

(Provisional)

Views on Software Licensing Agreements, etc. under the Antimonopoly Act

— An Interim Report of the Study Group on Software and
Competition Policy —

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Study Group on Software and Competition Policy

Introduction

Since August 2001, the Study Group on Software and Competition Policy met seven times, a working group also met twice, to study, from the perspective of the Antimonopoly Act, problems in the software trade, which has been becoming increasingly important in business activity as a result of advances in information technology (IT) in recent years. This is an interim report on the results of study to date.

Software (computer programs) discussed by the study group is primarily distributed in package or preinstalled form. It is expected, however, that as the environment, including application service providers (ASPs), is improved for high-speed, constant access to the Internet, the forms of distribution and use of software will change considerably. In recent years, meanwhile, it has been becoming increasingly common that not only purchased software but also such software as is called "open source software" or "free software" is provided for business purposes.

We hope, therefore, that in order to ensure fair and free competition in the software market, the Fair Trade Commission will positively apply the Antimonopoly Act to the software trade, referring to this report and the actual conditions of the software trade. We also hope that this report will trigger more active discussions about fair competition in software market in related quarters.

Further progress in IT reform inevitably requires the maintenance of fair and free competition in the software market. As used here, the term "software" is not limited to computer programs discussed by this study group but can include software in the broad sense, such as various digital contents traded over networks. It is considered necessary, therefore, to study, from the viewpoint of the competition policy, how competition should be ensured in the development and trading of software in the broad sense, including digital contents.

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Part 1 Objects of Study and the Viewpoints of Study

1. Objects of Study

(1) Growing Importance of Software Trade

A. Until the late 1960s, software ^(Note 1) was provided as an integral part of computers by the manufacturers of general-purpose computers called "mainframes." Software began to be treated as independent products when IBM Corp. of the United States switched to the policy of selling software separately from hardware. As the recognition of the economic value of software began to increase against this background, it began to be studied how software should be treated ^(Note 2).

B. The performance of computers remarkably improved in the 1980s and the early 1990s, and small computers like office computers became available to handle the work that used to be processed by large computers such as mainframes. As a result, the pattern of computer use changed. That is, while computer makers used to provide software and peripherals as well, it became possible for users to use hardware and software of different manufacturers as interface and other information came to be shared among manufactures. At the same time, software makers saw a rapid expansion of the market in which they could sell versatile software, such as operating systems and application software, in packages. In recent years, large programs for key operations that used to be developed by individual companies have been developed as packaged software for sale on the market. In addition, software makers that conventionally developed software for corporate use are expanding a "system integration service," the service of providing individual customers with customized software by procuring and combining existing packaged programs.

(Note 1) Today the term "software" is used in very many senses. For example, it means digital contents, such as digitized music and images in some cases, and in other cases, it means media such as recorded CDs. This report primarily studies programs that control information processing systems such as computers. The Copyright Law defines the computer program as "an expression as a combination of instructions to electronic computers in order to obtain a certain result by operating the computers" (10-2 of Subparagraph 2 of Section 2 of the Copyright Law).

(Note 2) Discussions have been made to legally protect software by copyrights or patent rights, as business secrets, or by a special law. With respect to protection by copyright, the United States amended the Copyright Act in 1980 to provide for the protection of programs by copyrights. Japan followed suit by amending the Copyright Law likewise in 1985. Meanwhile, software-related inventions have been protected in the United States by patent rights under case law since the U.S. Supreme Court ruling in the Deere case in 1981. In Japan, such inventions have come to be protected by patent rights under examination criteria of the Patent Office.

C. In the late 1990s, the fusion of computers and telecommunications caused the rapidly widespread use of means of communication, such as Web sites and e-mail, using the Internet and other networks (hereinafter called the "Network"). This in turn brought about commercial services such as news distribution services, software and other content distribution services, and authentication services. Software is indispensable for the use of these network services. The importance of software is rapidly increasing.

(2) History of Study

The Fair Trade Commission amended the Guidelines for Patent and Know-how Licensing Agreements under the Antimonopoly Act (hereinafter called the "Patent and Know-how Guidelines") in July 1999, presenting its views on trading in intellectual property.

With respect to software, it is expected that the form of its distribution will change considerably with improvement of the environment for high-speed, constant access to the Internet.

In its Three-Year Plan for Promotion of Regulation Reform (Cabinet decision of March 30, 2001), the Government said it would clarify its views on software licensing agreements, etc. under the Antimonopoly Act by around the end of fiscal 2001. In the background to this decision are the following facts:

- ① Software trade is becoming increasingly important.
- ② It is pointed out that the market for some software is liable to be monopolized as a result of the so-called "network effect". In the United States and Europe, practices restricting competition in the software trade are already posing problems.
- ③ Software has some characteristics, including constant updates, that are different from ordinary goods.

In the above-mentioned circumstances surrounding software, this report summarizes the results to date of our study of problems in the software trade from the perspective of the Antimonopoly Act.

2. Viewpoints of Study

With respect to the technology trade, the Patent and Know-how Guidelines were published as mentioned above, and comprehensive views were presented on the application of the Antimonopoly Act to patent and know-how licensing agreements, typical examples of the

technology trade. Referring to intellectual property other than patents and know-how, the guidelines say, "These guidelines are not directly applicable as they are to the licensing of other forms of Intellectual Property Rights (IPRs). However, since the nature of exclusivity of patents or know-how can be seen to differ from that of other forms of IPRs, the views stated in these guidelines will be applied *mutatis mutandis* to the extent possible depending on the nature of such other IPRs."

