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Software Protection in the International Marketplace

J. B. Taphorn*

The courts clearly have established the protectability of computer software in the United States. Decisions such as *Apple v. Franklin*¹ and *Apple v. Formula*² have affirmed the copyright protection of computer software in the United States. The Supreme Court decisions in *Diamond v. Bradley*³ and *Diamond v. Diehr*⁴ have established the patentability of inventions involving computer software. Furthermore, decisions such as *Telex v. IBM*⁵ and *S&H v. SAS*⁶ have held that computer programs may be protected also as trade secrets.

This article discusses the protection that exists in other countries for computer software. It explores how the laws of other countries compare with those in the United States. Upon considering the nature of computer software, the article examines the protection mechanisms that exist in the United States for various aspects of software. Because protection mechanisms exist in similar patterns throughout the world, knowledge of United States protection mechanisms aids in understanding the possible protections in many countries that have not yet addressed the protection of computer software.

The article further explores means of extending protection to other countries. For some protection mechanisms, this extension essentially is automatic, while for other mechanisms extension requires overt acts of the potential owner. Finally, the article explains the enforcement of rights to prevent appropriations of software by others.

I. The Nature of Software

"Software" is an all encompassing term, that includes within its ambit computer programs (code); program documentation such as user manuals, installation manuals, and program logic manuals; and

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¹ 219 U.S.P.Q. (BNA) 113 (3d Cir. 1983)

² 725 F.2d 521 (9th Cir. 1984).

³ 450 U.S. 381 (1981).

⁴ 450 U.S. 175 (1981).

⁵ 367 F. Supp. 258 (N.D. Okla. 1973).

⁶ 568 F. Supp. 416 (M.D. Tenn. 1983).

precode materials such as flow charts, flow diagrams, detailed design, and pseudocode. Computer programs and precode materials will be discussed, because copyright protects documentation in most countries. The copyright protection of program logic manuals generally should be sufficient to prevent the use of those manuals for purposes of writing computer programs that copy their program logic and flow.

Congress has statutorily defined computer programs as sets of statements or instructions for use directly or indirectly in a computer to bring about a certain result.⁷ One form of these sets of statements or instructions is known as code. The most common type of program is known as a macroprogram. A user normally adapts a macroprogram to its computer system configuration and applications, and therefore, must have sufficient information to understand the language of the set of statements or instructions to be able to modify and make additions to the program. Macroprograms generally are application programs that are designed to meet particular user needs such as payroll, inventory, accounts receivable, accounts payable, and spread sheets.

Macroprograms also include operating systems that the computer manufacturer normally supplies. They provide the user with the ability to manage the resources of the computer such as disk drives, tape drives, printers, communication controllers, data bases, and the various programs that the computer might execute concurrently. Operating systems also provide the common functions that each of the various programs otherwise would have to incorporate itself, including loading from or writing on disk or tape drives. Macroprograms also include utilities. The uses of utilities include loading data or programs into a computer, printing data out of a computer, and sorting or merging data within a computer.

While computer manufacturers provide macroprograms with the expectation that the user might tailor a program to its situation, they do not have this expectation when providing microprograms. Generally, the user has no explanation of the language of the microprogram. Microprograms frequently are internal to a computer and are not ordinarily accessible to the user. Thus, the manufacturer provides them as a component part of a computer. This is not the exclusive form of marketing, however, because today manufacturers frequently market microprograms separately on media that the user inserts into a computer.

Computer programs also are distinguishable by their form. One form is source code, which is the series of statements or instructions that the programmer writes directly, usually with explanatory com-

⁷ 17 U.S.C. § 101 (1982).

ments. The programmer can write this series of statements or instructions with high-level languages, including COBOL, FORTRAN, PASCAL, PL1, and BASIC. These languages enable the program to run on computers of different architecture through conversion by respective compilers. A compiler is a program that converts a source code program into object code, which executes on a computer of a particular architecture. The architecture of a computer is the manufacturer specified relationship, including formats and protocols, between the parts (including programs) of a computer system.

