is one of the touchy issues in this seeming panacea.¹⁹ Each partner, of course, will seek some control over the day-to-day management, major management, and financial issues experienced by the new company. It is important, however, for the U.S. partner/licensor to be able to control the "flow" and the proprietary interests in the technology transferred.²⁰ These matters would have to be specified in great detail not only in the joint venture agreement, the by-laws of the new company, but also by the interconnection of these documents with the foreign license agreement.²¹

C. *Transfer through Foreign Agents and Distributors*

Foreign agents and distributors sell for the U.S. company, as well as purchasing and reselling the products of the U.S. company. Agents and distributors, often called foreign representatives, sometimes are trademark licensees of the U.S. company, enabling them to utilize the U.S. company's trademark in their businesses.²² Once the market has been "tested" through a foreign representative, the U.S. company and its representative might form a joint venture company to produce the products, formerly imported from the United States, in the foreign representative's country. It is important for the U.S. company to select its representatives carefully, especially in light of various foreign laws which may make it expensive to terminate the relationship altogether.²³ In addition, the foreign representation agreement may contain clauses similar to those found in technology licenses, such as the representative's contractual commitment to keep confidential trade secret or other proprietary information which the U.S. company transfers to the representative.²⁴

19. *Id.* at 13.

20. From the author's personal experiences, the U.S. partner, even if a minority shareholder, may be able to control the joint venture company to some extent by controlling the flow of technology. This may be done, for example, by controlling the rate at which new designs and improvements to the basic technology are transferred to the joint venture company. Thus, the license between the U.S. partner and the joint venture company is very important.

21. See Travaglini, *supra* note 1, at 172-75. See also French, *License or Joint Venture?*, 80 PAT. & TRADE-MARK REV. 347 (1982).

22. The foreign representative desires the trademark license in order to use the U.S. company's trademark on its own letterhead or office signs to indicate to the public its connection with the U.S. company. The goods themselves might be already marked with the U.S. company's trademark(s), and the U.S. company may have already registered its trademark in the representative's country. On this latter issue, see Lightman, *Foreign Trademark Protection: Treaties and National Laws*, in FOREIGN BUSINESS PRACTICES 61 (U.S. Dept. of Commerce, 1981).

23. See Giberga, *Law Restraining Agency Agreement Termination*, in FOREIGN BUSINESS PRACTICES 1 (U.S. Dept. of Commerce, 1981).

24. See Suzuki, *Foreign Sales Agent and Distribution*, in INT'L TRADE FOR THE NON-SPECIALIST 289 (ALIBABA Resource Materials 1979).

In some industries there is a direct technology transfer through foreign representatives. This direct transfer occurs in certain service-dominated industries, such as consulting, architectural, engineering, and data processing services. One important industry in which the representative method is used to a large extent is the computer hardware and software industry. In this industry, the foreign representative becomes a reseller of the hardware to entities in its country and a transferee or licensee of the company's software with rights to sublicense to the end-user or purchaser. U.S. software companies often utilize foreign representatives to act as a transferee or sublicensor of unbundled software.²⁵

IV. COMPUTER SOFTWARE LICENSING: PARTICULAR METHODOLOGIES AND PROTECTION

One of the fastest growing technologies in the United States is the computer industry and, within it, the software industry. Just as the industry has grown in the United States, computer companies have ventured in large numbers abroad. Many of the larger computer and software companies earn as much as forty to fifty per cent of their total income abroad.²⁶ The U.S. software industry currently has a clear comparative advantage over its foreign competition.²⁷ Accordingly, it is important to examine the ways in which this technology is transferred, the ways in which the technology is protected or protectable abroad, and the ways in which certain U.S. and foreign tax laws affect the U.S. software industry operating internationally.

A. *Technology Transfer Methodologies: Legal and Financial*

A primary method of transferring computer software is through a U.S. company's overseas representative, directly, or through its overseas subsidiary or branch. This transfer may be accomplished in one of several ways. First, the U.S. company which has had its programs encoded on magnetic tapes or diskettes

25. Unbundled software is software licensed without the sale of related computer hardware. When hardware and software are transferred together, this is referred to as a bundled system.