Referring to the views stated in the Patent and Know-how Guidelines under the Antimonopoly Act, this study group tries to clarify the views on software trade under the Antimonopoly Act based on the characteristics of software described below.

(1) Existence of Platform Software to Serve as System Base

- A. Some software provides basic functions indispensable for the functioning of hardware and application software. For example, operating systems have the function of controlling the whole computer system, and middleware provides network controlling functions. Such software is generally called "platform software."
- B. What is called the "network effect" is very likely to work in the case of platform software. That is, as the number of users of a specific platform function increases, its usefulness increases, gaining still more users as a result. Therefore, a specific platform function tends to occupy the position of a *de facto* standard. Individual users are locked into systems based on the platform and can virtually buy only hardware and application software compatible with the platform software. On the other hand, hardware and application software makers are forced to develop products compatible with the platform software, receiving technological information on interfaces, etc. from the maker of the platform software. As a consequence, acts of the maker of the platform software can substantially affect the competition not only in the platform software market but also in the markets for hardware and application software.

C. The Patent and Know-how Guidelines primarily study how the network effect affects competition in the product market or the technology market where protection by patents or know-how matters. Meanwhile, for the handling of platform software under the Antimonopoly Act, it is necessary to study not only the effect on competition in the product market and the technology market ^(Note 3) pertaining to platform software but also the effect on competition in the product and technology markets where hardware and application software are developed based on the technological information about the platform software.

(2) Problems about Software Licensing Agreements

The Patent and Know-how Guidelines present views on restrictive acts recognizable as the exercise of patent rights under patent or know-how licensing agreements from the perspective of the Antimonopoly Act. The guidelines also say that the views stated in these guidelines will be applied *mutatis mutandis* to the extent possible to licensing agreements for other intellectual property rights depending on the nature of those rights.

Although software is protected by patents and know-how in some cases, it is primarily protected as works under the Copyright Law from the perspective that it represents creative expressions of thoughts and feelings. Software also has features such as short life cycles, requiring constant updates, and ease of reproduction or imitation. Therefore, software-licensing agreements may impose restrictions recognizable as the exercise of rights under the Copyright Law, such as prohibiting the reproduction, assignment, and alteration of the software. It is necessary to study these restrictions from the perspective of the Antimonopoly Act.

3. Meanwhile, whether entrepreneurs' specific acts falling into the types of acts studied in Parts 2 and 3 hereof violate the Antimonopoly Act should be judged on a case-by-case basis in consideration of the magnitude of the effect of those acts on competition in relevant markets.

(Note 3) "Software technology market" means the market for rights or know-how pertaining to specific software and for technologies with similar functions and effects to them. (This definition applies hereinafter.) The product and technology markets pertaining to software must be delimited in consideration of the following characteristics: ① Software is updated frequently. ② There are many software packages that have similar functions or contain the same functions. ③ Software packages with similar functions may be intended for different lines of business or operations. ④ Software packages containing the same functions may be designed to operate in different environments.

Part 2 Views on the Provision of Technological Information on Platform Software from the Perspective of the Antimonopoly Act

1. Basic Views

- (1) Of the software that has platform functions, the operating system ^(Note 4), which has the function of controlling the whole system, is closely related to the computer, peripherals, and other hardware components of the system. Hence, when a hardware maker wants to develop a product compatible with a certain operating system, the maker has to first obtain the technological information that is required to ensure the interoperability of the product with the operating system. In addition, since software is updated frequently, hardware makers have to constantly receive technological information from the operating system maker in order to develop products compatible with updated software. As a consequence, continuous business relationships tend to be formed between the operating system maker and the hardware makers that have to depend on the operating system maker. At this time, when the technological information provided to hardware makers contains know-how, the operating system maker may impose various restrictions on the hardware makers in order to prevent leaks of know-how.

The same is basically true of the case where application software makers develop products compatible with a specific operating system. They have to be constantly provided with the technological information required for product development from the operating system maker. As a consequence, continuous business relationships tend to be formed between the operating system maker and the application software makers that have to depend on the operating system maker. When such technological information provided contains know-how, the operating system maker may impose various restrictions on the recipients in order to prevent leaks of know-how.

- (2) The formation of such continuous relationships between an operating system maker and hardware and application software makers will, as long as it enables the hardware and application software makers to carry out stable research and development activities over long terms, improve user convenience in some respects, such as by expanding the markets for hardware and software that are compatible with the operating system.

(Note 4) Software with platform functions includes, in addition to operating systems, middleware that provides network management and other functions. Although this report hereinafter discusses the operating system, which is the typical software that has platform functions, the same discussions apply to middleware as well.

- (3) Hardware and application software makers have to be provided with relevant technological information by the maker of a specific operating system in order to develop products compatible with the operating system. Therefore, it is difficult for the hardware and application software makers to convert their products for use on other operating systems. In addition, when the operating system in question is a de facto standard, there is no operating system that provides alternative functions, and therefore if hardware and application software makers fail to maintain business relations with the operating system maker, they will suffer a great deal of trouble in their business activities. That is, it is indispensable for hardware and application software makers to be provided with technological information by the operating system maker in order to continue their business activities and start new businesses. It is considered, therefore, that there may be some cases in which they have to accept significantly disadvantageous conditions proposed by the operating system maker in order to be provided with technological information.
- (4) Under the circumstances where it is necessary for hardware and application software makers to receive technological information on platform functions from an operating system maker, if the operating system maker imposes conditions that restrict competition or give discriminatory treatment when providing the hardware and application software makers with technological information, it is considered that the acts will fall within the category of unfair trade practices and be in violation of the Antimonopoly Act, provided that the acts are likely to impede fair competition in a market for products such as operating systems, hardware, or application software or for technologies, such as by deterring the hardware or application software makers from developing products for operating systems that compete with the operating system in question.

