

〈ARTICLE〉

Experimenting With Copyright Protection of
Computer Software in the Republic of Korea

by Sang Hyun Song*

I. Introduction

The rate of technological progress has frequently outpaced the ability of societies to change and adapt. The electronics industry in general, and the computer industry in particular have developed more rapidly than the law in the vast majority of countries. For example, even in the United States, the birthplace of the modern computer, questions remained about the scope of protection afforded to computer programs under the Copyright Act.⁽¹⁾ Indeed, the inclusion of computer programs within the scope of U.S. copyright law was not made explicit until the passage of the Computer Software Protection Act of 1980.

The rapidity with which Korea has entered the computer age has been even greater than most other countries. Only a few years ago, Korea's computer software and hardware industries barely existed. Now, as a result of local development and technology transfer, Korea is expected to emerge as a major world supplier of software by the year 2000. In addition, the various courses of action or inaction taken by other Asian countries has raised questions as to the approach which Korea should adopt. For example, Taiwan only recently adopted copyright protection for computer software, and Japan's recent adoption of copyright legislation providing specific protection followed serious consideration

* Professor of Law, Seoul National University.

(1) Apple Computer, Inc. v. Franklin Computer Corp., 714 F. 2d 1240 (3d Cir. 1983).

of protecting computer programs through a special “program right”.⁽²⁾

II. Protection of Computer Software under the Present Copyright Act

As is the case with most other countries that have not made specific modification to their copyright laws, the Korean Copyright Act does not explicitly include computer software within the scope of its coverage.⁽³⁾ Indeed, several provisions of the Copyright Act are at odds with effective protection of computer software.⁽⁴⁾ As a result, the existence of copyright protection for software, and the scope of such protection, if any, have been the subject of much discussion.

From the standpoint of foreign nationals, the greatest difficulty with obtaining copyright protection in Korea is the first publication requirement. Article 46 of the Copyright Act⁽⁵⁾ provides that the copyrights of foreigners shall be protected only if the work is “originally published” in Korea. Although the Act provides that this requirement can be superseded by a treaty or treaties, Korea has not yet ascribed to either the Universal Copyright Convention or to the Berne Convention. In addition, there are no other bilateral or multilateral treaties which would overcome this difficulty.

Significant problems for domestic and foreign software authors would exist even in the absence of the first publication requirement. Perhaps the most challenging of these obstacles is the definition of “works” to which the Copyright Act applies. The only portions of this definition which might be construed to cover computer software in all of its various forms is the catch-all phrase “and all other items having academic or artistic scope”.⁽⁶⁾

(2) Dario F. Robertson, “Copyright Protection for Computer Programs”: The New Amendments, *East Asian Executive Reports*, p. 8 (July, 1985).

American Chamber of Commerce in Korea, *The Need for Computer Software Copyright Protection in Korea*, pp. 49 and 58 (1985).

(3) Copyright Act, Law No. 432, Promulgated on January 28, 1957.

(4) See, e.g., Tae Hee Lee, “Panel on Law and Technology-Transnational Data Flow,” Proceedings of the Twelfth Conference on World Law, *World Peace Through Law Center*, pp. 13-14 (July 23, 1985).

(5) Copyright Act, Article 46.

(6) *Id.*, Copyright Act, Article 2.

Obviously, such a definition is open to a variety of interpretations. For example, does a commercial computer program, such as an accounting or word processing program, relate to “academic scope”? Even if this question were answered in the affirmative, would copyright protection extend to recreational and operating system software, to programming language software and machine control software? The opinions on these questions are divided, and because of the uncertainty, the Ministry of Culture and Public Information has refused to accept computer software for registration under the current Copyright Act.⁽⁷⁾

A further difficulty arises from the definition of “publication”⁽⁸⁾ and the specification of non-infringing acts. Reproduction, according to Article,⁽⁹⁾ requires that the work be reproduced by “printing techniques and/or other mechanical or chemical methods,” and Article 64 provides that the reproduction of works by “other than mechanical or chemical methods” is not an act of infringement.

III. Other Forms of Protection for Computer Software in Korea

As in many other jurisdictions, computer software can be protected as a trade secret. Unfortunately, Korea has no separate trade secret law. As such, a plaintiff must rely on general tort principles in enforcing its rights. In any event, persons who are not parties to the misappropriation cannot be stopped from using or distributing the computer software under Korean law. As such, once the breach has occurred, the only remedy may be money damages from the person responsible for the breach. Trade secret protection is thus practical only for those types of computer programs which are intended for distribution to a limited group of users, and is more uncertain than in some other jurisdictions.