In such representation agreements, it is somewhat dangerous for a U.S.-based software company to call its foreign representative a distributor or to provide in the representation agreement that the foreign representative is "buying" the computer program for "resale." The problem is that in order to preserve the licensor/licensee status of the relationship, it is necessary to avoid any provision which might appear to transfer title to the foreign representative. Otherwise, the software protection scheme in which title always resides in the U.S. software company may be defeated. Title is important because it enables the U.S. software company to legally control copying of the computer program by the representative and by the end-user.

26. DATAMATION, June 1980, at 97.

27. Steve Jobs, the chairman of Apple Computer, recently stated that "[t]here are no foreign software companies here [in the United States]. This is an American industry." Washington Post, March 4, 1984, at H 1, col. 3.

may make copies of the programs in the U.S. and export them directly to foreign end-users that have been contacted through its foreign representative. In a true sense, these end-users are licensees who are required to execute the U.S. company's software license agreement prior to shipment of the program to the foreign end-user. The software license requires the licensee, in addition to other normal terms and conditions, to recognize the confidential status of the licensor's program under a confidentiality clause (trade secret protection). The licensee also promises to limit the production of the number of copies of the program and to retain only those copies necessary for its own use.²⁸

Second, some other companies arrange the transfer of the program through a license/sublicense transaction. Under this arrangement, the U.S. company licenses its foreign representative as a licensee and grants the representative a right to sublicense the program to end-users in the representative's country. This method maintains the legal responsibility of the foreign representative to ensure that its licensees (the end-user/sublicensee) conform to the provisions of the software license (confidentiality, restriction on copying, and the payment of periodic royalties where appropriate).

Third, in some circumstances, the U.S. company will send a master tape of the program to the foreign representative allowing the representative to arrange licenses of the program with end-users in its country and to make copies of the program for distribution to end-users. This method requires a great deal of trust between the U.S. company and the foreign representative.²⁹ This same foreign representative is usually responsible, according to the representation agreement, to install the program on the end-user's computer(s), to do any translation necessary into the language of the representative's country, and to perform such servicing as may be necessary. The representative's compensation for its services may be a fixed sum or, more usually, a percentage of the license fees paid by the end-user.

Finally, the U.S. company may dispense with the physical transfer of the tape(s) or diskette(s) altogether and transmit the program electronically, by wire or through satellite, from the U.S. company's computers directly to the foreign representative's or end-user's own computer. By using this method of transfer, the U.S. company would increase the efficiency of its operations and avoid any

28. For examples of "typical" software licenses, see NORTHEAST COMPUTER LAW INSTITUTE 65, 71 (MCLE-NELI, Inc. 1980). For a discussion of software licenses in general, see *id.* at 16-19.

29. The obvious reason for this need for trust is that the foreign representative can, in short order, ruin the U.S. company's business by making copies of the programs wholesale and selling or licensing the copies itself. Also, because of the distances involved, it might be a long time before the U.S. company is aware of the subterfuge. There are remedies against the foreign representative, but it would be difficult to track down the parties to whom the representative transferred the programs. The legal ability to bring the representative's transferees into court would depend on the status of the law in the transferee's country. This issue pertains especially to the software industry because it is so easy to reproduce the technology and the computer program.

customs duties which may be imposed by foreign governments on the importation of software programs into their national territories.³⁰

B. *Protection of Computer Software Abroad*

The protection of computer software technology under any of the existing statutory (patents and copyrights) and nonstatutory (trade secret) laws is a familiar problem to patent and computer lawyers in this country. In a recent decision, the U.S. Supreme Court ruled that certain software-related inventions are patentable under the U.S. patent laws.³¹ Another court has decided that the program itself, in whatever form, is protected under the U.S. copyright laws.³² This protection has been achieved additionally through an amendment to the 1976 Copyright Act in 1980 which protected computer programs by copyright. In addition, one federal district court has held that an owner of a computer program may protect the program under the federal copyright laws as well as under state common law or statutory trade secret laws.³³ This paper will now examine the extent of protection available abroad for computer programs.

Because patent protection for programs is generally unavailable outside the United States, the emphasis has been on the protection available under the copyright laws and confidentiality provisions of the foreign laws.³⁴ Most companies have turned to the copyright laws for several reasons. First, copyright protection (i.e., the right to prevent others from making copies of the program) is provided for by statute under U.S. law.³⁵ Second, virtually all countries have adopted a form of copyright law protection very similar to that in force in the United States.