It is also considered that if the maker of an operating system that has become a de facto standard eliminates or controls the business activities of hardware and application software makers by imposing such restrictions as those mentioned above on those makers and thereby substantially restricts competition in a market for products such as operating systems, hardware, or application software or for technologies, it will be illegal under the Antimonopoly Act as private monopolization.

2. Types of Acts Posing Problems under the Antimonopoly Act

(1) Discriminatory Treatment and Refusal to Deal in the Provision of Technological Information

- When an operating system maker provides technological information necessary for product development, the maker discriminates against hardware and application software makers that supply products compatible with other, competing operating systems, such as by delaying the provision of the technological information necessary for product development, or does not provide those makers with such technological information.
- When an operating system maker provides technological information necessary for product development, the maker discriminates against hardware and application software makers that supply products competing with application software or hardware that the operating system maker supplies, such as by delaying the provision of the technological information necessary for product development, or does not provide those makers with such technological information.

A. When an operating system maker provides hardware and application software makers with the technological information necessary for the development of products compatible with the operating system, the technological information may include know-how. In addition, hardware and application software makers that are provided with such technological information will have different technological strength, business operations, etc. Therefore, it is considered that the fact that the information provided or the conditions imposed for the provision of information differ from one recipient or another does not immediately pose problems under the Antimonopoly Act.

B. However, in cases where an operating system maker provides hardware and application software makers with technological information, if the operating system maker:

- ① discriminates, such as by delaying the provision of technological information, against hardware or application software makers that supply products compatible with other, competing operating systems;

- ② conditions the provision of technological information on recipients' not developing products compatible with other operating systems and does not provide technological information for hardware or application software makers that do not comply with those conditions;
- ③ discriminates, such as by delaying the provision of technological information, against application software makers that supply products competing with application software that the operating system maker supplies; or
- ④ conditions the provision of technological information on recipients' not supplying products competing with application software or hardware that the operating system maker supplies and does not provide technological information for application software or hardware makers that do not comply with those conditions;

and if these acts are likely to impede fair competition in a market for products such as operating systems, hardware, or application software or for technologies, such as by deterring these hardware or application software makers from developing products for other, competing operating systems or depriving makers supplying application software competing with the application software supplied by the operating system maker of the opportunities to make transactions with end users, thereby making it difficult for the makers of competing software to find alternative customers, then it is considered that these acts will fall within the category of unfair trade practices and be in violation of the Antimonopoly Act (falling under Item 2 [Refusal to Deal], Item 4 [Discriminatory Treatment], Item 13 [Dealing on Restrictive Terms], etc. of the General Designation) ^(Note 5).

C. It is also considered that if by performing such acts, the maker of an operating system that has become a de facto standard eliminates or controls the business activities of makers of other operating systems, application software, hardware, etc. and thereby substantially restricts competition in a market for products such as operating systems, hardware, or application software or for technologies, it will be illegal under the Antimonopoly Act as private monopolization (falling under the first sentence of Section 3 of the Antimonopoly Act).

(Note 5) These acts may sometimes have to be studied from the perspective of the abuse of a dominant bargaining position (Item 14 of the General Designation). The abuse of a dominant bargaining position can basically become a problem in any of the acts to be discussed below. In such cases, not only the items of the General Designation specifically applicable to individual acts but also Item 14 of the General Designation can apply to those acts. (Therefore, no individual mention is made of the acts in part 2 and part 3 below about whether the acts may fall under the abuse of a dominant bargaining position.)

(2) Refusal to Provide Technological Information for the Addition of New Functions
(Functional Tie-in)

- When an operating system maker has added new functions to an existing operating system through an update or otherwise, the maker does not provide makers of competing application software with technological information or delays its provision, even though the application software makers have to be provided with the technological information by the operating system maker in order to supply application software that competes with the new functions.

A. If an operating system maker updates, and adds new functions to its operating system, it will spread the use of the new functions, technological improvements, etc. in the market and will make the operating system more convenient for end users in some respects.

Various new functions may be added to an operating system, and there may be cases in which application software that competes with the added functions has already been or is likely to be traded as an independent product. In such cases, if end users have their copies of the operating system updated, they need not buy application software that competes with the new functions added to the operating system. As a result, the application software maker will be deprived of the opportunities to deal with end users.

On the other hand, even in cases where new functions are added to an operating system, if the possibility of choice is virtually ensured for end users about application software competing with the new functions, it is considered that there may be competition over the application software through end users' choice.

B. Therefore, from the perspective of competition policy, it is considered necessary to pay sufficient attention so that when an operating system maker adds new functions through an update or otherwise, it will not deter the development of application software competing with the new functions or will not unjustly eliminate the makers of competing application software from the market.

For example, in cases in which an operating system maker has added new functions through an update, if the maker does not provide application software makers with technological information or delays its provision, even though the application software makers have to be provided with the technological information by the operating system maker in order to supply application software that competes with the new functions, then it is considered that these acts will fall within the category

of unfair trade practices and be in violation of the Antimonopoly Act, provided that the acts are likely to impede fair competition in a market for products such as application software related to the new functions or for relevant technologies, such as by depriving the application software makers of the opportunities to deal with end users or making it difficult for them to find alternative customers (falling under Item 2 [Refusal to Deal] and Item 4 [Discriminatory Treatment] of the General Designation).