A program executes on a machine in the form of object code, which is machine-level language. In a computer of an appropriate architecture, this code will cause the computer to carry out the task for which the program was designed. Although the average person cannot easily read object code, programmers familiar with the machine-level language of a particular machine can read and understand it.

While programmers may use a high-level language to write a program in source code, they will write a program in an intermediate-level language when they want a compact and efficient code and have the necessary understanding of a particular type of computer. This intermediate-level language is assembler language. Compilers may convert source code into assembler language code as well as into object code. A programmer skilled in the assembler language can then complete the fine tuning of the program. An assembler program converts assembler code into object code.

Software also is distinguishable by the different kinds of media used for its distribution. The punched card was one of the early forms of distribution. A program involved hundreds of punched cards, with each card usually reflecting one statement or instruction. Magnetic tape first replaced punched cards. A reel of tape may contain one program or many programs. Punched paper tape also has distributed programs.

Disks also can be used to distribute computer programs. Disks are most useful, however, when distributing many programs, because of their capacity. Diskettes frequently distribute small programs such as those for personal computers.

Manufacturers frequently market microcode in "Read Only Memories" (ROMs). Users cannot readily permanently alter programs on ROMs. Thus, these programs are less likely to create problems for the manufacturer in the maintenance of the computer. Manufacturers are increasingly using ROMs for the marketing of licensed programs as well. These ROMs are pluggable units, which allows the user to insert them into the computer to run a particular program.

Manufacturers also are using telecommunications as a distribu-

tion mechanism for programs. Telecommunications may become a primary communication vehicle in the future. To execute a program using telecommunications, a computer at a remote location transmits the program over telephone lines, microwaves, or via satellite to the executing computer.

Other aspects of computer programs include flow charts, truth tables, algorithms, ideas, functions, operations, pseudocode, trade names, programmed computers, and computer controlled systems or processes. Flow charts reflect the decisions and actions of a program and the paths interconnecting these decisions and actions. The level of abstraction of these charts ranges from detailed specifications of the operations of individual instructions to general reflections of the nature of the input data, the processing, and the output data.

Truth tables are more concise format expressions of program logic. Truth tables describe logic functions by listing all possible combinations of input values and indicating the output value for each combination. The logic that a programmer selects to enable a program to achieve a particular result will also reflect the personality, skill, and judgment of the programmer. Programmers normally create flow charts and truth tables while developing a problem but can create them after coding to reflect the essential creative aspect of a particular program.

No universal programming definition exists for the term "algorithm." Several years ago the United States Patent Office postponed the formal issuance of guidelines for patenting programs because no consensus on this definition existed.⁸ An algorithm may be characterized, however, as the overall approach to solving a problem and may precede flow charting in program development. Typically, it defines the set of processing steps of the input and output data.

Additional aspects of computer programs are the ideas or concepts contained within them. An example of an idea or concept in a program is the rapid switching of the contents of two computer registers by the performance of three exclusive "or" operations. In that idea, the contents of the two registers first pass through an exclusive "or" adder, whereupon the program substitutes the product for the contents of one register. The contents of the two registers, the second of which still contains the old value, then pass through the exclusive "or" adder again whereupon the program places the new product in the second register. Finally, the current contents of the two registers pass through the exclusive "or" adder again, and the

⁸ Guidelines to Examination of Programs, 829 Off. Gaz. Pat. Office 865 (1966). Guidelines were later developed and included in Guidelines to Examination of Applications for Patents on Computer Programs, 855 Off. Gaz. Pat. Off. 829 (1968).

product is placed in the first register. The former contents of the second register are now in the first register and vice versa. A program may use many such ideas, which may be new or part of the general knowledge of the art. To the extent that an idea is new and inventive, it may be patentable.

