
Judith J. Welch
Wayne L. Anderson

Follow this and additional works at: https://repository.law.uic.edu/jitpl

Part of the Computer Law Commons, Intellectual Property Law Commons, Internet Law Commons, Privacy Law Commons, and the Science and Technology Law Commons

Recommended Citation

https://repository.law.uic.edu/jitpl/vol11/iss2/5

This Article is brought to you for free and open access by UIC Law Open Access Repository. It has been accepted for inclusion in The John Marshall Journal of Information Technology & Privacy Law by an authorized administrator of UIC Law Open Access Repository. For more information, please contact repository@jmls.edu.
COPYRIGHT PROTECTION OF COMPUTER SOFTWARE IN JAPAN

JUDITH J. WELCH*
WAYNE L. ANDERSON**

I. INTRODUCTION

The dramatic development and growth of the Japanese software market has captured the interest of American software manufacturers who are seeking to export their goods. The Agency for Cultural Affairs, an administrative organ of the Ministry of Education in Japan, reported that in September 1972, only 14,806 computers were operating in Japan.1 However, by March 1983, there were close to 128,000 computers operating in Japan.2 As the number of computers in Japan increased, the demand for software increased as well. According to a 1985 survey, the growth rate for Japanese software sales was in excess of twenty percent annually.3 The total value of the computer software market in Japan is estimated to be in excess of $40 billion.4 In addition to the current use, there is an anticipated increase for telecommunication projects and financial institutions' on-line systems.5

In 1985, Japan imported approximately $15.57 million of technology, while exporting to the United States only $3.8 million of technology. In addition, technology trade from the United States accounted for 71.1% of all imported intellectual property in Japan. This rapid growth in the use of computers coupled with the demand for software has pro-

---

* Assistant Professor of Business Law, School of Finance and General Business, Southwest Missouri State University.
** Lecturer, School of Finance and General Business, Southwest Missouri State University.

vided American software firms with a lucrative market. This is especially true since American software firms are more advanced in software technology than are Japanese firms. The increased demand has also encouraged the proliferation of unauthorized copying and use of computer software. Consequently, American firms are very concerned about how to protect their software under Japanese law.

Under the Japanese legal system, computer software can be protected under copyright, trademark, patent, tort, contract, or criminal law. This article will discuss the protection of software under Japanese copyright law. This protection can best be understood from a view of the historical development of the current Japanese law (Part II), the provisions of the current law (Part III), and a discussion of some of the unresolved issues under the current law (Part IV).

II. HISTORY OF THE JAPANESE COPYRIGHT LAW AMENDMENTS

In 1899, Japan joined the Berne Union and adopted its first copyright law. The Copyright Law of 1899 remained in force until it was replaced by the Copyright Law of 1970, which was in conformity with the Berne Convention for the Protection of Literary and Artistic Works. While the 1970 Copyright Law was designed to be flexible enough to adjust to developing technology, it did not foresee the results of rapidly changing technology in computer software. The Copyright Law was amended in 1984 to establish a public lending right to protect authors, performers, and manufacturers of phonograph records from public lending businesses. The law was later amended in 1985 to expressly extend copyright protection to computer programs and again in 1986 to provide protection to databases and various types of cable transmissions.

Before the 1985 amendment to the Copyright Law, the law was unclear as to whether computer programs were legally protected in Japan, and, if they were protected, what legal basis provided this protection. Part of this confusion was the result of heated debate between the Cultural Affairs Agency ("CAA"), a branch of the Ministry of Education, and the Ministry of International Trade and Industry ("MITI"). These are advisory committees that were formed in the early 1970s to address the issue of copyright protection for computer programs. The CAA has

6. CHUSAKUKENHO, LAW No. 48 OF 1970 [hereinafter COPYRIGHT LAW or LAW].
8. CHUSAKUKENHO, NO ICHIBU O KAISEISURU HORITSU LAW No. 62 OF 1985 (LAW AMENDING IN PART THE COPYRIGHT LAW) [hereinafter 1985 AMENDMENT].
9. Id.
authority for the copyright law while MITI has authority for patent and trademark law. Both CAA and MITI sponsored their own proposed amendments to the Copyright Law.

