

## Matters to be Noted upon Working of Inventions under the Revised Patent Law\*

### - Focusing on software-related inventions -

Software Committee

#### (Abstract)

As a result of the 2002 Revision of the Patent Law, it was made clear that the invention of a computer program is deemed as an invention of a product (or tangible article) and that the acts of providing programs via telecommunication networks is deemed as a working of an invention. Further, the provisions setting forth the indirect infringement were revised in the direction to ease the standard for judging the establishment of an indirect infringement. The purpose of this paper is to summarize the discussion made by the Software Committee regarding the matters to be noted, from the standpoint of an enterprise, in respect of indirect infringement, taking account of the fact that the working of a computer program closely relates to the eased standard for the establishment of indirect infringement. The Software Committee further conducted a case study by assuming different types of networking systems as the model cases of indirect infringement, and examined in detail how the court decisions would differ before and after the revision of the Patent Law. Then, the provisions for indirect infringement and the noticeable court decisions made overseas are introduced.

#### (Contents)

1. Introduction
2. Key points of the Revised Patent Law
  - 2.1 Issues Revised under the 2002 Revision
  - 2.2 Problems Unsolvable under the Revised Patent Law
3. How the Revised Indirect Infringement and the Infringement by Plural Subjects are Viewed
  - 3.1 How the Provisions of the Revised Article 101 are Viewed
  - 3.2 The Concept of Infringement by Plural Subjects (Joint Infringement)
4. Study of Model Cases
5. Acts Deemed as Indirect Infringement in Other Countries
  - 5.1 Legal provisions concerning indirect infringement
  - 5.2 Noticeable Judicial Precedents in Other Countries
  - 5.3 Matters to be Noted
6. Conclusion

## 1. Introduction

In response to the rapid development of information technologies that is notably represented by the penetration of the Internet, the Industrial Structure Council (Ministry of Economy, Trade and Industry) decided on May 11, 2001 to establish the Legislative Affair Subcommittee at the Intellectual Property Committee, aiming at the development of the intellectual property system adaptable to the networked society. The Legislative Affair Subcommittee began discussing in May of the same year and, after seven times of the subcommittee meeting for discussion, presented in December 2001 the report summarizing those discussions, entitled "The Desirable Provisions of the Patent Law and the Trademark Law Adaptable to Networked Society<sup>1)</sup> (hereinafter called "Subcommittee Report").

"Bill for the Amendment of Patent Law and other Industrial Property Laws", which passed the Diet and was promulgated on April 17, 2002 as Law No. 24 of 2002, had been prepared on account of the Subcommittee Report.

---

\* "CHIZAI KANRI" (Intellectual Property Management), Vol.53 No.4 2003, pp.549-560

The Third Subcommittee of Software Committee has been discussing the content of the bill during the fiscal year 2002.

This paper examines the bill and provides the matters to be noted by enterprises focusing on the software-related inventions, especially the working of such inventions. This paper also discusses briefly how the software-related inventions are treated under the Patent Law of other countries, getting right to the point.

## 2. Key points of the Revised Patent Law

The Software Committee had been making comments and proposals to the Legislative Affair Subcommittee in respect of the software-related inventions, from the standpoint of enterprises, while the discussions were underway at the Legislative Affair Subcommittee.

These comments and proposals were generally reflected on the Revised Patent Law, but some issues like “whether the existence of a direct infringement should be required for the establishment of an indirect infringement” or “whether the issue of joint infringement should be stipulated in the provisions” remained for further consideration by JPO.

Before discussing the matters to be noted by enterprises upon the working of software-related inventions, we will summarize the content of the Revised Patent Law by categorizing the issues into those solved under the Revised Patent Law and the problems unsolvable under the Revised Patent Law.

### 2.1 Issues Revised under the 2002 Revision

- (1) Clarification of the definition of “working of an invention” (Article 2, Patent Law)

Under the Revised Patent Law, the scope of protection under the Patent Law was revised to include information-based property (intangibles) as it is, such as computer programs, without a recording medium, by expressly designating “programs, etc.” as a type of “product (tangible article)” defined under the Patent Law. The term “programs, etc.” may include a data structure (namely, digital contents having a feature in its data structure).

Speaking of inventions relating to com-

puter programs, there are a lot of patent applications containing “computer program-related claim(s)” these days, following the publication of “Examination Guidelines for Computer Software-related Inventions” by JPO on December 28, 2000, which has been operated in a manner admitting the inventions of computer programs under the patent prosecution in practice.