The selection of program protection by copyright is supported by the exis-

30. Some countries levy a duty on the importation of computer programs across their borders. In some instances, the duty will be based on the value of the media only, and therefore the duty based on a certain percentage of that media (tape or diskette) would be nominal. However, if the country levies a duty based on the value of the program (i.e., the transactional value, which may be its selling price) plus the value of the media, the cost to the U.S. software company may be significant. If the representative receives a master copy from which it reproduces the end-user copies, then the customs duty may be paid only on the master copy as it comes into the representative's country. See *International Lawyers' Newsletter*, Dec. 1981, at 4.

31. *Diamond v. Diehr*, 450 U.S. 175 (1981) (a patent application held to be statutory subject matter under 35 U.S.C. § 101 even though the claims in the application included steps involving a computer program).

32. *Apple v. Franklin*, 714 F.2d 1240 (3d Cir. 1983) (holding that Franklin had infringed valid copyrights owned by Apple which were embodied in Apple's computer program).

33. *Tandy v. Personal Micro Computers*, 524 F. Supp. 171 (N.D. Cal. 1981) (no preemption of trade secret protection was found in a computer program which was also copyrighted).

34. The European Patent Convention specifically excludes the patentability of computer programs. For an excellent discussion of this issue, see Kolle, *The Patentability of Computer Software in Europe and under the International Patent Treatise*, reprinted in H. BRETT & L. PERRY, *THE LEGAL PROTECTION OF COMPUTER SOFTWARE* 30 (1981).

35. 17 U.S.C. § 101 (1982).

tence of two international treaties, the Berne Convention³⁶ and the Universal Copyright Convention.³⁷ The Conventions generally require countries to provide the same treatment for nationals of other Convention countries as they provide for their own nationals.³⁸ Copyright protection remains, however, an area of some uncertainty, because, unlike the United States, other developed countries have not amended their copyright laws specifically to protect computer programs.³⁹ Nevertheless, through a series of cases decided over the last two years, foreign courts have affirmed copyright protection of computer programs.

In 1982, a West German court found the VISICALC program to be protectable under the German copyright act.⁴⁰ The court also held that an unpermitted copying of that program was in infringement of the U.S. owner's copyright. In 1982, the Tokyo district court similarly found a program embedded in a ROM (Read Only Memory) to be protected by copyright as a literary work under Japanese copyright law.⁴¹ In 1983, however, a lower court in Australia held that an "Apple" program was not protected by copyright. The Australian court seemed to rely upon the fact that the Australian Parliament had not specifically extended copyright protection to computer programs, but meant to leave such protection to "other legislation."⁴² This case may be important to U.S. software owners in other common law countries, such as the United Kingdom and Canada, that also have not enacted the type of amendments that specifically grant protection to computer programs.⁴³

36. International Convention for the Protection of Literary and Artistic Works, Berne, 9 Sept. 1886 (revised Berlin 1908, Rome 1928, Brussels 1948, Stockholm 1967, Paris 1971).

37. Universal Copyright Convention, Geneva, 6 Sept. 1952, 25 U.S.T. 1341, T.I.A.S. No. 7868 (revised Paris, 1971).

38. *Id.* at art. II, §§ 1, 2.

39. In the United Kingdom, a governmental task force has addressed the issue of whether legislation should be introduced to include specifically computer programs under the existing copyright laws. The United Kingdom task force did not recommend amendment of the United Kingdom copyright law, but believed the present law sufficiently broad to cover computer programs. See Ulmer, *Copyright Protection of Computer Programs*, 14 INT'L REV. INDUS. PROP. & COPYRIGHT L. 159, 166-67 (1983).

40. *Visicorp v. Basis Software Gmbh*, (Munich District Court No. 702490/82, Dec. 21, 1982).

41. *Taito v. I.N.G. Enterprises*, 1979 Case No. (7) 10867 (Tokyo District Court, Dec. 6, 1982).