Protection for computer software is also available under the general principles of Korean contract law. Such protection, unfortunately, suffers from the same limitations as trade secret protection. That is, it provides a remedy only against

(7) *Supra.*, Tae Hee Lee, p. 13.

(8) *Id.*, Copyright Act, Article 9.

(9) *Id.*, Copyright Act, Article 94.

the purchaser or licensor of the software. As such, this method is typically useful only in lieu of or in tandem with trade secret protection, and is also a weak protection mechanism.

In November, 1984 the Office of Patents Administration established a set of guidelines for the protection of computer-related inventions. These guidelines make it quite clear, however, that patent protection does not extend to most software, but only to novel and inventive apparatus and methods, which may include computers and computer software.

IV. The Current Debate Regarding Software Protection

The debate in Korea concerning software protection is no longer centered on whether software should be protected, but rather is now focused on the type of protection which should be afforded and the timing of introduction of such protection.

The reasons advanced for providing protection are, of course, that: 1) the worldwide trend is toward protection of computer software under a copyright concept; 2) the providing of such protection would stimulate research and development; 3) such protection would contribute to the cultivation of the software industry and promotion of exports; and 4) the failure to provide such protection may contribute to the imposition of trade sanctions against Korea.⁽¹⁰⁾

Opposition to the implementation of software protection is largely directed to the immature status of the Korean software industry. The present number of software companies in Korea is not great, and most of them have been in business for less than five years. As such, some argue that the industry can only grow and catch up by imitation of the works of foreign authors.⁽¹¹⁾ Nevertheless, the preponderance of those involved in the industry acknowledge that some form of protection for software is needed.⁽¹²⁾

(10) Hee-Yul, Yoo, "Software Protection Policy By Law," *Management & Computers*, August 1985.

(11) *Id.*

(12) *Id.*

There is far less unanimity regarding the type of protection which should be provided. Proposals have included a patent law concept, a special act similar in many ways to Japan's abandoned "program rights" protection, and a special copyright-type law. In addition, some have advocated the enactment of an amendment to the present copyright act which would extend coverage to computer software.

V. Patent Type Protection

Although one survey indicates that some support exists in the industry for a patent-type protection, no specific legislation has been proposed to implement such a system. The Office of Patents Administration did promulgate guidelines for the examination of computer-related inventions. However, these guidelines were not designed to afford general protection for software.⁽¹³⁾ Rather, they are the result of careful study of the procedures implemented by the U.S. and Japan for the protection of patentable inventions which include the use of computers and software. Elements of the guidelines are drawn from the Japanese Examination Standards for Inventions Related to Computer Programs and the U.S. Patent and Trademark Office's Manual of Patent Examining Procedures.⁽¹⁴⁾ The Guidelines issued by the Office of Patents Administration thus is not directed at the mainstream of computer software, but only to those inventions which meet the standards of novelty and inventiveness.⁽¹⁵⁾

VI. Copyright Protection

A number of parties have discussed or urged the adoption of copyright law as the basis for protection for computer software.⁽¹⁶⁾ One group, the American Chamber of Commerce in Korea, has issued a position paper in support of this approach.⁽¹⁷⁾ The arguments in support of this position are generally directed

(13) *Supra.*, Tae Hee Lee.

(14) *Id.*

(15) Examination Guidelines for Computer Related Inventions In Korea, Section I(2).

(16) *Supra.*, American Chamber of Commerce In Korea.

(17) *Id.*, American Chamber of Commerce In Korea.

to the particular needs of the software industry. The argument is presented that the main effort in preparing software lies in the authorship process and especially in the creative expression of the program by the designers and programmers. Protection against copying will thus provide the needed protection of the most important aspects of the work without impeding others from using their own creative abilities to create similar kinds of software. The procedures for obtaining copyright protection are simple and inexpensive, which is said to be important for the small software producers that form an important part of the industry. A third argument advanced in support of the use of copyright law as the protection medium is that copyright law provides protection which is in effect on the date that distribution of the computer software commences. This is said to be especially important for computer software since a significant fraction of the sales of computer software frequently takes place in the first year or years following its initial publication. As such, the position paper states that protection during this early period is important.

VII. Program Right Protection

Arguments have also been put forth in support of a third type of protection for computer software, namely the protection of a program right distinct and apart from the patent and copyright laws. However, it appears that attention has turned away from such a program rights concept in view of the worldwide trend toward copyright protection, the abandonment of the concept by the Japanese, and pressure from the developed countries. This program right protection would have been granted based on registration of the work. Details regarding the work would have been published, and information about the direction of the industry and the availability of such program works would have been available to all. Some felt that this would stimulate the industry, avoid so called needless duplication of types of computer software, and allow for effective government planning and guidance.