In June 1971, MITI formed the Committee to Study Legal Protection of Software.\textsuperscript{10} In 1972, this Committee issued an interim report that admitted many computer programs probably qualified as copyrighted works, but the 1970 Copyright Law provided inadequate computer program protection.\textsuperscript{11} The MITI Committee proposed a \textit{sui generis} system of intellectual property protection, which was different from both patent and copyright protection. The MITI report ("MITI Report I") stressed that while the then current law prohibited unauthorized copying, it did not prohibit unauthorized use of computer programs. In addition, the Copyright Law did not extend to the working of the computer programs, did not prevent duplication of investments in developing programs, and did not help promote the distribution of programs. The report also argued that the relatively short life of a computer program makes the long term protection of a traditional copyright (fifty years) inappropriate. In response to these problems, MITI proposed an amendment with the following features:

1. An abstract of the computer program would be filed with the registering office;
2. the office would register the program and publish the name of the program, the name of the registrant, and an abstract of the program;
3. the office would keep a copy of the program and maintain its secrecy during the period of protection;
4. unauthorized copying, use, transfer, lease, etc. of a registered program would constitute an infringement;
5. remedies would be an injunction and damages;
6. a ten-year period of protection would apply; and
7. proof of identical programs would be a presumed infringement.\textsuperscript{12}

The MITI Committee recommended that legal protection should be given to each computer program itself, rather than the idea expressed in it, regardless of the creativity or novelty of the program.\textsuperscript{13} The Committee considered software to be significantly different than other material afforded copyright protection. Because of this philosophy, the

\textsuperscript{10} Id. at 7.
\textsuperscript{12} Doi, \textit{supra} note 7, at 7 (citing \textit{Sofutoucaketekihogo-chesa-iinka: Chukanhekokusho (Tsusanshe, Ministry of International Trade and Industry), Interim Report of the Committee to Study Legal Protection of Software} (May, 1972) [hereinafter MITI Report I].
\textsuperscript{13} Id.
Committee strongly advocated a compulsory licensing system that would require some holders of copyrights to sell their rights to the public for "fair compensation." However, the Committee was very hesitant to take any definitive action until there seemed to be some worldwide consensus on how to protect computer programs. Therefore, MITI Committee put forth its recommendations as a proposal for a future law with interim measures taken on an experimental basis.

Within a year of this report, the Cultural Affairs Agency Subcommittee No. 2 (Computer Problems) issued its report ("Agency Report I"). The Agency Report I and the MITI Report I agreed that many computer software programs fell within the definition of copyrighted works. However, this is where their agreement ended. The Agency Report I strongly criticized the MITI Report I for failing to find that computer programs were sufficiently protected under the existing Copyright Law. In response to the major problems raised by the MITI Report I, the Agency Report I stated that there was insufficient justification to shorten the period of computer program protection from the standard copyright protection period. The report also stated that any economic interests of program developers added burden or enforced supervisory registration.

The Agency proposed that minor modifications to the Copyright Law would provide adequate protection to computer programs.

While these two reports raised conflicting solutions to copyright protection of computer programs, the Japanese government did not move to resolve these issues. At least two major factors contributed to the government's attitude that to resolve these conflicts was unimportant. The first was the fact that the use of computers was not very widespread in the early 1970s. The second factor was that software was not considered "an independent object of commercial activity." Generally, software was sold as a part of the hardware package and considered to be only an appendage to the hardware. Even after software began to be sold separately, trade secret law rather than copyright law was considered to be the basic method to protect computer software. This was especially true for operating systems since these systems were viewed by the courts as machine parts, which may not be copyrighted.

In 1982, the Tokyo District Court established the principle that computer programs qualify for copyright protection. In a landmark decision, the court ruled in the Taito Corporation Case that video game

---

15. BUNKACHO, CHOSAKUKEN SHINGIKAI DAI-Z SHOINKAI (KONPUTA-KANKEI) HOKOKUSHO (Cultural Affairs Agency, Report of the Second Subcommittee (Computer-related) of the Copyright Council) 1 (June, 1973) [hereinafter AGENCY REPORT].
programs may be the subject of copyright protection. In this case, the plaintiff was a video game manufacturer that claimed the defendant had infringed on its copyright by copying the object program contained in read only memories ("ROMs") of the plaintiff's video game machine. The defendant argued that the use of the program was not an infringement of the Copyright Law because computer programs are not included in the works protected under the law and are not subject to being copyrighted. The court held that "the act of storing original video game programs in read only memories (ROMs) constitutes an act of copying them; and that such act, if performed without authorization, 'constitutes an infringement of the copyright in them.'" By its order, the court established for the first time that computer programs were a work subject to copyright protection under the Copyright Law. This holding supported the one area of agreement between the MITI Report I and the Agency Report I: Computer programs fall within the definition of works under the Copyright Law.