The term "function" has many definitions. For purposes of this article, "function" is a customer-perceived feature. An example of such a function is the generation of a list of parts added to an inventory by a program designed to keep track of a customer's inventory. Another example is the generation of a list of parts suppliers. These functions are separate from the main function of maintaining a list of parts in inventory.

"Operations" is a term that has both program and business implications. For the purposes of this article, the definition of "operation" is an action directed by an instruction, such as addition, branching, or comparing. An operation may be performed through one or more instructions. A series of such operations may constitute a routine or subroutine. A number of routines may make up a module, and a number of modules may constitute a program.

Pseudocode is one way of perceiving the detailed logic of the sequence of operations chosen by a programmer, and may parallel detailed flowcharts. A set of instructions that reflects exactly the logic of a programmer's pseudocode can be written. Another use of pseudocode is to compare the respective detailed logics of programs suspected of being derivatives of another program.

Trademarks often are important aspects of computer programs but need to be distinguished from a program's name. An example of a program's name is "computer assisted design automation program" (CADAM). Sometimes an indication of its source accompanies the program name. CADAM is one example of an indication of source for a computer assisted design automation program. The Lockheed Corporation uses CADAM as a trademark.

In 1981 the Supreme Court issued the *Bradley* and *Diehr* opinions, which many courts have interpreted as indicating that two aspects of computer programs may be patentable. One such aspect is a computer in which a program has appropriately modified its behavior. In *Bradley* the inventor used a microprogram to update a cache memory, a high-speed memory inserted between the regular memory of a computer and its decode and execution registers to speed up the operation of a computer. The cache memory contains instructions or data that a computer is likely to use. New information may update the main memory after the data has transferred to the cache memory for use. The invention in *Bradley* was the incorporation of a microprogram into the computer that responded to the changes in main memory data that updated the cache memory. The Supreme

Court found that a computer programmed in this manner was patentable subject matter.⁹

The other possibly patentable aspect of a program is a computer controlled system or process. In *Diehr* the Supreme Court held patentable a system or process that controlled the curing of rubber in a mold by inserting a temperature probe into the mold, connected the temperature probe to an appropriately programmed computer to regulate the cure time, and stopped the curing after a predetermined amount of curing had occurred.¹⁰ The computer contained a program that calculated the cure time as a function of a mathematical formula.

Because of the many different aspects of a computer program, many different forms of protection for computer programs are necessary. These forms of protection include not only patent protection as indicated by the *Bradley* and *Diehr* decisions, but also trade secret, copyright, unfair competition, and trademark protection.

II. Software Protection in the United States

Patents protect ideas and concepts for a limited period of time in exchange for disclosure of the idea or concept to the public. When a patent issues, the inventor receives a seventeen-year monopoly on his invention, giving him the right to prevent others from using the invention during that period.¹¹ Only new ideas or concepts are patentable. The idea or concept must be novel, which means that the invention must not be obvious to one skilled in the art. Generally, the writing of most new computer programs does not involve invention. Because of the great expense involved in patent application, programmers have not viewed patents as an effective protection mechanism for most new programs.

A person who believes that he has created a patentable invention, however, should see a patent attorney. The patent attorney will prepare a patent application that lists claims about the scope of the invention and will file it with the United States Patent Office. A patent examiner will examine the application and cite prior art that is believed to narrow the scope of the invention. When the examiner and the attorney agree on the scope of the invention, the patent will issue.

Unlike patent protection, trade secret law does not require the expenditure of money. Because the purpose of the trade secret pro-

⁹ 450 U.S. at 381.

¹⁰ *Id.* at 184.

¹¹ 35 U.S.C. § 154 (1982). The common law and not the patent law gives the inventor the right to make, use, and sell his invention. Patent law establishes the right to exclude others from using the invention. *Rawlings v. National Molasses Co.*, 394 F.2d 645, 647 (9th Cir. 1968); *L.L. Brown Paper Co. v. Hydroiloid, Inc.*, 32 F. Supp. 857, 867 (S.D.N.Y. 1939).

tection is to maintain confidentiality, precautions are necessary to prevent the trade secret from becoming common knowledge in the industry. Maintaining the secrecy of a trade secret requires a constant effort, once a secret is disclosed, it is lost.