C. It is also considered that if by performing such acts, the maker of an operating system that has become a de facto standard eliminates or controls the business activities of makers of competing application software and thereby substantially restricts competition in a market for products of the application software related to new functions or for technologies, it will be illegal under the Antimonopoly Act as private monopolization (falling under the first sentence of Section 3 of the Antimonopoly Act).

(3) Unjust Accumulation of Technologies Independently Developed by Hardware and Application Software Makers

- When an operating system maker updates its operating system, the maker not only provides hardware and application software makers with technological information on the new version of the operating system (hereinafter called the "new version") in advance and in turn requires those makers to feed back to it the technological information that they may obtain in developing products compatible with the new version but also obligates them to have the rights and know-how concerning the technologies they may independently develop belong to it or prohibits them to utilize those technologies for the development of products compatible with competing operating systems.
("Feed back" refers to the imposition of the duty to report.)

A. In the case of software, technological progress is remarkable, and new products incorporating the results of progress are being actively developed. Therefore, if an operating system maker provides hardware and application software makers with technological information on a new version of its operating system in the stage of developing the new version, it will enable the supply of hardware and application software compatible with the new version at the same time as the new version is supplied.

B. In cases in which an operating system maker provides hardware and application software makers with technological information on, for example, a new version of its operating system, if the hardware and application software makers feed back technological information obtained in the process of developing products compatible with the new version to the operating system maker, the results of technological development by the hardware and application software makers will be reflected in the development of the operating system, thus enabling the efficient use of hardware and application software on the new version, and it will make the products more convenient for end users in some respects.

C. However, if the operating system maker not only obligates the hardware and application software makers to feed back to it the technological information that may be obtained in the process of developing products compatible with the new version but also:

- ① obligates those makers to have the rights and know-how concerning the technologies they may independently develop belong to it or license it to make exclusive use of the rights and know-how or
- ② prohibits them to utilize those technologies for the development of products compatible with competing operating systems or to license third parties to use the rights and know-how,

then it is considered that these acts will fall within the category of unfair trade practices and be in violation of the Antimonopoly Act, provided that the acts are likely to impede fair competition in a market for products such as operating systems, hardware, or application software or for technologies, such as by deterring the hardware and application software makers from freely developing products or from developing hardware or application software for competing operating systems (falling under Item 11 [Dealing on Exclusive Terms] and Item 13 [Dealing on Restrictive Terms] of the General Designation).

D. It is also considered that if by accumulating technological information by imposing such restrictions as are described in ① and ② above, the maker of an operating system that has become a de facto standard eliminates or controls the business activities of makers of other operating systems, application software, hardware, etc. and thereby substantially restricts competition in a market for products such as operating systems, hardware, or application software or for technologies, it will be illegal under the Antimonopoly Act as private monopolization (falling under the first sentence of Section 3 of the Antimonopoly Act).

(4) Unjust Expansion of Obligations to Protect Secrecy

- When an operating system maker provides hardware and application software makers with technological information necessary for the development of products compatible with its operating system, the maker unjustly expands the obligations to protect the secrecy of the technological information, applying the obligations to technological information that is not secret or that is developed independently by hardware or application software makers.

A. In cases in which an operating system maker provides hardware and application software makers with technological information necessary for the development of products compatible with its operating system, if the operating system maker obligates the hardware and application software makers to protect the secrecy of the information, it is considered that, since the technological information may contain know-how ^(Note 6), it will have little effect on competition in a market for products such as operating systems, hardware, or application software or for technologies as long as the scope of the obligations to protect secrecy is limited to the know-how.

B. However, if for example, the operating system maker:

- ① unjustly expands the scope of the technological information whose secrecy is to be protected and thus applies the obligations to technological information that is not secret or
- ② applies the obligations to protect secrecy to technological information that is developed independently by hardware or application software makers without using the technological information provided by the operating system maker,

then it is considered that these acts will fall within the category of unfair trade practices and be in violation of the Antimonopoly Act, provided that the acts are likely to impede fair competition in a market for products such as operating systems, hardware, or application software or for technologies, such as by deterring the hardware and application software makers from freely developing products or from developing hardware or application software for competing operating systems (falling under Item 13 [Dealing on Restrictive Terms] of the General Designation).

^(Note 6) In this report, "know-how" means a group of useful technological information concerning industry that is secret and is recognizable in appropriate form, such as being described or recorded by an appropriate method.

C. It is also considered that if by performing such acts against hardware and application software makers, the maker of an operating system that has become a de facto standard eliminates or controls the business activities of makers of other operating systems, application software, hardware, etc. and thereby substantially restricts competition in a market for products such as operating systems, hardware, or application software or for technologies, it will be illegal under the Antimonopoly Act as private monopolization (falling under the first sentence of Section 3 of the Antimonopoly Act).

Part 3 Views on Software Licensing Agreements from the Perspective of the Antimonopoly Act

1. Forms of Software Trade

Software trade may be made directly between a software maker that supplies software and a user (an individual, a firm, or any other entity; hereinafter called an "end user") that uses the software or may be made through another firm. In each of these cases, a licensing agreement is concluded, under which various conditions may be imposed on the method of the licensee's using the software and the scope of use.

(1) In cases in which a transaction is made directly between a software maker and an end user, a licensing agreement is concluded between them under which the software maker provides the end user with the software pertaining to the agreement, granting the end user a license to use it. At this time, the software maker usually imposes conditions such as the restriction of copying and assignment of the software and the prohibition of its modification and reverse engineering.

(2) In cases in which a transaction is made through another firm, ① a hardware maker may provide software preinstalled in its product such as a personal computer or ② a distributor or the like may provide software by selling copies to end users, retailers, and others.