The second case, Taite K.K. v. Makoto Denshikegye K.K., was decided by the Yokohama District Court on March 30, 1983. In this case the defendant manufactured and sold a counterfeit video game. The court granted the plaintiff damages on the grounds of copyright infringement and specifically noted that the plaintiff's program was a creative expression of the plaintiff's thoughts and thereby was a work of authorship entitled to copyright protection. The court further found that the object program was a copy of the original program and the defendant's storing of the object program in ROMs was a tangible reproduction of the plaintiff's original program.

Almost a year later, on January 26, 1984, the Osaka District Court decided the third case, Konami Kegye K.K. v. K.K. Daiwa. The plaintiff manufactured and sold a video game. The defendant copied the object program from the plaintiff's ROM into another ROM with the aid of a ROM reader. In holding that the sale of counterfeit circuit boards was an infringement of the copyright in the plaintiff's computer program, the Court stated:

[I]n combination with other information . . . assembly language . . . can be communicated to third parties having expertise. The discovery of solutions and combination of instructions naturally requires logical

thinking by the creator, and, therefore, the program as finally completed reflects the creator's individual characteristics, which are different from other programmers. 

The Copyright Law defines "work of authorship" as "a production in which thoughts or emotions are expressed in a creative way and which falls in the literary, scientific, artistic or musical domain."21

These cases firmly established that copyright protection can be given to computer programs, whether these programs are stored in ROMs, in a magnetic tape, or on a diskette. However, these cases did not solve all the problems associated with developing and protecting computer programs. Some felt that the court's broad application of the Copyright Law would impede the development of new programs since a new computer program is often an improvement of an old program.22 Under the Copyright Law, the owner of the work has the exclusive right to translate that work; therefore, the courts may view an improvement of the old program as an illegal translation. The questions left unanswered by these cases led MITI and the Agency to both prepare proposed amendments to the Copyright Law.

"In 1983, the Information Industry Committee of MITI's Industrial Structure Council issued an interim report23 on computer program protection."24 This report ("MITI Report II") departed from its previous position that computer programs were protected under the Copyright Law. In the MITI Report II, computer programs were considered economic assets that are intended to contribute to the industrial economy as opposed to copyrighted works such as art, music, or drama, which are intended to contribute to cultural development.25 The MITI Report II listed six basic requirements of a legal system for computer software protection. First, the system must accommodate the special characteristics of computer software such as the ease of copying and the need for post-sale confidentiality of software information. Second, the system should have dual purposes of promoting software for industrial use and protection of rights. Third, the system should encourage development of new software by balancing the rights of reproduction of old software with the rights to develop new programs. Fourth, the system should protect the economic interests of both the software developers and the users. Fifth, the system should be able to adapt readily to technological

24. Nakajima, supra note 11, at 146.
25. MITI REPORT II, supra note 23, at 22.
changes. Sixth, the system must consider the international issues of legal protection of computer software.\textsuperscript{26}

Just as it had in 1972, the MITI Report II concluded that current law was not adequate to provide the above requirements for computer software protection. Therefore, MITI proposed the enactment of a Program Right Law.\textsuperscript{27} MITI hoped that the enactment of this law would become a model for international negotiations on protection of computer software. As they had in 1972, MITI also proposed to shorten the protection period of the Copyright Law. MITI Report II argued that the current fifty-year protection period was so long as to impede development of new programs, which become obsolete in a much shorter period of time. The proposed Program Right Law did not specify a specific period of time, leaving the time frame to be determined through negotiations with the United States to gain its approval of the proposal. MITI Report I in 1972, however, had suggested a period of fifteen years.

The proposed Program Right Law provided that the right to use, reproduce, modify, and lease a computer program belonged exclusively to the person who developed the program.\textsuperscript{28} The 1970 Copyright Law did not have a “right to use” provision; it provided only that the creator had the exclusive right to reproduce and modify a copyrighted work.\textsuperscript{29} Therefore, it was considered a copyright infringement only if a work was knowingly reproduced or modified. Use of a computer program even in a manner not authorized by the author would not constitute an infringement. MITI’s proposed law was an attempt to make this unauthorized use an infringement of the creator’s rights.

The Program Right Law also proposed compulsory licensing similar to the Japanese Patent Law.\textsuperscript{30} The MITI Report II would authorize use of a computer software program if such use was required in order to develop a new computer program, or if such use was in the public interest.

The fourth major area dealt with by the Program Right Law was the area of moral rights. The 1970 Copyright Law gives two distinct rights to creators of copyrightable works: Moral rights and copyrights.\textsuperscript{31} These rights belong to the creators immediately upon the creation of their works and do not require registration. The moral rights of a creator are recognized by the Berne Convention as being independent of the author's economic rights and are not assignable. These rights include the right to preserve the integrity of the copyrighted work. As a

\textsuperscript{26} Nakajima, supra note 11, at 148.