VIII. Attitudes of the Business Community

In October, 1985, the Korea Information Industry Association sent a ques-

tionnaire to 2,780 persons, including businessmen, academics, researchers and public officials with ties to or an interest in the computer software industry.⁽¹⁸⁾ Of those surveyed, 384 responded to the questionnaire. Although the results of the survey may be subject to question one fairly unambiguous result was that a great majority of those responding believed that there is a need for some form of legal protection for software (84.1% of those responding). The vast majority also believed that the advent of legal protection would foster the growth of the software industry in the long run (82.9%) and that such legal protection would gradually eliminate the copying problem (86.6%). Thus, as mentioned above, those connected with the industry appear to support the concept of protecting computer software.

However, there is hardly unanimity on how and when such protection should be implemented. The majority also feared that the implementation of such protection at present would hamper the growth of the domestic information industry (95.9%). In addition, there is no unanimity as to the kind of protection which should be afforded. At present, according to the survey, about the same number favor a special form of software protection (41.6%) as favor copyright type protection (45.5%). This does indicate an increase in the support for copyright protection, however, since an earlier survey had found that a majority favored a special form of software protection (61.3%) by almost a factor of three over copyright protection (23.0%).⁽¹⁹⁾ In addition, the most popular time frame for the enforcing of protection of computer software is 1990-92 (38.8%, vs. 28.7% for 1986-87 and 16.3% for 1988-89).

Probably the most noticeable information contained in the survey results is that a large portion (73.6%) believe that software protection should not be afforded to computer software written by foreign authors until after such protection is provided to domestic authors. The survey also indicates that wide support exists for allowing imitation of foreign computer software (85.0%).

(18) Korean Software Research and Development Association, Results of the Second Special Questionnaire Regarding the Legal System of Software Protection, 1985~1986.

(19) *Supra.*, Tae Hee Lee.

IX. The Computer Program Protection Law

There has also been considerable discussion as to which ministry should bear responsibility for computer software. The Ministry of Culture and Public Information administers the Copyright Act. However, this ministry has no experience in dealing with technical subject matter. The Ministry of Science and Technology already has a division which deals with computers and related technology, but has not administered any form of intellectual property. Both ministries have investigated the protection of computer software. In addition, the Ministry of Communications claims competency on the protection of computer software as far as it is related to the tele-communication technology. The Ministry of Trade and Industry also argues that it has jurisdiction over computer software, because it is an independent economic good subject to the international trade.

In the present climate, objections will inevitably be raised to any protection scheme for computer software that may be put forward. Nevertheless, the Ministry of Science and Technology has forged ahead and prepared draft legislation entitled The Computer Program Protection Law.⁽²⁰⁾

This draft bill initially appears to create a special form of protection for computer software which is distinct from the existing patent and copyright laws. This impression is given by the fact that the draft does not incorporate the word "copyright" in the title, is directed exclusively to the protection of computer software, and would afford protection to computer software without relying on or modifying the existing Copyright Act.

Notwithstanding these facts, the draft law is, in essence, a copyright law. First, infringement is defined in Article 26 to include the unauthorized reproduction, publication, and distribution of the computer program of another.⁽²¹⁾ This is the same kind of definition typically present in copyright laws. In

(20) Ministry of Science and Technology, *The Computer Program Protection Law* (draft), March, 1986. Although the bill was revised to some extent, this paper is based on the version of March, 1986.

(21) *Id.*, Article 26.

addition, the draft legislation provides for registration of the computer software, and allows, but does not require the deposit of the computer software.⁽²²⁾ There is no restriction on the subject matter of the computer software which could be protected under the proposed law, nor is there any examination as to the scope or content of the work.

Unfortunately for foreign authors, the current draft would not provide protection for computer software unless such software was first published in Korea.⁽²³⁾ However, should Korea accede to one of the major international copyright conventions, it is believed that Article 3(3) would require that the protection of this law be extended to nationals and residents of other member countries.

The draft law has a number of interesting aspects. Unlike the present Copyright Act, the draft law provides that the employer is the author of a program which is created by an employee in the course of his or her duties.⁽²⁴⁾ This provision is much like the “work made for hire” provision of U.S. copyright law and will greatly facilitate the running of software producing companies, since no assignment of the computer software to the company will have to be obtained. This also vests the so-called moral rights in the company rather than leaving them with the persons who write the software.