Often it is difficult to maintain the secrecy of a trade secret in a marketed product. The program industry has tried to solve this problem through the use of marketing agreements that impose a confidential obligation on the recipient of a program. The courts generally have upheld these agreements. The vendor who uses these agreements has a trade secret right of action against the customer. Vendors are reluctant, however, to sue their customers. A further problem exists: the vendor has no contractual right against a third party to whom a customer has given the trade secret, because the contract imposes no obligations on the third party. Moreover, the scope of trade secret protection varies from state to state.

As a result of problems with patent and trade secret law, the computer industry has turned to copyright law to protect programs. Copyright protects a program against copying and using it to prepare a derivative work.¹² It also protects against the public distribution of any unauthorized copies, including copies of derivative works.¹³ Copyright law does not protect particular ideas, but it does protect the expression of ideas and the selection, coordination, and arrangement of a compilation of ideas.¹⁴ *Whelan Associates v. Jaslow Dental Laboratory*¹⁵ held that the reproduction or utilization of a program to prepare a derivative work appropriates the expression. The copyright protected component of a program protects the various ways programmers could write the program. Copyright protects the personality, skill, and judgment of the individual programmer. Under copyright law anyone is free to use an abstract idea or algorithm from a program. A programmer is not free, however, to duplicate the detailed design logic or flow of the individual programmer's implementation by translating, reverse flow charting, or pseudocoding, and recoding.

¹² *The Subject Matter of Copyright*, 1 NIMMER ON COPYRIGHT § 2.04[c], at 2-42 to -44.2 (1984).

¹³ 17 U.S.C. § 103(a) (1982). The statute defines a derivative work as a work "based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgement, condensation, or any other form in which a work may be recast, transformed, or adapted" or "consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship." 17 U.S.C. § 101 (1982).

¹⁴ See H.R. REP. NO. 1476, 94th Cong., 2d Sess. 54, reprinted in 1976 U.S. CODE CONG. & AD. NEWS 5659, 5667. The House Committee Report explained that among "literary works" protected by copyright law were "computer programs to the extent that they incorporated authorship in the programmer's expression of original ideas, as distinguished from the ideas themselves." *Id.*

¹⁵ No. 83-4583, slip op. (E.D. Pa. Jan. 22, 1985).

Copyright protection arises on creation of the program.¹⁶ Once a program is written, the programmer has an automatic copyright. Nothing needs to be done to maintain protection until the writer offers the program to the public. At the time of public distribution, the program should carry the copyright notice in a manner and location that will give reasonable notice of a claim to copyright.¹⁷ Although copyright law does not require a programmer to deposit with the Copyright Office a program that is distributed on machine readable media only, the writer commonly places a copy of the program (or appropriate identifying material) in the Copyright Office within three months after publication, simultaneously with an Application to Register a Claim of Copyright with the Copyright Office.¹⁸ The Copyright Office awards a certificate of registration in due course to the copyright owner.¹⁹ A copyright owner must register the program to have standing to bring suit under the copyright law.²⁰

License agreements are often the means of marketing programs protected by copyright. Typical license agreements lease a copy of the program and license a customer to copy the program into a designated computer for execution. Frequently, a charge accrues for each month a customer uses the program. Upon termination of the license agreements, the customer must either return the program to the licensor, or erase it and the copy he had placed in the computer.

A vendor, of course, may sell rather than lease a program. The purchaser becomes the owner of a copy of the program. A December 12, 1980 amendment to the copyright laws provides some copying and adaptation rights to the owner of the copy.²¹ This section states it is not copyright infringement for the owner of a copy of a program to make another copy or adaptation thereof, provided the new copy or adaptation is created as an essential step in the utilization of the program in conjunction with a machine, or is for archival purposes only.