\textsuperscript{27} MITI REPORT II, supra note 23, at 25-27.

\textsuperscript{28} Nakajima, supra note 11, at 150.

\textsuperscript{29} Copyright Law, supra note 6, at art. 20.

\textsuperscript{30} MITI REPORT II, supra note 23, at 25.

\textsuperscript{31} Nakajima, supra note 11, at 151 (citing Copyright Law, supra note 6, at arts. 18-28).
signatory of the Berne Convention, Japan must recognize these moral rights. The MITI Report II felt that these rights were incompatible with the economic functions of computer programs.

As can be seen, the MITI Report II and its proposed legislation were strongly opposed to copyright protection despite the strong judicial development of the previous years. On the other hand, the Cultural Affairs Agency felt even more strongly than before that copyright was the more appropriate method to protect computer programs. In January 1984, the Sixth Subcommittee of the Agency's Copyright Council released its own report ("Agency Report II"). The Agency proposed an amendment of the 1970 Copyright Law to specifically include the protection of computer programs. The Agency Report II noted that a copyrighted work is any product in which the creator's thoughts or emotions are creatively expressed and that belong to the category of art, music, literature, or science and technology.

The Agency Report II concluded that a computer program can be copyrighted work since it is a product in which the programmer's thought is creatively expressed and it falls into the category of science and technology. The Agency Report II further argued that since computer programs have many applications outside economic development, they would lead to the "development of culture," which is the objective of the Copyright Law.

Another area of major disagreement between the MITI Report II and the Agency Report II was in the length of the period of protection. The drafters of the Agency Report II saw no reason to shorten protection period of fifty years because they felt the longer protection time would provide an inducement for creators to develop computer programs. This interest in the development of new programs also led the Agency to oppose the compulsory licensing system and to create a "right to use" provision. However, one of the Agency's main arguments in favor of their proposed legislation was that there was an international trend towards protection of computer programs under copyright law rather than some other legal regime.

Both the MITI and the Agency submitted bills for legislative action. Normally, the MITI would have defeated the Agency in this matter. However, the MITI Program Right Law ran into strong opposition from

33. Nakajima, supra note 11, at 152.
34. AGENCY REPORT II, supra note 32.
36. Nakajima, supra note 11, at 153.
the United States government since the time of protection was different than that required by the Berne Convention, which is accepted on a more international basis. The importance of the United States opposition is a matter of some debate, but regardless of the specific reasons, the MITI and the Agency reached an informal agreement on March 16, 1985. Under this agreement, the MITI agreed to withdraw its plan and support the copyright protection of computer programs.

As soon as the agreement was reached, the Cultural Affairs Agency submitted a Bill for a Partial Amendment of the Copyright Law to the 102nd Session of the National Diet. The bill was passed by both Houses of the Diet without any changes and became effective on January 1, 1986, as Law No. 62 of 1985 ("1985 Amendment").

III. COMPUTER PROGRAM PROTECTION UNDER CURRENT JAPANESE LAW

Article 10 of the Japanese Copyright Law lists examples of the types of work that it protects. The 1985 Amendment to the Copyright Law adds "program works" to this list as item (ix). Further, the amended law defines computer program in Article 2(1) as "an expression of combined instructions given to a computer so as to make it function and obtain a certain result." In the Agency Report II, the application of this definition would include source codes, object codes, operating systems, and application programs. The Agency Report II also argued that other types of computer software such as flowcharts, manuals, and outputs could be considered separate and independent copyrighted works.37

Since the basic purpose of the Copyright Law is to protect the expression of an idea and not the idea itself, the 1985 amendment specifically excludes programming languages and the order of information processing embodied in the program.

The Copyright Law gives the creator the right to copy, the right to play, the right to broadcast, and the right to translate, modify, or adapt a copyrighted work.38 These rights are protected for a period of fifty years after the creator's death if he or she is a natural person. If the creator is a legal person, the protection period is fifty years after the copyrighted work is made public or after its creation. This distinction was necessary because computer programs made for an employer may not be made public under the name of the employer.