Therefore, the 2002 Revision did not cause any substantial change in the practice of patent prosecution. However, the meaning of the 2002 Revision is that the inventions of computer programs are now legally secured by expressly designating computer programs as the subject of an invention of product under the Patent Law while, before the 2002 Revision, the inventions granted in relation to computer programs had the risk of being revoked by the judicial decision, because the basis of such grant of patent had been just an examination guideline.

Further, the act of “provision of a patented program, etc. via telecommunication network” was included in the definition of the working of an invention, thereby expressly stipulating that the transmission of computer programs, etc. via telecommunication networks may be deemed as the working of an invention.

In this respect, the services provided by ASP (Application Service Provider) that provides its customers with the functions may also be included in the working of an invention.

Due to the Revised Patent Law, the acts of transmitting a computer program via telecommunication networks could constitute a direct infringement of a program claim, and the enterprises are now able to obtain patents for software-related inventions and enforce such rights with a greater sense of security.

- (2) Expansion of Provisions for Indirect Infringement (Article 101, Patent Law)

The provisions for indirect infringement (before the 2002 Revision) were introduced in 1959, and 40 years have passed since the implementation of such provisions. During these 40 years, a lot of judicial precedents were made under which the establishment of an indirect infringement was not admitted due to the strict construction of the requirement “used exclusively for the manufacture of the product (or used exclusively for the working of the invention)”. Although recently some decisions were

made admitting indirect infringement by flexibly construing said “exclusivity” requirement, in the “Bakery Machine” case (Osaka District Court, Oct.24, 2000, Case No.12109 “*wa*” of 1996) for instance, generally the construction of the “exclusivity” requirement had been too strict for patent owners or proprietors to enforce their right, and some suspected if the rights of patent owners and proprietors were effectively secured in respect of enforcement of their rights.

With these backgrounds, provisions introducing the subjective requirement (item 2 and item 4) were added in Article 101 under the Revised Patent Law, as a standard for deciding whether an indirect infringement is established.

Namely, under the Revised Patent Law, a component “indispensable for attaining the object of the patented invention” shall be deemed as an indirect infringement only if such component meets the subjective requirement that “with the knowledge that the invention is patented and that the article will be used for the working of the patented invention”. The scope of indirect infringement was expanded so that an indirect infringement could be established in the cases other than those meeting the “exclusivity” requirement.

Here we have a problem in construing the applicable scope of said requirement and also a problem in construing the phrase “excluding those articles which are distributed widely and commonly in Japan”, which was provided for excluding staple articles. These construction issues are discussed below in Section 3, “How the Indirect Infringement and Infringement by Plural Subjects are Viewed”.

## 2.2 Problems Unsolvable under the Revised Patent Law

Although the measures for the issues like “definition of invention” and “infringement by plural subjects” were not taken under the 2002 Revision, the Subcommittee Report sets forth the necessity of further consideration as follows:

“The definition of an invention, “a creation of technical ideas by which a law of nature is utilized”, is causing no substantial problem in admitting the patentability of a software-related invention, due to the flexible operation of the law heretofore. Also, we do not find any urgent necessity for revising the definition of an inven-

tion at this moment, considering that the actual requirement for expanding the scope of protection under the Patent Law to pure business methods is not an urgent matter...(omitted)... These matters should be continuously and actively considered, taking account of the future technological trend and the discussions concerning international harmonization”. This statement remains the possibility of future revision of the definition of an invention.

Further, in respect of the issue of infringement by plural subjects, the report suggests the necessity of detailed examination in the future, stating in the “Future Issues -- Response to violation of patent rights by plural subjects” as follows: “To respond to the increase in intangible abetment or instigation of patent infringement over networks, and to the situation where individuals, not business operators, take part in such abetment or instigation of infringement, we should continuously study the possibility of the introduction of the provisions for active inducement under the US Patent Law and the review of “in the course of business” requirement for drawing up necessary measures, while observing the actual situation of the business activities concerning patents and trademarks on networks.”

For reference, we have a judicial precedent admitting a joint unlawful act, the “Stepping Motor” case (Osaka High Court, Aug.28, 2002, Case Nos.3014 and 3015 “*ne*” of 2000). In this case, the court admitted a joint unlawful act by stating “(The distributor) shall be deemed to contribute to an unlawful act (direct infringement) of its customer upon distributing a product with the knowledge that a direct infringement may be established, and (such distributor) shall be deemed liable for the joint unlawful act.”