42. *Apple Computer v. Computer Edge Pty. Ltd.*, No. 6130 of 1983, Federal Court of Australia 23, (New South Wales District, Dec. 7, 1983).

43. See Bishop, *Legal Protection of Computer Programs in the United Kingdom*, 5 N.W. J. INT'L L. & BUS. 269 (1983). In the developing world, there have been, to this author's knowledge, no cases involving this identical issue, with the exception of Taiwan. Recently, a Taiwan court has sentenced six executives of a company found to have pirated Apple computer programs to eight-month prison terms. *Wall St. Journal*, Jan. 27, 1984, at 34. Recent action in Mexico might be a precursor of actions in other developing countries. Mexico, like many other developing countries, requires a licensee to submit patent and other technology licenses for prior government approval of the terms and conditions contained in the license agreement. Failure to do so may make the agreement unenforceable and/or may cause the Mexican government to deny foreign exchange to the U.S. licensor. Prior to 1982, computer programs were not required to be submitted for such approval. The Mexican law now specifically includes computer programs. See Delgado, *Mexico-Commentary on the Amended Technology Law*, 80 PAT. & TRADE-MARK REV. 295 (1982). The new Mexican law, in Article 2, requires that all agreements to be performed in Mexico must be registered with the Mexican National Registry of

Because of this alleged uncertainty in copyright protection abroad, U.S. software owners, when licensing the programs abroad (and in the U.S. as well), also attempt to protect their programs under the confidence laws of the various countries. This is accomplished by including, in addition to a copyright notice, provisions and statements as to the trade secret and confidential status of the software licensed both in the software license and on the media itself (usually a label on the diskette).⁴⁴

C. Foreign Tax Issues

Countries normally impose a withholding tax on certain types of payments made by nationals of that country abroad. Traditionally, these taxes were imposed on certain interest payments, dividends, and royalties under technology licensing. Attorneys who deal with the "normal" types of technology licenses, such as patent and know-how licenses, are familiar with this procedure and take care to place contractual provisions in these licenses to shift the burden of payment of withholding taxes on the licensee, either directly or through a "grossing-up" of royalties paid to the U.S. licensor.⁴⁵ The Japanese and Canadian governments have taken similar actions to impose upon the licensee a withholding tax on software licensee fees which are accorded status akin to royalties.⁴⁶ While software licensors also shift the burden to the licensee to pay withholding taxes, interesting legal issues are raised by the imposition of such taxes on program licenses. Programs are licensed primarily to allow the licensor to maintain control over disclosure and copying of the programs. If it were not for the license status of programs, however, there would probably be no tax at

Transfer of Technology if they relate to, *inter alia*, "computer programs." 80 PAT. & TRADE-MARK REV. 300 (1982).

Brazil has recently followed suit, and it is expected that other developing countries may do likewise. Normative Act No. 22/82-Special Secretary of Informatics-SEI. Article 1 of the Act states: "The Registration in the Special Secretary of Informatics of computer software to be used in automatic machines for data processing and peripheral units installed in the National Territory is hereby established."

44. See generally H. BRETT & L. PERRY, *THE LEGAL PROTECTION OF COMPUTER SOFTWARE* (1981).

45. A withholding tax, which is imposed on the licensor, is usually required to be withheld by the licensee from royalties to be paid to the foreign licensor. In most instances, when permitted by local law, the foreign licensor will require the licensee to "gross-up" the royalty payment to the licensor. By this method, the amount of the royalties to be paid is increased by a sufficient amount so that, once the withholding tax is paid, the foreign licensor receives an amount equal to the originally established royalty fee. The amount of the tax is thus paid by the licensee and is usually passed on to the end-users in one form or another. A licensee may, in some instances, not be required to "gross-up" if the foreign licensor can obtain a usable U.S. foreign tax credit for the amount of the tax withheld by the licensee's government.

46. From the author's personal experience, this is the case with respect to certain programs. Arguably, the permissibility of Japan's imposing such a tax rests with the Japanese Income Tax Law, art. 161, item 7, and the Convention between Japan and the United States of America for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income (art. 14, para. (3)).

all. That is, if the programs were sold outright to the foreign end-user, there would be no tax on the simple export of the program product, because the payment for the sale of the product would not be construed to be a royalty.