A. The hardware maker concludes an agreement with the software maker to sell software preinstalled (hereinafter called the "preinstallation agreement"), under which the hardware maker is granted a license to sell to end users the software pertaining to the agreement preinstalled (copied) in hardware. In this case, a licensing agreement is concluded directly between the software maker and an end user.

There are cases in which a software maker authorizes hardware makers to grant sublicenses, and these firms conclude sublicensing agreements with end users.

B. The distributor concludes with the software maker an agreement to sell the software product to retailers and end users (hereinafter called the "sales agency agreement"), under which the distributor is granted the rights to copy the software pertaining to the agreement on CD-ROMs and other media and sell them to end users. In this case, a licensing agreement is also directly concluded between the software maker and an end user.

There are cases in which a software maker authorizes distributors to grant sublicenses, and these firms conclude sublicensing agreements with end users.

- (3) In addition to the cases mentioned above, there are cases in which end users request system integrators or other firms to customize the software for which they have licensing agreements with the software maker. In such cases, system integrators may modify the software, and therefore, they conclude agreements, as necessary, with the software maker to customize and otherwise modify the software for end users (hereinafter called "customization agreements") under which they are granted the right to modify the software for customization.

2. Basic Views

(1) Aspect of Software as Works of Authorship

- A. As described above, software licensing agreements are executed in many aspects of software trades, under which the licensors, i.e., the software makers, normally impose various restrictions on the licensees about the methods of using the software pertaining to the agreements and the scopes of use. It is considered that such restrictions sometimes include restrictions considered to be the exercise of the software makers' rights under the Copyright Act, such as the limitation of reproduction, assignment, and alteration of the software.
- B. With respect to the acts considered to be the exercise of rights under the Copyright Act, Section 21 of the Antimonopoly Act stipulates: "The provisions of this Act shall not apply to such acts recognizable as the exercise of rights under the Copyright Act, the Patent Act, the Utility Model Act, the Design Act or the Trademark Act." In view of the purpose of the provisions of this section, although it is considered that such an act is externally or formally recognizable as the exercise of rights under the Copyright Act, it may actually be considered to be part of or a means of unjust restriction of trade or private monopolization if such act is not really an act "recognizable as the exercise of rights" under the Copyright Act and is therefore subject to the application of the Antimonopoly Act. In other cases in which an act is externally or formally recognizable as the exercise of rights under the Copyright Act, it may be considered that, if such act is actually considered to deviate from the purpose of the copyright system or to be contrary to the purpose of the system as a result of individual, concrete judgment based on the purpose and condition of the act and its effect on competition in the market in question, then the act is not really an act "recognizable as the exercise of rights" under the Copyright Act and is therefore subject to the application of the Antimonopoly Act.

(2) Aspect of Software as Patents and Know-how

- A. Since patents may be granted on software as software-related inventions, some software licensing agreements impose restrictions on licensees about the production, sale, etc. of patented products. In addition, since algorithms and other information in software may contain know-how, some software licensing agreements obligate licensees to protect secrecy or restrict their handling of competing products. It is considered that the views in the Patent and Know-how Guidelines basically apply to such restrictions in software licensing agreements.
- B. It should be noted, however, that while the Patent and Know-how Guidelines define know-how as "a collection of useful technical information in an industry, which has a confidential nature and is able to be identified properly, in other words, is described or recorded by an appropriate method," some software contains much technical information that does not have such confidential nature as is mentioned above, such as general algorithms.

3. Views on Restrictions in Software Licensing Agreements from the Perspective of the Antimonopoly Act

The subsequent sections will study restrictions in software licensing agreements, primarily those relating to the exercise of rights under the Copyright Act and restrictive acts that are likely to pose problems in the software trade, from the perspective of the Antimonopoly Act, especially from the viewpoint of unfair trade practices ^(Note 7).

Meanwhile, if the imposition of such restrictions substantially restricts competition in a market for products such as operating systems, hardware, or application software or for technologies, it will also pose problems from the viewpoint of private monopolization.

(1) Restrictions on Reproduction

- Under a software licensing agreement, the licensor restricts, for example, the number of times the licensee may reproduce the software.

- A. When a hardware maker sells software preinstalled in hardware under a preinstallation agreement or when a distributor sells copies of software under a sales agency agreement, it is necessary to reproduce the software. Under some such

(Note 7) In addition to the restrictions to be studied below, the licensor under a licensing agreement may impose restrictions on licensees such as restrictions on resale prices, restrictions on sales prices, and restrictions on customers. It is considered that the views in the Patent and Know-how Guidelines apply to these restrictions.

agreements, software makers impose restrictions on hardware makers or distributors about the reproduction of the software.

- B. The act of reproducing software is an act covered by the right to reproduce, a branch right of the software maker under the Copyright Act, and it is considered that the software maker's granting of the right to reproduce software to hardware makers and distributors and imposing reproduction restrictions on them are acts recognizable as the exercise of rights under the Copyright Act. However, since the details of rights and/or conditions, etc. of licenses granted by the software maker to these firms can vary, it is considered that whether or not the imposition of restrictions should not be recognized as the exercise of rights under the Copyright Act, and therefore subject to the application of the Antimonopoly Act, must be judged individually and concretely based on the purpose and condition of the act and the magnitude of its effect on competition in the market in question in accordance with the purpose of the copyright system.
- C. For example, in cases where the following reproduction restrictions are imposed on hardware makers and distributors, if they are used as means of impeding fair competition in a market for software and hardware products or for technologies, it is considered that they are not recognizable as the exercise of rights under the Copyright Act and are subject to the application of the Antimonopoly Act:

(A) Calculation of licensing fees based on factors other than reproduction

In cases where licensing fees payable by hardware makers and distributors are calculated, if the licensing fees are calculated based not solely on the shipments of products in which the software pertaining to the relevant agreements is reproduced, but on the total shipments of those products and products in which other software competing with the software in question is reproduced, then it is considered that the act will fall within the category of unfair trade practices and be in violation of the Antimonopoly Act, provided that the act is likely to impede fair competition in a market for software products, such as by forcing the hardware makers and distributors to adopt the software in question instead of competing software and thereby depriving the competing software makers of the opportunities to deal with the hardware makers and distributors and making it difficult for the competing software makers to find alternative customers (falling under Item 13 [Dealing on Restrictive Terms] of the General Designation).