As noted above, moral rights of a creator generally include the

37. AGENCY REPORT II, supra note 32, at 36.
38. Nakajima, supra note 11, at 160 (citing Copyright Law, supra note 6, at arts. 21, 23, and 27).
right to preserve the integrity of a copyrighted work.\textsuperscript{39} The amended Copyright Law makes some specific exceptions to this rule when the modifications are necessary to use the program in a particular computer or to use it efficiently.\textsuperscript{40} This includes the right of an owner of a duplicate copyrighted computer program to copy and adapt it to the extent necessary for using it on his or her own computer. These provisions signify that a user of a copyrighted program may upgrade it and modify it for the purpose of replacement.\textsuperscript{41}

The 1985 Amendment confirms the broad interpretation of \textquote{\textipa{\textquoteright}works of authorship\textquoteright} and \textquote{\textipa{\textquoteright}reproduction\textquoteright} given by the three court decisions discussed previously.\textsuperscript{42} A major change made by the 1985 amendment although not touched by the court decisions is the registration requirement. Under the amended law there are four kinds of registrations in the Copyright Register: (1) registration of the author's real name;\textsuperscript{43} (2) registration of the date of first publication;\textsuperscript{44} (3) registration of the date of creation of a program work;\textsuperscript{45} and (4) registration of the transfer or other disposition of copyright.\textsuperscript{46} The expiration date of the copyright is determined by reference to the date on which the work is created or published. Because computer programs are often kept confidential, the creator may register any date within six months after the actual creation as the date of creation.

Under the Copyright Law as amended in 1985, there are specific legal effects that follow from registration. When a work of authorship is published anonymously or under a pseudonym, the author may register under his or her real name regardless of whether he or she owns the copyright in the work. When the creator's real name is registered, the registration is published in the Official Gazette. Upon registration in a real name, there is a presumption of authorship. Registration of an author's real name can be applied for after his or her death by a person so designated in the author's will.\textsuperscript{47} However, many Japanese scholars feel it is too early to tell if the Program Registration Law is of great practical importance to the software industry.

The owner of a copyright has the right to seek remedies against either actual or threatened infringement.\textsuperscript{48} The damages incurred by

\textsuperscript{39} See supra text accompanying note 31.
\textsuperscript{40} 1985 AMENDMENT, supra note 8, art. 20.
\textsuperscript{41} Nakajima, supra note 11, at 161.
\textsuperscript{42} See supra notes 17-21, and accompanying text.
\textsuperscript{43} 1985 AMENDMENT, supra note 8, art. 75.
\textsuperscript{44} 1985 AMENDMENT, supra note 8, art. 76.
\textsuperscript{45} 1985 AMENDMENT, supra note 8, art. 77.
\textsuperscript{46} 1985 AMENDMENT, supra note 8.
\textsuperscript{47} 1985 AMENDMENT, supra note 8, art. 76.
\textsuperscript{48} Nakajima, supra note 11, at 155.
the plaintiff are presumed to be equal to the proceeds earned by the infringer as a result of the infringement. If the infringement has been against moral rights, the creator may demand that the infringer take measures necessary to restore that creator's reputation.49

IV. REMAINING PROBLEMS REGARDING COMPUTER PROGRAM PROTECTION

One problem that still remains is that while unauthorized adaptation is prohibited, creation of a new program based on the "idea" of the old program is permitted. This is a problem because it is very difficult to distinguish between the idea and expression in a computer program.

Second, the protection of interfaces is of major importance in computer programs, and they are not protected under the 1985 amendment.50

Third, the amended law permits upgrading to the extent necessary to use a program more efficiently. However, the legal distinction between lawful upgrading and prohibited adaptations is unclear.

Fourth, reverse engineering is generally a permissible or encouraged method of development in an industry. However, the Copyright Law does not specifically provide for this to be authorized use. If the law is literally interpreted, it would prohibit such reproduction and adaptation.

V. CONCLUSION

Internationally, the software copyright field is a fast developing legal area. This is clearly associated with the rapid technological developments in the field. The United States, as a leader in software development, is especially interested in establishing software protection. The Japanese Copyright Law as amended in 1985 is less protective than the American law. Japanese court decisions interpreting the law are lacking or ambiguous.

However, Japan seems to be taking steps in an effort to solidify and clarify protection to computer programs under its law. In late 1988, the MITI announced that it was going to undertake a comprehensive study of the problems of protection of intellectual property, including copyright, trade secrets, industrial property rights, and reverse engineering. The intent is to have an Intellectual Property Policy Office collect and analyze information regarding recent developments in the international

49. Nakajima, supra note 11, at 155.
community. The Plan announced by the MITI also called for a committee to study the legal issues arising from protection of intellectual property under the copyright law.\textsuperscript{51}

While further development of the Japanese law is made, an American software manufacturer will do well to look at all areas of Japanese law, including patent, contract, unfair competition, and criminal law, to protect its interest in computer software marketed in Japan.