The misappropriation doctrine under the law of unfair competition, which, like trade secret law, is statutory, regulates the appropriation of products among competitors. This doctrine has its genesis in the Supreme Court case, *International News Service v. Associated Press*.²² In *International News Service* a news service competitor copied from newspapers published by members of the Associated Press. The Supreme Court affirmed the court of appeals' grant of an injunc-

¹⁶ 17 U.S.C. § 302(a) (1982) (this section applies only to works created on or after January 1, 1978).

¹⁷ *Id.* § 402(c).

¹⁸ *Id.* §§ 408, 409.

¹⁹ *Id.* § 410.

²⁰ *Id.* § 411(a).

²¹ Pub. L. No. 96-517, 94 Stat. 3028-29 (1980).

²² 248 U.S. 215 (1918).

tion, holding that while a consumer was free to read "hot news," a competitor was not free to read this news, copy it, and reprint it as its own.²³ Although the *International News Service* doctrine was dormant for a while, several recent cases have relied upon it to hold the defendant competitor liable.²⁴

Trademark law may not seem to be a likely protection mechanism for programs, because trademarks are only an indication of the source of the product, and trademark law does not protect the content of a product. A trademark owner, however, may prevent a competitor from marketing a product under a mark likely to cause confusion between its product and the trademarked product, or from passing off its product as that of its competitor. Thus, Lockheed could prevent a competitor from distributing a particular computer assisted design automation program (CADAM). CADAM is an indication of the source of the program, and a competitor's use of the word CADAM for marketing another computer assisted design automation program would infringe the trademark owner's rights.

In the United States, foreign trademarks will be protected if the mark has been registered in the country of origin of the applicant or the applicant alleges use in commerce.²⁵ Nevertheless, applicants normally register trademarks with the United States Patent and Trademark Office to enhance the legal status of the trademarks.²⁶

III. International Extensions of Software Protection

A programmer may secure rights in other countries in several ways. Some of the protection rights previously discussed require country by country activity. For example, the filing of a patent application is a prerequisite to obtaining patent rights in any country. Normally, foreign attorneys file this application, working through a United States patent attorney. Recent international agreements,

²³ *Id.* at 236-40.

²⁴ *International News* was a pre-*Erie* case developing the "general federal common law" of unfair competition as misappropriation. The doctrine retains vitality in state common law, which has been interpreted in several recent federal cases. *See, e.g.*, *Standard & Poor's Corp. v. Commodity Exch., Inc.*, 683 F.2d 704, 710-11 (2d Cir. 1982) (affirming injunction against defendant's use of Standard & Poor's 500 Index to determine settlement price of former's stock index futures contracts); *Roy Export Co. v. Columbia Broadcasting Sys.*, 672 F.2d 1095, 1105 (2d Cir. 1982), *cert. denied*, 459 U.S. 826 (1983) (defendant's use of film clip compilation owned by plaintiff, in film biography of Charlie Chaplin was misappropriation under New York common law); *United States Trotting Ass'n v. Chicago Down Ass'n*, 665 F.2d 781, 785, 787 & n.9. (7th Cir. 1981) (defendant misappropriated performance information from plaintiff's eligibility certificates for harness-racing horses); *Miller v. Universal City Studios, Inc.*, 650 F.2d 1365, 1370 (5th Cir. 1981) (author's factual research not copyrightable; compared to uncopyrightable "information concerning current events" in *International News*); *Toho Co. v. Sears, Roebuck & Co.*, 645 F.2d 788, 794 (9th Cir. 1981) (state misappropriation law, based on *International News*, inapplicable to trademark infringement).

²⁵ 15 U.S.C. § 1126(c) (1982).