D. *U.S. Tax Issues*

The treatment of income from foreign countries raises U.S. tax issues. One issue concerns whether income received from the licensing of software programs is entitled to the benefits of a Domestic International Sales Corporation (DISC).⁴⁷ The software industry is a rapidly growing sector of our high technology economy. U.S. software companies, which provide both "products" and services, enjoy a competitive advantage over their foreign software competitors. Yet, apparently because of the definition of "export property" under the DISC, few software companies have availed themselves of the benefits of the DISC.⁴⁸

DISC benefits are intended primarily for income produced from the export of goods manufactured in the United States, i.e., "export property." A DISC has as its principal function the selling, leasing, or renting of export property for use outside the United States. If the property that a corporation sells or leases is not "export property," the corporation does not qualify as a DISC.⁴⁹

One of the original justifications for the DISC is that the tax incentive allows U.S. corporations to produce in the United States and to export the fruit of their labors, thus giving employment to U.S. workers.⁵⁰ According to this justification, exported software programs should qualify for DISC benefits. The programs are conceived, developed, written and debugged, with appropriate documentation, by U.S.-based programmers, and are usually exported abroad in the form

47. Under the DISC, a taxpayer is permitted to defer part of its U.S. income taxation on certain foreign export income. For a thorough discussion of the DISC, see Domestic International Sales Corporations, *Tax MGMT.* (BNA) No. 264-3rd. The DISC provisions are contained in I.R.C. §§ 991-997 (1954).

48. The proposed Foreign Sales Corporation (FSC) legislation, S. 1804, 98th Cong. (1983), a bill to replace the present DISC legislation, makes little change in the export property definitions presently set forth in § 993(c)(1)(B) of the Internal Revenue Code. That section specifically excludes from the definition of export property, and thus DISC benefits, patents, inventions, or processes, copyrights or similar property. Therefore, a patent or other license may not obtain DISC benefits. Further, in the DISC regulations, intangible property is defined to include "any patent, invention, model, design, formulae, or process whether or not patented, or any copyright." *Treas. Reg.* § 1.993-3(F)(3).

49. I.R.C. § 993(c)(1)(A) (1954).

50. Congress denied DISC benefits for "intangible property" such as foreign technology licenses, because there is no concomitant benefit to U.S. employment. For example, in a foreign patent license of a U.S.-owned French patent, the U.S. company gives a French company the right to make, use, and sell the product in France. If the patent is for an innovative electric motor, the U.S. company/patentee gives the French company the right to manufacture the electric motor in France. This has at least two effects. First, French workers are employed to manufacture the electric motor, probably using materials purchased from other French companies. Second, U.S. exports to France by the U.S. company/patentee are displaced in part or in whole by sales of the licensed motor by the French company/licensee. Thus, U.S. workers and U.S. products and materials are not employed and purchased, respectively.

of tapes, floppy disks, or cartridges, together with the documentation. While there might be a translation of the program and related documentation into the language of the country of destination, the software exported is a product for all essential purposes. Importantly, U.S. employment benefits from the production and exportation of the software.⁵¹

An analysis of the relevant regulations of the Internal Revenue Code supports the argument that the DISC may already cover software. Regulation 1.933-3(F)(3) provides two exceptions from the definitions of export property. One exception includes a copyrighted article which is a film, tape, record, or similar reproduction.⁵¹ Most computer software programs are usually embodied on either a tape or a floppy disk and may arguably be defined as a "record." Also, the regulation provides that a copyrighted book, if there are restrictions on copying, and a license for a master recording tape for reproduction outside the United States are considered export property. Software programs are usually protected by copyright and are licensed; these licenses almost always include prohibitions on making copies. Moreover, some software companies produce a software program in the United States and send a master tape or disk abroad for strictly controlled reproduction and distribution. Thus, an export of software programs meets several of the requirements for DISC benefits.

A final problem, however, in qualifying software programs for DISC benefits is that the Internal Revenue Service has maintained (in Revenue Procedure 69-21) that unbundled software be characterized specifically as an intangible asset.⁵² This characterization of software as intangible is inconsistent with the general legal and technical definitions of product tangibility. Specifically, it is inconsistent with Federal court characterizations of analogous products.⁵³ However, the Internal Revenue Service's characterization of unbundled software as an intangible obviously is problematic for those software companies considering forming a DISC.