## 3. How the Revised Indirect Infringement and the Infringement by Plural Subjects are Viewed

We asked some question of the Committee members about the provisions revised under the 2002 Revision in order to inquire how they view the revised provisions and how they responded to the change. We will introduce, as appropriate, our discussions made especially for the matters to be noted in relation to the inven-

tion of computer programs, which became admitted as an invention of a “product”.

### 3.1 How the Provisions of the Revised Article 101 are Viewed

We asked how the Committee members view the revised Article 101 of the Patent Law, which stipulates the provisions for indirect infringement, according to each requirement set forth in the provisions in the same way as the commentary published by JPO<sup>2)</sup> on the Revised Patent Law.

Article 101.2 of the Patent Law defines an indirect infringement as follows; “in the case of a patent for an invention of a product, acts of commercially manufacturing, assigning and the like, importing or offering for assigning and the like, an article to be used for the manufacture of the product (excluding those articles which are distributed widely and commonly in Japan) which is indispensable for attaining the object of the patented invention, with the knowledge that the invention is patented and that the article will be used for the working of the patented invention”. Each of the requirements is discussed in the following items (1) through (3) one by one. Then, further discussion is made in item (4) in respect of the provisions as we view as a whole, combining each such requirement. Unless otherwise provided herein, the newly added Items (ii) and (iv) of Article 101 under the Revised Patent Law shall be referred to as “Revised Provisions”.

- (1) Requirement of “excluding those articles which are distributed widely and commonly in Japan”

Many of the Committee members answered that they feel the wording of the provision unclear and difficult to make their decision. Since it is not clear at which time the state of “widely and commonly distributed in Japan” is to be decided, there may be a case where the situation did not meet the requirement at the time of filing of application but did meet the requirement at the time of the infringement. For example, a kind of component that had been distributed as a tailor-made product at the time of the filing of application may be subsequently distributed in the market generally at the time of infringement. Likewise, a component not desig-

nated as “indispensable” at the time of filing may subsequently become indispensable at the time of registration due to an amendment made to the scope of claims. Further, it is predictable that you may have a trouble in deciding whether a product widely and commonly distributed in a limited area should be deemed as “widely and commonly distributed” under the Revised Provisions.

In relation to the revision of Article 101, the Subcommittee Report describes the articles not categorized as the “exclusive article” by using the terms “neutral article: article that is suitable for the working of a specific invention but has other usage” or “staple article: article that is generally available in the market, such as screw, nail, transistor, etc.”. On the other hand, such terms as “neutral article” and “staple article” are not used in the Revised Provisions nor in the commentary published by JPO, and the JPO’s commentary explains the non-exclusive article as “standardized product or article generally available in the market”.

Therefore, it should be noted that the articles for which indirect infringement is established under the Revised Provisions are only the “neutral article” as defined in the Subcommittee Report, and that indirect infringement is not established, for example, for the distribution of a “staple article”. Comparing with the patent legislation in the United States or Germany, where indirect infringement is applicable to the “staple article” by way of admitting the theory of “active inducement” or others, there is a room for further easing of this requirement in Japan.

- (2) Requirement of “indispensable for attaining the object of the patented invention”

In response to our question whether to decide the requirement of “indispensable” in the same way as the term “essential” as discussed in the doctrine of equivalents, we could hear many opinions that they will be treated in the same manner in most part but the definition of the term “indispensable” will be construed with a broader meaning. The basis of these opinions was the description made in the JPO’s commentary on the Revised Law, stating that “a tool or material to be used for the manufacture of a product or for the working of a method as well as the elements or components of an invention might be included”.

The decision of infringement has been based mainly on the comparison of the claimed invention and the article (or process) in dispute according to each element or component described in the scope of claims. However, assuming a program claim that is deemed as an invention of a product, the compiler<sup>3)</sup> or the code generator<sup>4)</sup> used for generating a program will be deemed as a tool and the module<sup>5)</sup> or library<sup>6)</sup> incorporated in the program will be deemed as a material, as long as “a tool or material to be used for the manufacture of a product” is to be included. In that case, if the article in dispute is not a program within the scope of claims but a compiler to generate the program or a module incorporated in the program, such article may be deemed as an indirect infringement as long as such article is not distributed widely and commonly in Japan.

On the other hand, another major opinion was that, since the object “indispensable” for the manufacture of an article (or the working of the invention) is not limited to the element or component of the patented invention, the most difficult question is how to prove the article as “indispensable”.