²⁶ *Id.* § 1051.

such as the Patent Cooperation Treaty²⁷ and the European Patent Convention,²⁸ have made this an easier and less expensive activity. The owner of a patent must pay taxes, known as maintenance fees, on the patent.²⁹ Maintenance fees can become quite prohibitive in the later lives of patents. Unless the patent actually protects an important development, it may become expedient to abandon a patent right.

The use of trademarks is another protection mechanism that requires country by country activity. Contrary to the practice in the United States, where the first user obtains a right to the trademark, in most foreign countries, the first to register obtains the right to the trademark.³⁰ The registration of the trademark usually does not require prior use. The first registrant owns the trademark, but ownership may be lost through nonuse. Thus, if an owner has a successful mark and desires to market its program in other countries, it should register the mark as soon as it has made that marketing decision; this prevents anyone else from obtaining a blocking registration and engaging in a hold-up operation. Of course, the owner also may lose its foreign registrations if it does not follow up registration with marketing activity. Normally, foreign attorneys effect foreign registrations.

One protection right that does extend automatically to many countries is copyright. A number of conventions operate to extend copyrights including the Universal Copyright Convention (UCC),³¹ the Buenos Aires Copyright Convention,³² and the Berne Convention.³³ The United States belongs to the first two conventions but not to the Berne Convention. In fact, the Universal Copyright Convention was formed because the United States was unable to join the Berne Convention because of its copyright laws.

The Universal Copyright Convention (UCC) involves about eighty countries, most of which are the primary program marketing opportunities throughout the world. Basically, other UCC countries must accord a United States copyright holder with the same protection accorded to their local citizens. If a United States copyright notice includes the capital "C" in-a-circle symbol (©), other UCC countries will deem the owner to have complied with their formalities.

²⁷ Patent Cooperation Treaty with Regulations, June 19, 1970, 28 U.S.T. 7645, T.I.A.S. No. 8733.

²⁸ Convention on the Grant of European Patents, Oct. 5, 1973, Jan. 1982 Industrial Property Laws and Treaties—Multilateral Treaties (Switz.) 2-008.

²⁹ 35 U.S.C. § 41(b), (c) (1982).

³⁰ I S. LADAS, PATENTS, TRADEMARKS AND RELATED RIGHTS: NATIONAL AND INTERNATIONAL PROTECTION 1055, 1060 (1975).

³¹ UNESCO, 3 COPYRIGHT LAWS AND TREATIES OF THE WORLD (Supp. 1972).

³² *Id.*

³³ *Id.*

The Buenos Aires Copyright Convention of 1910 (BAC) applies mainly to Latin American countries. The BAC provides that a copyright obtained in the United States shall be effective in all of the other countries, provided a statement appears in the work that indicates the reservation of the property right. The United States copyright notice typically meets that requirement.

BAC differs from the Washington Copyright Convention of 1946,³⁴ which states that it replaces the Buenos Aires Convention. The United States, however, does not belong to the Washington Convention. That Convention expressly states that the use of a copyright notice is not a condition of protection, although it encourages use of the copyright notice.

The Berne Copyright Convention is the oldest copyright convention. It also has approximately eighty countries in its ambit. Most of these countries are also in the Universal Copyright Convention. With the increase in program piracy, however, the ability to establish copyright in countries that are not members of both conventions is increasingly important. The Berne Convention requires moral rights, no formalities, and a number of minimum rights and imposes fewer criteria for copyright eligibility. As noted earlier, the United States was ineligible for Berne membership because of its copyright laws. Efforts are under way, however, to determine whether, under the new copyright law which became effective in 1978, the United States may be eligible for Berne membership. Abolition of the United States copyright notice requirements would ease this entry.