(B) Setting an upper or lower limit to the number of times of reproduction

If a software maker imposes such a restriction on hardware makers and distributors as setting an upper limit to the number of times of reproduction, it is considered that the act will fall within the category of unfair trade practices and be in violation of the Antimonopoly Act, provided, for example, that the act consequently causes a supply and demand adjustment effect on a market for hardware or software products (falling under Item 13 [Dealing on Restrictive Terms] of the General Designation).

It is considered that there are cases in which a software maker will set a lower limit to the number of times of reproduction by distributors and hardware makers for the purpose of ensuring a minimum amount of licensing fees. However, if a software maker imposes such a restriction for the purpose of deterring distributors and hardware makers from handling competing software products, it is considered that the act will fall within the category of unfair trade practices and be in violation of the Antimonopoly Act, provided that the act is likely to impede fair competition in a market for software products, such as by depriving competing software makers of the opportunities to deal with the hardware makers and distributors and making it difficult for the competing software makers to find alternative customers (falling under Item 13 [Dealing on Restrictive Terms] of the General Designation).

(2) Restrictions on Alteration

- Under a software licensing agreement, the licensor restricts or forbids the alteration of the software pertaining to the agreement by the licensee.

A. Software Alteration

(A) Software alteration ^(Note 8) is performed in various aspects of software usage. For example, software alteration may be performed ① by the software maker that has developed the software, ② by a hardware maker to install the software in its products (hardware) for sale to end users, ③ by a distributor to sell software products to end users under a sales agency agreement with the software maker, and ④ by an end user of the software or by a third party (such as a system integrator) at the request of an end user.

^(Note 8) The term "alteration" as used here means the alteration of "programs in software," but for the sake of convenience, these are simply called "software." "Software alteration" includes program debugging, software updates to improve performance or add functions, localization of overseas software, porting of software developed for specific hardware to other hardware,

- (B) On the other hand, under actual software licensing agreements, the software maker, the licensor, often guarantees the normal operation of the software pertaining to the agreement under certain environments and provides the service of maintaining the software. In such cases, the licensor often restricts or forbids the alteration of the software by the licensee on such grounds that the alteration of the software by persons other than the licensor is likely to make it difficult to provide such a guarantee and maintenance service.

B. Treatment under the Copyright Act

The author of a work has the right to maintain their identity, and the author or the copyright holder who has the copyright assigned by the author (both parties hereinafter called "right holders") exclusively has the right to reproduce and the right to adapt. Therefore, if persons other than the right holder desire to alter, reproduce, or adapt the work, they have to be licensed by the right holder in principle.

Meanwhile, alteration of software by persons other than the right holder does not violate the author's right to maintain their identity as long as the alteration is performed to the extent necessary for making the software usable more efficiently (Subparagraph 3 of Paragraph 2 of Section 20 of the Copyright Act). In addition, the owner of a copy of software is authorized to reproduce or adapt the software to the extent necessary for using the software (Section 47-2 of the Copyright Act) ^(Note 9).

C. Views under the Antimonopoly Act

- (A) Software alteration enables more efficient use of software and also relates to software research and development activity. Therefore, when a software maker restricts the alteration of software by licensees under software licensing agreements, such as end users, hardware makers, distributors, and system integrators, it can affect competition in markets for software products and technologies by restricting the licensees' research and development activities, an important means of their competition.

- (B) On the other hand, the software maker, the right holder, has the right to maintain identity, the right to reproduce, and the right to adapt. The software

customization of software to suit the business of users, and the addition of new functions through add-on software.

(Note 9) There is a dispute about whether the provisions of Section 47-2 of the Copyright Act are adoptive provisions or forcible provisions.

maker often guarantees the normal operation of the software under certain environments and provides maintenance service for licensees such as end users, hardware makers, distributors, and system integrators. Therefore, it can make it difficult for the software maker to provide these services if persons other than the software maker independently alter the software.

- (C) Hence, in cases in which the software maker forbids licensees to alter the software, if the forbidden alteration is recognizable as being to the extent necessary for providing these services, then it is considered that the imposition of the restriction will have little effect on competition in markets for software products and technologies.

However, if the forbidden alteration exceeds the extent necessary for the software maker to provide the guarantee and the maintenance service described above, such as the cases in which the software maker forbids end users:

① to debug or customize the software or

② to connect or incorporate the software with or into other software or hardware personally or through third parties (such as system integrators) for the purpose of making a more efficient use of the software, then it is considered that the act is not recognized as the exercise of rights under the Copyright Act, and falls within the category of unfair trade practices and is in violation of the Antimonopoly Act, provided that the act impedes the licensees' research and development activities in a market for software products or for technologies and is thus likely to impede fair competition in a market for software or hardware products that can be used on the software or a market for such services related to the software as are provided by the system integrators and others (falling under Item 13 [Dealing on Restrictive Terms] of the General Designation).