(3) Requirement of “with the knowledge (that the invention is patented and that the article will be used for the working of the patented invention)”

In response to our question what could be a proof for demonstrating that a person is working an invention “with the knowledge...” other than by sending a cease-and-desist-letter, we received the following answers:

- (The fact that) the subject invention is cited in the patent specification or academic paper of the other party;
- (The fact that) the subject invention is identified in a provision of an agreement executed by and between the parties;
- (The fact that) a request for inspection, request for examination or an opposition concerning the subject invention has been filed or any information in relation thereto has been submitted under the name of the other party;
- (The fact that) a trial for invalidation has been filed by the other party;
- (The fact that) an establishment of a license for working the subject invention has been

registered for the other party;

- (The fact that) a request for interpretation has been filed by the other party;
- (The fact that) the other party has obtained an expert opinion in relation to the subject patent;
- (The fact that) the subject patent is identified in the specification or other document that the other party, which is a subcontractor, receives from the principal contractor;
- (The fact that) the subject patent is mentioned in the Web site of the other party or in the catalogue or leaflet distributed by the other party; and so on.

However, even if you can demonstrate that the other party knew the existence of the subject patent, the above-mentioned proofs are not sufficient to when you are required to demonstrate that the other party performed the designated acts “with the knowledge that the article will be used for the working of the patented invention”, and therefore it would be necessary in practice to send a cease-and-desist letter to the other party describing the situation.

Some Committee members commented that they were afraid that the abusive use of such cease-and-desist letters might be caused by the 2002 Revision. It is true that we may predict some increase of opportunities where we receive those cease-and-desist letters. However, if we see the situation objectively, those cease-and-desist letters would be necessarily required to describe the fact that the other party meets the requirement of indirect infringement, and accordingly the issuance of the cease-and-desist letters will be made in a prudent manner compared with the present situation.

In response to the question whether the claim of non-infringement could be accepted using an expert’s opinion supporting the non-infringement, when a party receives a cease-and-desist letter, most of the Committee members answered that they consider such expert’s opinion useless because the working of an invention might be deemed as an infringement by the court decision even if they claim they worked the subject invention with the belief of non-infringement by way of obtaining a non-infringement opinion.

- (4) How the provisions of the revised Article 101 are viewed as a whole

In view of each requirement of Article 101 as mentioned above, the criteria of each such requirement for making decision is unclear, and many of the Committee members commented that they feel it difficult to judge to what extent Items (ii) and (iv) of the revised Article 101 could crack down on indirect infringement.

Accordingly, in response to the question what measures are taken against the revised provisions and what matters should be noted as an enterprise, their answers were “we try to diversify the claims so that we need not resort to the indirect infringement”, “we are trying to make our employees have thorough understanding of the revised provisions” and so forth, indicating that they are still in their pursuit of adequate measures although they do think they should take some measures in the future.

Speaking of the manipulation in preparing claims, some Committee members commented that they “prepare program claims without fail” so that they might easily enforce their right against the act of providing computer programs through networks.

Under the 2002 Revision of Patent Law, the applicants have become required to disclose prior art information in their specification. However, careless description of prior art information in relation to other enterprise might be judged as you have the “knowledge” of such other patented invention. Therefore, you should not carelessly disclose prior art information just to meet the disclosure requirement but should conduct patent search with sufficient care and describe appropriate prior art information.

### **3.2 The Concept of Infringement by Plural Subjects (Joint Infringement)**

Under the 2002 Revision of Patent Law, there is no provision for the infringement by plural subjects. As stated above, this issue was deferred by the Legislative Affairs Subcommittee as there is some room for further consideration. This Committee did examine the issue of infringement by plural subjects, and decided that it is still too early to incorporate this issue as a provision of the Patent Law. This Committee submitted its opinion to the Legislative Affairs Subcommittee supporting the deferring of the

issue.

On account of the easing of criteria for establishing an indirect infringement under the Revised Patent Law, we inquired if the Committee members feel the necessity of further provisions for the infringement by plural subjects in the Patent Law in the future.

The result showed that the half of the members answered they feel no such necessity and the other half supported the necessity to add such provisions.