Although the United States does not belong to the Berne Copyright Convention, United States citizens may qualify for its protection. Under the Berne Convention, if the first publication by a citizen of a country that is not a member of the convention occurs in a member country, that person will obtain Berne Copyright Convention protection in all Berne Convention countries.³⁵

The Berne Convention does not actually require first publication in a Berne country; that obligation will be met if simultaneous publication exists. Further, simultaneous publication does not necessarily require actual simultaneity in publication; if publication occurs within thirty days of the United States publication, it may meet the provisions of certain versions of the Berne Convention Treaty. This means that if an owner assures that a program is available for public distribution in a Berne Convention country such as Canada, England, France, or Germany, on the same day, or within thirty days in some countries, of its availability for public distribution in the United

³⁴ *Id.*

³⁵ Berne Convention, Sept. 9, 1886, 3 Copyright Laws—Multilateral Conventions (Switz.) A-1.

States, the owner would have copyright protection in various Berne countries.

Although an owner may not have rights in a particular country via one of the international copyright conventions, he may have rights via an exchange of proclamations or a bilateral treaty that the United States has with that country. An example of such a bilateral treaty was the 1946 treaty between the United States and the Republic of China, before Chiang Kai-Shek left the mainland and went to Taiwan.³⁶ After Chiang's departure, only Taiwan accorded United States citizens copyright rights via that treaty. The People's Republic of China, however, denounced the treaty and did not provide protection for the intellectual property of foreigners. Although no treaty between the United States and the People's Republic of China currently provides for copyright protection, discussions are underway that may lead to protection of United States copyrighted material in China. The People's Republic of China also is in the process of considering the issuance of a copyright law.

In all countries where program copyright issues have arisen, except Finland, the courts have indicated that copyright protection will apply to computer programs. In the Finnish case, *Tietoura v. Bitti*,³⁷ the lower and intermediate courts held that copyright protection did not apply to computer programs.³⁸ The case was appealed to the highest court of Finland, but not on the copyright issue. The official position of Finland now, however, appears to be that copyright protects programs there, too.

Trade secret rights have automatic international extensions in the sense that a concept kept secret remains secret worldwide. Most foreign countries provide some equivalent of this protection even though they may not refer to it as trade secret protection. Business counterparts in different countries may share secrets without forfeiting this protection, if they disclose it under confidential agreements or contracts.

Unfair competition law also varies among countries. Countries may not designate the laws as unfair competition laws, but they have related concepts providing for enforcement of commercial morality. Furthermore, some acts will violate the sense of fairness of many cultures.

IV. Enforcement

Intellectual property rights are not self-executing; a holder of an intellectual property right must take the initiative to enforce his

³⁶ Treaty of Friendship, Commerce and Navigation, Nov. 4, 1946, United States-Republic of China, 63 Stat. 1299, T.I.A.S. No. 1871.

³⁷ 2 NIR 160,160-67 (1973).

³⁸ *Id.*

rights against an infringer. If he does not act diligently, legal doctrines such as laches and estoppel may apply to bar the enforcement of rights. The equitable doctrine of laches may work against a holder of an intellectual property right if he has knowledge of the infringement and fails to act for an unreasonable period of time. The equitable doctrine of estoppel may prevent the holder from enforcing his rights if he allows the infringer to continue the appropriation, knowing the infringer is relying on his failure to take action.

Protection may be desired against many types of infringing activities in a foreign country. One of the most obvious of these activities is the manufacture of computer programs. Another is the duplication of programs for sale in competition with the holder of an intellectual property right. The holder may desire to prevent the programs that he had licensed to one customer. The holder may desire protection from the importation of infringing programs into that country or from that country into the United States.

If the owner or holder of intellectual property rights believes that someone is violating his rights in another country and cannot negotiate a satisfactory resolution, he may bring suit in the local country's courts. In addition to the problems that he will face as a foreigner in those countries, however, he also can expect the infringer to urge additional defenses. The defenses might include assertions that the holder did not work the patent in that country or sell products according to the patented invention in that country. Some countries give a person a patent if their citizens will receive the benefit of the invention. If the holder of a patent does not sell the product in the country, infringers might argue that he at least should be required to offer others a license to manufacture and sell the product in the country.