The moral rights provided under Articles 8 through 10 of this law are similar to those provided under the present Copyright Act. The most important of these moral rights is the right of an author to preserve the integrity of the work (Article 10). However, several exceptions to this right are provided. Modifications to permit the computer software to work on a specific computer, or to function more efficiently on such computer are allowed, as are modifications which are necessary in view of the nature of a program (a program with a user installation procedure might fall under this last category). The moral rights are personal to the author and, along with the right to make derivative

(22) *Id.*, Article 23.

(23) *Id.*, Article 3(1) and (2).

(24) *Id.*, Article 7.

works, remain with the author and survive the assignment of the whole of the computer software.⁽²⁵⁾

One feature of the draft bill which may draw much attention is the right to use through administrative adjudication. If the owner of computer software cannot be contacted or is unknown, or if an agreement cannot be reached with the owner, despite reasonable efforts, an interested party can apply for the right to use the computer software. If the ministry finds that there is reason to do so, it can set a royalty rate and allow the applicant to use the software upon payment of such royalty.⁽²⁶⁾ A party dissatisfied with the amount of royalties awarded as a result of such proceeding can bring a legal action regarding the royalties in district court.⁽²⁷⁾

There are several circumstances specified in the draft in which computer software can be reproduced without liability. The first two are relatively innocuous. Computer software can be used or reproduced when necessary for an administrative deliberation and mediation of dispute or court proceeding. The third is somewhat more troublesome. Under this provision, use and reproduction are permissible when necessary for the purposes of school education. The details of this provision are to be provided by Presidential Decree. The exact scope of this provision will thus have to await administrative clarification.⁽²⁸⁾

Another provision which is certain to draw much commentary is Article 28 (5). Although Articles 23 and 24 do not require registration and deposit of the computer software, failure to do so will result in the loss of the right to obtain an injunction and damages. Since Article 23 allows only six months from creation to effect the registration and Article 24 allows only 3 months from registration to effect deposit, this provision in effect requires registration and deposit well before infringement problems are likely to appear.

(25) *Id.*, Articles 15 and 16.

(26) *Id.*, Article 18.

(27) *Id.*, Article 20.

(28) *Id.*, Article 13.

Other common aspects of copyright laws which are incorporated into this draft are the right of the author to decide whether to release the work as set forth in Article 8, and the long term of protection. The term of the rights created by this law is 30 years, as specified in Article 15.

X. The Draft Amendment to the Copyright Act

Although not directed to the protection of computer software, the recently released draft amendment to the Copyright Act is also of interest.⁽²⁹⁾ This draft legislation was prepared by the Ministry of Culture and Public Information, which is responsible for the administration of the present Copyright Act. It represents a major revision of the current Act and would update the Act to world standards. Some of the additions and modifications of note include:

1. Updated definitions of “reproduction,” “publication” and “release”;⁽³⁰⁾
2. Addition of a presumption that the employer is the author of a work made in the course of employment;⁽³¹⁾
3. Addition of exemptions for use in news reporting, criticism, studies and so forth;⁽³²⁾ and
4. Addition of an exemption for temporary tape recording by broadcasters.⁽³³⁾

The modifications which would be brought about by enactment of this draft legislation are such that it might be found to cover computer software. “Works” is defined for the purposes of this amendment as creative works belonging to the province of learning or arts.⁽³⁴⁾ The definition may thus be interpreted as less specific and restrictive than that of the present Copyright Act. Some question remains as to whether some types of computer software can be considered as learning or art. In addition, the definition of “reproduction” and the specification

(29) Ministry of Culture and Public Information, *Bill to Amend the Copyright Law*, March 1986.

(30) *Id.*, Article 2.

(31) *Id.*, Article 9.

(32) *Id.*, Articles 22 and 23.

(33) *Id.*, Article 29.

(34) *Id.*, Article 2.

of infringing acts do not require the use of only chemical or mechanical means as to the corresponding definitions in the present Copyright Act.⁽³⁵⁾

XI. Choice of Separate Laws

There has been some comment on the differences between the draft law directed to computer software and that directed to amendment of the present act. In particular, the United States government has reacted very strongly and negatively to the preparation of two separate draft laws. Nevertheless, aside from arguments relating to sovereignty and the merits of diversity and experimentation, there are good reasons for Korea to proceed with separate laws relating to copyright protection and software protection even if the intended scope of protection is the same. The first of these reasons is that the Ministry of Science and Technology is most capable of dealing with technical subject matter such as computer software. The administrative adjudication and registration procedures are thus more likely to be responsive to the particular needs of the industry and users if this ministry is responsible for their administration.