As a reason for answering that there is no need for adding such provision was that the scope of patent search would become too broad in view of the patent clearance. For example, you may assume that a product or component distributed by your company might be used by your customer as a part of any form infringing a patent of a third party. Accordingly, we can predict a situation under which we might not be able to distribute our own product at ease unless we check out the form of use of such product by each customer one by one and conduct patent search in relation to such form of use. Further, some of the Committee members commented that, considering that Article 719 of the Civil Code setting forth the joint unlawful act was held applicable to those acts of infringement in some judicial precedents, there is not urgent necessity to add a special provision for the infringement by plural subjects.

On the other hand, as Article 719 of the Civil Code stipulates that “If two or more persons have by their joint unlawful act caused damage to another, they are jointly and severally liable to make compensation for such damage; the same shall apply if it is impossible to ascertain which of the joint participants has caused the damage”, the problem is that a party is allowed to claim compensation of damages but not allowed to demand injunction under the present situation as far as this provision is applicable. For some of the Committee members, the comment that there is a need for adding a provision for the infringement by plural subjects was made on account of the necessity of the right to demand injunction. Other Committee member commented that for computer related inventions they currently prepare system claims and claims for each server and terminal one by one, and said that they might expect reducing the costs and workload for preparing patent claims, if

joint infringement to a single system claim is constituted when a system is built by plural subjects in combination. Many of the Committee members pointed out that sufficient and careful discussion is needed beforehand because the effect caused by adding such new provision may vary depending on each technical field.

When an invention contains a telecommunication network as its element, there may be a form of working the invention in which an intermediary such as an ISP (Internet Service Provider) provides a network that is one of the elements of the invention. "Law Concerning Limitation of Damages to Specific Telecommunications Service Provider and Disclosure of Sender Information ("ISP Liability Law")", which has already come into effect, sets forth the provisions specifying the responsibility and liability to be assumed by ISP as well as the indemnification allowed for ISP in respect of infringement cases. For example, when ISP receives a request for deleting unlawful information from a party who claims its right has been infringed by the distribution of such information, and ISP has a good reason to believe that said right is infringed, ISP may delete such information (Article 3.2.1 of the ISP Liability Law). Further, when ISP receives a request for deleting unlawful information and sends a notice of that effect to the sender of such information, ISP may delete such information unless it receives an objection within seven days from such notice (Article 3.2.2 of the ISP Liability Law).

In the cases of copyright infringement, however, expansion of infringement damage is anticipated if such infringement is left as it is for seven days. Therefore, a guideline was developed by the Association for Examining Guideline Concerning ISP Liability Law consisting of ISP and other interested groups in May 2002. According to this guideline, a proprietor is recommended to present a good reason for ISP to believe that the right is actually infringed upon making a request for deleting unlawful information so that ISP is able to delete such information immediately, thereby preventing the expansion of infringement.

On the other hand, in the cases of patent infringement, the point of dispute is in most cases whether the allegedly infringing product is within the scope of the patented claims, and it is quite difficult for ISP to decide whether the pat-

ented right is actually infringed, directly or indirectly. As a result, it is anticipated that the ISP Liability Law will be operated in the manner that ISP firstly makes a notification to the sender of information subject to Article 3.2.2, even if ISP has a good reason to believe that the patent right is actually infringed and then, ISP deletes the information if necessary.

As mentioned above, although the Revised Patent Law eased the criteria for establishing an indirect infringement by adding the provisions in Items (ii) and (iv) of Article 101, namely by introducing the subjective requirement in making a decision regarding the (allegedly infringing) object, the provisions of such Items (ii) and (iv) are still unclear from the standpoint of enterprises, and the clarification of such criteria through the guideline concerning indirect infringement or through the accumulation of judicial precedents is expected as soon as possible.