Part of the uncertainty of qualifying software programs for DISC benefits may be due to the fact that at the time of the DISC's enactment, the software industry was small and Congress could not have foreseen the emergence of this important industry. Today, however, the industry is large and growing fast, both here and abroad. Congress should take into account the changes in the software industry

51. Even under the present law and relevant regulations, software companies arguably may legally qualify the exports of their software as proper export property. See Yost, *A Survey of Tax Issues Affecting Software Developers and Users*, TAX EXECUTIVE 120, 125 (1984). Some large software companies have already formed DISCs. Also, many computer companies that bundle their software with their hardware receive DISC benefits for the "bundled" price, not the hardware price alone. Not many companies, however, which produce and transfer unbundled software have availed themselves of potential DISC benefits. Treas. Reg. § 1.933-3(F)(3).

52. Rev. Proc. 69-21.

53. See *Texas Instruments v. United States*, 551 F.2d 599 (5th Cir. 1977); *Walt Disney Productions v. United States*, 549 F.2d 576 (9th Cir. 1977); *Bing Crosby Productions v. United States*, 588 F.2d 1293 (9th Cir. 1979).

and amend the DISC definition of export property to include exported computer software produced in the United States.⁵⁴

V. U.S. ANTITRUST LAW IMPACT ON INTERNATIONAL TECHNOLOGY LICENSING

The attorney drafting a foreign technology license agreement must address the important issue of the permissibility of the terms and conditions in that license under U.S. antitrust laws. The concern arises because various U.S. laws might apply to these licensing activities. Further, the activities of the licensor and licensee may pass muster under the U.S. antitrust laws, but may run afoul of, for example, the noncompetition provisions of the European Economic Community.

The U.S. antitrust laws apply to activities performed or occurring abroad. The Sherman Act,⁵⁵ declares illegal every contract, combination in the form of a trust or otherwise, or conspiracy in restraint of interstate or foreign commerce.⁵⁶ Similarly, Section 2 of the Sherman Act condemns activities by persons who monopolize or attempt to monopolize any part of interstate or foreign commerce.⁵⁷ The Clayton Act and the Federal Trade Commission Act also apply to commerce with foreign nations.⁵⁸ Most recently, the Foreign Trade Antitrust Improvements Act (FTAIA)⁵⁹ excludes U.S. export trade from the coverage of the Sherman Act. This exclusion, however, is conditioned upon one party's actions not having an adverse effect upon the export trade of another person. The FTAIA will hopefully clear up some of the uncertainties which allegedly exist in the extraterritorial jurisdiction of the U.S. antitrust laws.⁶⁰

Although it is difficult to describe the reasoning behind the extraterritorial application of the U.S. antitrust laws, some introduction is necessary in order to appreciate how these laws may be applied to licensing.⁶¹ The Department of Justice identifies two major goals in the enforcement of the antitrust laws in international commerce. The first goal is to protect "the [U.S.] consuming public

54. The author made such a suggestion to the Senate Finance Committee in his testimony on S.1804 on Feb. 3, 1984.

55. 15 U.S.C. § 1 (1982).

56. The Sherman Act uses the terminology "in restraint of trade or commerce . . . with foreign nations." 15 U.S.C. § 1 (1982).

57. *Id.* § 2. Section 2 of the Act uses the terminology "Every person who shall monopolize or attempt to monopolize . . . any part of interstate or foreign commerce. . . ." *Id.*

58. In the Clayton Act, the terminology is "Commerce . . . means trade or commerce . . . with foreign nations." 15 U.S.C. § 14 (1982). In the FTC Act, the terminology used is "Commerce means commerce . . . with foreign nations" 15 U.S.C. § 44 (1982).

59. 15 U.S.C. § 4017 (1982).

60. The 1982 Act was enacted along with the Export Trading Company Act of 1982, 15 U.S.C. § 4017 (1982), which provides that companies may apply for and receive certificates from the U.S. Department of Commerce which may allow the companies to do certain actions abroad in the export trade which might otherwise be prohibited under the U.S. antitrust laws if done in the United States.