An infringer of a copyrighted program may argue as a defense that the copyright holder did not supply sufficient copies of the program in the country. Another defense is that the holder did not translate the copyrighted work into the local language. This defense may not be a serious problem with programs, because programs are written in universal languages to a considerable extent, and many data processing people are familiar with the English language.

Foreign courts no longer are the sole forums for enforcing intellectual property rights in a foreign country, because such enforcement is a transitory action, which often obviates the need to decide those cases in the country where the rights exists. In such cases courts in other countries may determine the applicability of those rights. Thus, a transitory action is a cause of action that may be adjudicated by the courts of a sovereign other than the one in which the cause of action arose, provided the court has jurisdiction over the defendant.

An example of such a cause of action is a patent case, *Ortman v. Stanray, Corp.*³⁹ The Illinois court, which already had personal jurisdiction over defendant in a contractual rights dispute, decided it also had jurisdiction to hear a cause of action based on defendant's infringement of plaintiff's foreign patent.⁴⁰

Similarly, in a copyright case, *Sheldon v. Metro Goldwyn Pictures*,⁴¹ the federal court allowed a United States company to collect the foreign profits made from the foreign reproduction, distribution, and exhibition of films based on an illegal United States copy, from another United States company. In effect, the court found defendant to be a trustee of the foreign profits.⁴²

In a copyright case with a reverse twist, *London Film Productions v. Intercontinental Communications*,⁴³ the federal court ruled that it had jurisdiction in a suit against a United States company for infringing a British company's copyrights in Chile and other Latin American countries. The court found jurisdiction because it had personal jurisdiction over defendant.⁴⁴ Thus, a foreigner under some circumstances may be able to sue a defendant in the United States for acts of infringement elsewhere.

The United States courts have demonstrated willingness to adjudicate infringing behavior in other countries in the trademark area, too. In *Bulova Watch Company v. Steele*⁴⁵ the Supreme Court held that the United States courts have jurisdiction to award relief to a United States corporation for trademark infringement and unfair competition consummated in a foreign country by a United States citizen and resident.⁴⁶ Similarly, in *American Rice v. Arkansas Rice Growers*⁴⁷ the court found that it had the power to restrain the infringer from selling a trademark bearing product in a foreign country.⁴⁸

The United States Customs Service is another instrumentality for protecting the rights of intellectual property owners. Customs can intercept the importation of infringing programs into the United States, and registration of computer programs alerts Customs. Typically, to register a program, the owner sends to Customs a copy of the program and the United States copyright registration certificate.

³⁹ 163 U.S.P.Q. (BNA) 331 (N.D. Ill. 1969).

⁴⁰ *Id.* at 333-34.

⁴¹ 106 F.2d 45 (3d Cir. 1939).

⁴² *Id.* at 48.

⁴³ 580 F. Supp. 47 (S.D.N.Y. 1984).

⁴⁴ *Id.* at 48-49.

⁴⁵ 344 U.S. 280 (1952).

⁴⁶ *Id.* at 282-87.

⁴⁷ 701 F.2d 408 (5th Cir. 1983).

⁴⁸ *Id.* at 412-16.

V. Summary

Rights in computer programs can exist in foreign countries. These rights may exist automatically in the area of copyrights. Similarly, trade secret rights can exist through activities in the United States. Activities in foreign countries, such as filing patent applications and registering trademarks, will produce foreign patent and trademark rights.

Intellectual property rights in foreign countries may be realized not only by marketing the products in the foreign countries, but by licensing foreign manufacturers and sellers and by being alert to infringements. It is wise to engage foreign counsel when contemplating foreign operations. Foreign counsel's knowledge of the foreign country's laws will far exceed that of most United States attorneys. Moreover, counsel's knowledge of the politics of a country may be of greater value than knowledge of the law. In sum, the most effective worldwide protection for computer programs requires cooperation of United States and foreign attorneys.