In addition, the Ministry of Science and Technology is already involved in reviewing aspects of technology transfers relating to computer hardware, and in reviewing foreign investment applications directed to the computer industry. The placing of the responsibility for computer software protection in this ministry would thus allow the development of a uniform and consistent policy in the computer and computer software industries. A single ministry will be better able to meet the competing needs of these two industries and will be better able to respond to changing conditions and new developments.

The use of separate laws has other benefits as well. The moral rights, such as the right of the author to have his or her name used on the work, to preserve the integrity of the work by controlling changes, and the like, have been significantly reduced in the draft law. It might be difficult to secure such

(35) *Id.*, Articles 2 and 88.

reduction of the moral rights if the two draft laws were combined into one general purpose law.

XII. Future Policy Formulation

The draft law for protection of computer software, if enacted, will bring important benefits to the computer software industry. However, there are matters which should be considered in addition to enactment to this legislation. Since the draft law does not provide protection for the computer software of foreign authors, at present, unless the software is first published in Korea, the foreign community will probably view accession to one of the international copyright treaties as one of the most pressing actions to be taken. The domestic software industry will probably come to view such accession as desirable as it strives to compete with copies of foreign software which are sold at very low prices.

Procedural matters also deserve attention. Perhaps the most important remedy available to the holders of rights in computer software (and any holders of intellectual property rights) is the right to obtain an injunction against the infringing activity. Under the Korea's civil law system, procedural matters are specified by the Code of Civil Procedure. The law, however, does not provide contempt of court procedures. This absence greatly weakens the injunctive power of the court. The injunctive power is also weakened by the absence of an emergency injunction procedure such as the temporary restraining order provided under U.S. law. Although provisional injunctions can be obtained relatively rapidly compared to some jurisdictions, two to three months may still elapse before such injunctions come into force. In complex cases, which seem to be the rule with respect to computer software, the preliminary injunction procedure can take even longer. Amendment of the code of civil procedure to provide for effective injunctive powers, at least with respect to intellectual property matters should thus be considered.

Another procedural matter is the assessment of damages. Korean procedural laws allow only very limited discovery and impose at times an impossible burden of proof on plaintiffs to substantiate their damages. Normally, this is

not a problem in civil litigation where objective information concerning physical damage resulting from a tortious act, or increased prices resulting from a breach of a supply contract are concerned. Unfortunately, in the area of copyright infringement, it is frequently difficult to prove the extent to which sales have been lost, and much of the information on such lost sales must be viewed as somewhat speculative. As is the case in many jurisdictions, Korean courts are reluctant to award damages if they are speculative.

U.S. copyright law permits the recovery of the profits of the infringers as well as statutory damages. These remedies could also be provided in the Korean procedural laws and would greatly increase the deterrent effect of the draft law.

One additional form of protection could be added which would not be inconsistent with the copyright protection. Presently, there is a small segment of the software market which is directed to proprietary programs. Trade secret protection for such computer software is not presently as effective as it could be if a specific statute were enacted. Under the present law, the recipient of a program who should have known of its proprietary nature can escape liability because there is no breach of a duty of confidentiality by this person (in the absence of inducement of the misappropriation of the computer software). The provision of a remedy against such persons would strengthen the protection of such software, and provide added flexibility in the choice of a method of protection.

If the government wishes to influence the direction of the industry, this could be accomplished by use of special incentives which would not interfere with protection of computer software under the draft law and international conventions. These incentives could include the extension of the term of protection, the granting of access to government-owned computer equipment for the purpose of modifying the program to run on such equipment, and the granting of tax incentives for the development of the desired kinds of software.

Certain aspects of the present draft may also be reconsidered. The provision which in effect allows for compulsory licensing,⁽³⁶⁾ the grant of an undivestable

(36) *Id.*, Article 18.

right in an author to use and reproduce derivative works (even if the making of such works has been authorized),⁽³⁷⁾ and the scope of the moral rights⁽³⁸⁾ may be worth reconsidering as experience with administration of the bill (if enacted) is gained.

XIII. Conclusion

The provision of effective protection for computer software will in all likelihood stimulate the software industry, a belief reflected by the majority of the respondents to the survey discussed earlier. The protection afforded by the draft law, which is essentially copyright protection, lends itself well to protection of foreign works through the medium of one or both of the international copyright conventions. Such protection, moreover, would allow for other types of protection which could strengthen the industry, such as specific trade secret protection for programs.

(37) *Id.*, Article 12.

(38) *Id.*, Articles 8-11.