61. See ANTITRUST DIVISION, UNITED STATES DEP'T OF JUSTICE, ANTITRUST GUIDELINES FOR INTERNATIONAL OPERATIONS (1977) [hereinafter cited as GUIDE].

by assuring it the benefit of competitive products and ideas produced by foreign competitors." The second major antitrust goal is "to protect [U.S.] export and investment opportunities against privately imposed restrictions."⁶²

Although the Sherman Act seems to declare illegal all conspiracies, monopolies, or attempts to monopolize, the Supreme Court early adopted a "rule of reason" construction for applying the provisions of the Sherman Act.⁶³ Thus, not every restraint of trade is illegal. Only those restraints which "unreasonably" restrain trade are illegal. In applying the rule of reason to specific factual restraints, the Department of Justice adopts three threshold inquiries. First, is it an anticompetitive restraint which is ancillary to a lawful main purpose? Second, is its scope or function greater than necessary to achieve that purpose? Third, is it otherwise reasonable, either alone or in conjunction with other circumstances?⁶⁴ Through application of the rule of reason, the Supreme Court has determined that certain conduct in restraint of trade is unreasonable *per se*. The court has applied the *per se* classification to price fixing, agreements among competitors, agreements to limit production, agreements among competitors to divide markets, group boycotts, concerted refusals to deal, and other behavior determined to be undesirable regardless of the economic context in which it took place.⁶⁵ These *per se* rules, however, do not necessarily apply to activities abroad.⁶⁶

Regarding the issue of the application of the U.S. antitrust laws abroad, the Supreme Court has extended the subject matter jurisdiction of U.S. courts to allegedly anticompetitive activities performed at least partly abroad. In the early case of *American Banana Co. v. United Fruit Co.*,⁶⁷ the Supreme Court held that activities occurring abroad which are permitted by a foreign government are not within the purview of the Sherman Act, despite U.S. citizens' activities in that foreign country. Some years later, in *United States v. Aluminum Co. of America*,⁶⁸ the Supreme Court pronounced the "effects" doctrine. In *Aluminum Co. of America*, the Court held that the U.S. antitrust laws may reach contracts, conspiracies, and combinations made abroad, including those exclusively among foreign companies, if they are intended to restrain U.S. foreign commerce and actually do result in anticompetitive effects on U.S. commerce.⁶⁹ The Department of Justice has adopted the position of the *Aluminum Co. of America* Court

62. *Id.* at 4-5.

63. *Standard Oil Co. of New Jersey v. United States*, 221 U.S. 1 (1911).

64. GUIDE, *supra* note 61, at 3-4.

65. See U.S. INTERNATIONAL TRADE COMMISSION PUB. NO. 935, INTERNATIONAL TECHNOLOGY TRANSFER: A REVIEW OF RELATED LEGAL ISSUES 23 (1979) [hereinafter cited as INTERNATIONAL TECHNOLOGY TRANSFER].

66. GUIDE, *supra* note 61, at 7; see also INTERNATIONAL TECHNOLOGY TRANSFER, *supra* note 65, at 21-28.

67. 213 U.S. 347 (1909).

68. 148 F.2d 416 (2d Cir. 1945).

69. *Id.* at 421.

stating that "[w]hen foreign firms actions have a substantial and foreseeable effect on U.S. commerce, they are subject to U.S. law regardless of where they take place".⁷⁰ Conversely, when foreign activities would have no direct or intended effect on either U.S. consumers or export opportunities, the Department of Justice has indicated that the U.S. antitrust laws do not apply.⁷¹

Applying the above antitrust standards to foreign patent licenses, one must remember that while certain activities within the U.S. in patent licensing may be *per se* illegal, the legal status of those activities may change when the activity is performed abroad. Even if the activities are classified as *per se* illegal in the U.S., in overseas markets those same activities are not objectionable under U.S. Law unless they unreasonably foreclose other U.S.-based sellers from making sales abroad or affect goods reexported into the U.S. market.⁷²