- (3) Assignment of Rights and Know-how Pertaining to the Results of Alteration, and Granting Licenses for Exclusive Use

- Under a software licensing agreement, the licensor obligates the licensee to assign to the licensor, or to grant to the licensor a license for exclusive use of the rights and know-how pertaining to the results of any alteration of the software that may be performed by the licensee.

A. Treatment of the Results of Software Alteration

- (A) In some cases in which an end user that has concluded a software licensing agreement alters the software for the purpose of personal use or in which a distributor or a hardware maker that handles the software alters the software for end users with the consent of the software maker, the software maker, which is the licensor of the software to be altered (hereinafter called the "original software"), obligates the licensee to assign to the licensor, or to grant to the licensor a license for exclusive use of the rights and know-how pertaining to the results of the alteration performed by the licensee.
- (B) In addition, in some cases in which a licensee has developed separate software as a module in order to add new functions to the original software and partly alters the interface of the original software in order to incorporate the module into the original software, the licensor obligates the licensee to assign to the licensor, or to grant to the licensor a license for exclusive use of, not only the results of alteration of the interface but also the module itself.

B. Treatment under the Copyright Act

When software is altered by a person other than the right holder to the software, its treatment under the Copyright Act needs to be studied from the viewpoint of whether the act of alteration is an act covered by the right to maintain identity, the right to reproduce, and the right to adapt. If the result of alteration is substantially the same as the original software as an expression, the act of alteration will be recognized as an act of reproduction more often than not. In addition, if the expression of the original software is changed only in its external format with its internal format kept unchanged (in which case the act often has a creative nature), it is considered that the act will be recognized as an act of adaptation more often than not ^(Note 10).

If an act of alteration is recognized as creative adaptation, the result of adaptation (alteration) is a secondary work, and the person that has performed the adaptation (alteration) is the author and has rights under the Copyright Act, while the right holder to the original software also has the same right (Section 28 of the Copyright Act) ^(Note 11). In such cases, therefore, when the licensee grants a license to a third

^(Note 10) Whether the act is recognized as reproduction or adaptation under the Copyright Act, it is an act of alteration and therefore a license from the author, who has the right to maintain its identity, is required in principle. However, exceptions are provided for as described in B of (2), Restrictions on Alteration, above.

^(Note 11) However, it is often not necessarily clear whether a specific act of alteration of software falls under reproduction under the Copyright Act or adaptation in which a secondary work is created.

party for the secondary work, the third party needs to be granted a license by the licensor, the right holder to the original software, as well. Likewise, when the licensor grants a license to a third party for the secondary work, the third party needs to be granted a license by the licensee as well. Meanwhile, in the case described in (B) of A above, it is considered that any software (module) that is newly developed separately from the original software is not a secondary work and that the rights under Section 28 of the Copyright Act do not accrue to the licensor, the right holder to the original software.

C. Views under the Antimonopoly Act

(A) In the case of general technological transactions pertaining to patents, if the licensor obligates the licensee to assign to the licensor, or to grant to the licensor a license for exclusive use of the results of improvement, etc. performed on the technology, it is considered that the act is likely to have an adverse effect on competition in a market because it will restrict the use by the licensee itself, or the licensing by the licensee to third parties of the knowledge, experience, improvement inventions, etc. and will impede the licensee's incentive to engage in research and development, thereby impeding the development of new technologies.

(B) In the case of software, for example, the software maker, i.e., the licensor, obligates a licensee to assign to the licensor, or to grant to the licensor a license for exclusive use of the rights and know-how pertaining to the results of software alteration performed by the licensee, the act:

① could result in the enhancement of the position of the licensor in a relevant software technology market by unjustly pooling the rights and know-how pertaining to the results of alteration by the licensee in the hands of the licensor software maker or

② will impede the development of new software by the licensee, etc. by restricting the use by the licensee itself, or the licensing by the licensee to third parties of the knowledge, experience, and results of alteration,

and therefore may have an adverse effect on competition in the market for software products or technologies. In addition, since it is considered that there is no reasonable justification for the licensor to impose such a requirement, the act is highly likely to fall within the category of unfair trade practices and be in

violation of the Antimonopoly Act (falling under Item 13 [Dealing on Restrictive Terms] of the General Designation) ^(Note 12).

(4) Forbidding Reverse Engineering

- Under a software licensing agreement, the licensor forbids the licensee to reverse engineer the software.

A. Reverse Engineering

Under software licensing agreements, the licensor often provides the licensee with software as object code. When providing software as object code, the licensor, on the ground that algorithms, etc. in the software have the nature of know-how, often includes provisions to forbid the reverse engineering ^(Note 13) of the software in order to prevent the acquisition, use, and leakage of the know-how by the licensee, etc.

B. Treatment under the Copyright Act

Unlike the Patent Act, etc. ^(Note 14), the Copyright Act does not have provisions concerning research and development through reverse engineering.

In the reverse engineering of software, analyses are performed in order to extract know-how and ideas in the software, such as interface information and algorithms. There is a view that reproduction as defined in the Copyright Act is performed in the stage of disassembly and decompilation ^(Note 15), one of the methods of the reverse engineering. Based on this view, it is argued that the disassembly and decompilation of software violates copyrights. On the other hand, there is a view that reverse engineering is an act of reading ideas in software and that reproduction performed to the extent necessary does not violate copyrights. Based on this view,

^(Note 12) If the licensor pays reasonable compensation for the assignment of, or for the license to exclusively use, the rights and know-how pertaining to the results of alteration, then it will not impede the development of new technologies by impeding the licensee's incentive to engage in research and development. Therefore, it is considered that this is not a case of restriction.

^(Note 13) The definition of "reverse engineering" is not necessarily established. In this report, the term means "studying and analyzing an existing product and thereby detecting its structure, manufacturing method, etc."

^(Note 14) The Patent Act stipulates that "the effect of the patent right does not apply to the implementation of the patented invention for experimentation or research" (Section 69 of the Patent Act). The Act Concerning the Circuit Layout of Semiconductor Integrated Circuits has a similar provision (Section 12).

^(Note 15) Disassembly and decompilation means the act of analyzing software provided as object code, which is hardly readable for humans, and converting it into source code, etc. in a software language more readable to humans.

it is argued that reverse engineering accompanied by disassembly and decompilation is permissible under the Copyright Act ^(Note 16).

C. Views under the Antimonopoly Act

(A) Reverse engineering has the aspect of contributing to the promotion of technological advances. Therefore, if under a software licensing agreement, the licensor forbids the licensee to reverse engineer the software, it restricts the licensees' business activities concerning research and development, an important means of their competition, and is likely to impede software improvement and development by the licensee.

On the other hand, the algorithms and other technological information in software may contain know-how. When software is provided as object code, the licensor may forbid the licensee to reverse engineer the software for the protection of the know-how in the software.

(B) From the viewpoint of the Antimonopoly Act, it is important to promote the licensing of software by the licensor and not to impede the licensee's incentive to engage in research and development and the development of new technologies by the licensee. From this point of view, if reverse engineering is forbidden in the case of software with platform functions, for example, in which:

- ① interface information about the software is required in order to develop software or hardware that has interoperability with the software;
- ② the interface information is not provided by the licensor; and
- ③ for the licensee, reverse engineering is an indispensable means for developing software or hardware for the software in question,

the act is not an act recognizable as the exercise of rights under the Copyright Act and is therefore subject to the application of the Antimonopoly Act, even if the software may contain know-how and is an act externally or formally recognizable as the exercise of rights under the Copyright Act.

(C) Therefore, if in such cases, the licensor forbids the licensee to reverse engineer the software, it is considered that the act falls within the category of unfair

^(Note 16) Reverse engineering to obtain interface information is permitted in the EU by the EC Directive Concerning the Legal Protection of Computer Programs of 1991 and in the United States by case law.

trade practices and is in violation of the Antimonopoly Act, provided that the act impedes the licensees' research and development activities in a market for software products or for technologies and thus impedes fair competition in a market for software or hardware products that can be used on the software or a market for such services related to the software as are provided by system integrators and others (falling under Item 13 [Dealing on Restrictive Terms] of the General Designation).

(5) Tie-in Sales, Restrictions on the Handling of Competing Products, etc.

A. Views under the Antimonopoly Act

(A) When a software maker concludes preinstallation agreements with hardware makers or sales agency agreements with distributors, the software maker may impose such restrictions as buying other software tied in with the software in question or restricting the handling of competing products. Some restrictions imposed by the licensor on the licensee about the reproduction, etc. of the software when granting licenses to hardware makers and distributors to sell the software are acts of exercising branch rights under the Copyright Act. However, since such acts as requiring the purchase of other software tied in with the software in question or restricting the handling of competing products can directly affect competition in a market for hardware preinstalled with the software or for products of the software and also since such acts are not recognizable as the exercise of rights under the Copyright Act, it is considered that their nature of impeding fair competition should be judged individually in consideration of their effect on competition in the market.

(B) Meanwhile, in the software trade, the software maker, i.e., the licensor, sometimes authorizes licensees such as hardware makers and distributors to grant sublicenses to end users for the use of products of the software in question as described above. It is considered that the same view as described in (A) above applies to such cases.

B. Tie-in Sales with Other Products

- Under a preinstallation agreement with a hardware maker, a software maker obligates the hardware maker to sell end users not only the software in question but also other software products of the software maker preinstalled in the hardware maker's products.
- Under a sales agency agreement with a distributor, a software maker obligates the

distributor to sell end users not only the software in question but also other software products of the software maker tied in with the software in question.

In cases in which it is an important means of competition in the hardware market for hardware makers to sell certain influential software preinstalled, if at the time of concluding preinstallation agreements with hardware makers, the maker of the software obligates the hardware makers to preinstall the software maker's other software products as well for tie-in sale of the software pertaining to the agreements, it is considered that the act falls within the category of unfair trade practices and is in violation of the Antimonopoly Act, provided that by utilizing the market influence of the software in question, the act is likely to impede the hardware makers' freedom of choosing software and hence fair competition in a market for tied-in software products. It is considered that the same holds true for cases in which these restrictions are imposed on distributors (falling under Item 10 [Tie-in Sales, etc.] of the General Designation).

C. Restrictions on the Handling of Competing Products

- Under a preinstallation agreement with a hardware maker, a software maker forbids the hardware maker to handle products of software makers that compete with the software maker.
- Under a sales agency agreement with a distributor, a software maker forbids the distributor to handle products of software makers that compete with the software maker.

In cases where it is an important means of competition in the hardware and software markets for hardware makers and distributors to sell certain influential software, if the maker of the software forbids hardware makers and distributors to handle software competing with the software provided by the software maker, it is considered that the act falls within the category of unfair trade practices and is in violation of the Antimonopoly Act, provided that the act is likely to impede fair competition in a market for software products, such as by depriving the competing software makers of the opportunities to deal with the hardware makers and making it difficult for the competing software makers to find alternative customers. It is considered that the same holds true for cases in which these restrictions are imposed on distributors (falling under Item 11 [Dealing on Exclusive Terms] of the General Designation).