An example of the foregoing is perhaps useful. A traditional *per se* violation of the U.S. antitrust laws is a tying arrangement, in which the licensor, as a condition for granting a patent license, requires that the licensee purchase unpatented supplies from the licensor. Tying is objectionable because it attempts to extend the patentee's statutory patent rights to unpatented goods and precludes the licensee from purchasing the unpatented goods from others, including the licensor's domestic competitors. This same activity, performed between a U.S. licensor and its foreign licensee may violate U.S. antitrust laws if there is some effect on U.S. exports or imports of the unpatented goods.⁷³ Such an effect could occur, for example, if there exist other U.S.-based producers of the unpatented goods. These U.S. based producers would be actually or potentially prohibited from selling those goods to the foreign licensee; therefore, there could be an effect on U.S. foreign commerce, that is, the commerce of the U.S. patentee's U.S. competitors.⁷⁴

Conversely, while a particular activity may be legal under the U.S. antitrust laws, the restrictions placed upon the foreign licensee may be in violation of the laws of the country of the foreign licensee. For example, the European Economic Community (E.E.C.) has its own antitrust law provisions.⁷⁵ The Commission of

70. GUIDE, *supra* note 61, at 6.

71. GUIDE, *supra* note 61, at 7. Two recent cases, *Timberlane Lumber Co. v. Bank of America*, 549 F.2d 597 (9th Cir. 1976), and *Mannington Mills, Inc. v. Congoleum Corp.*, 596 F.2d 1287 (3d Cir. 1979), have attempted to temper the traditional "effects" doctrine by requiring that international comity factors, such as the interests of the United States versus those of other countries, be considered when attempting to enforce the U.S. antitrust laws extraterritorially. See Mirabito & Friedler, *The Commission on International Application of the U.S. Antitrust Laws: Pulling in the Reins?*, 6 SUFFOLK TRANSN'L L.J. 1 (1982).

72. GUIDE, *supra* note 61, at 35-39.

73. GUIDE, *supra* note 61, at 35.

74. For a further discussion of the impact of the U.S. antitrust laws on foreign commerce, see Fugate, *The Department of Justice's Antitrust Guide for International Operations*, 17 VA. J. INT'L. L. 645 (1977).

75. Those provisions are contained in Articles 85 and 86 of the Treaty of Rome. See INTERNATIONAL TECHNOLOGY TRANSFER, *supra* note 65, at 37, 38.

the E.E.C. has recently circulated a draft regulation⁷⁶ that specifies those restrictions which may be permitted and those which are prohibited in patent licenses involving companies of E.E.C. member states. Similarly, the Andean Common Market, among others, has established rules applicable to foreign licensors of technology.⁷⁷ These rules include prohibitions on tying, on the fixing of resale prices of the licensee's product, and other prohibitions. Accordingly, an attorney who is drafting foreign licenses must not only satisfy U.S. antitrust requirements but also appreciate any foreign laws and regulations which might make what is permitted in the U.S. prohibited under foreign laws and regulations.

When representing a U.S. company which is licensing abroad, under any of the methods discussed above, an attorney should have not only adequate knowledge of the pertinent U.S. antitrust laws and regulations, but also a sensitivity to the foreign legal issues which arise in the licensee's country or country group.

VI. CONCLUSION

This paper has examined the various types of technologies which are licensed abroad and attempted to demonstrate the legal regimes under which the transfer occurs. Technology licensing will continue to be an important component for U.S. companies in the international marketplace because of the requisite monetary benefits to U.S. companies. A U.S. technology licensor, however, may run the risk of losing its technology to its own licensee. Thus, joint venture agreements may be used to minimize this danger.

In the relatively new and quickly growing computer software industry, the methods by which computer software is licensed abroad have been discussed, as well as effective methods of protecting software abroad. Finally, it has been noted that the attorney engaged in technology licensing must be fully apprised of the relevant U.S. and foreign antitrust laws and regulations which must be examined in any technology transfer abroad. This paper is not intended to comprehensively discuss the covered subjects, but to apprise counsel of the close attention which must be paid to U.S. and foreign laws in licensing technology abroad.

76. Official Journal of the European Communities, No. 16/3 (1984). See also Hayward, *Patent Licensing in the EEC*, 35 BUS. LAW. 455 (1980).

77. See Mirabito, *The Control of Technology Transfer: The Burke-Harthe Legislation and the Andean Foreign Investment Code*, 9 INT'L LAWYER 215, 232 (1975).