#### 4. Study of Model Cases

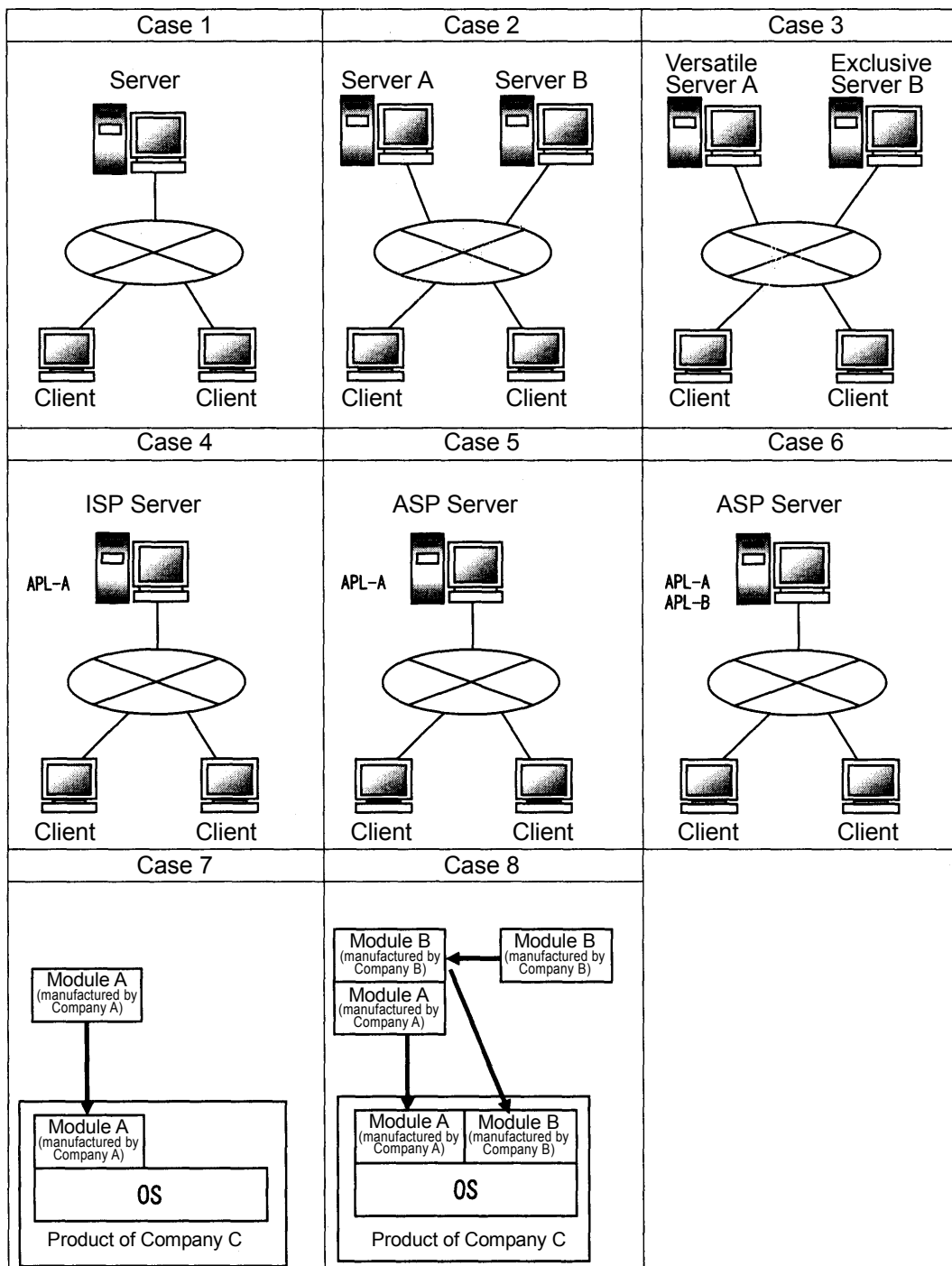
As shown in Table 1 below, eight types of model cases representing software-related inventions were examined from the perspective of the indirect infringement and the infringement by plural subjects, before and after the 2002 Revision of Patent Law, on a case-by-case basis, and opinions of the Committee members are summarized as below. The examination was made on the assumption that the client users are enterprises, without assuming any intervention by an individual.

##### (1) Opinions Concerning Cases 1, 2 and 3

The model cases 1, 2 and 3 are based on the hardware structure of client and a server (or servers) connected to each other via network. In the virtual patent claims, we assumed that Case 1 contains "a server and client", Case 2 contains "server A and server B" and Case 3 contains "server A (versatile use) and server B (exclusive use)" as the element of the invention, respectively, and studied each case assuming that those who work the invention differ depending on each hardware (element).

Direct infringement is not established in each case, before or after the 2002 Revision.

Table 1 Virtual Cases



Under the Revised Patent Law, indirect infringement of server or client could not be established unless each of server and client (element of invention) is worked by using an exclusive article due to the “exclusivity” requirement set forth in the Patent Law prior to the revision. Therefore, it is highly probable that the indirect infringement by only the party who worked the invention by using the server B of

Case 3 is established. However, it is quite difficult in practice to establish an indirect infringement because, in general, the server or client is hardly operated by the sole function claimed in the invention only. Under the Revised Patent Law, we may assume the neutral articles as well as the exclusive articles thanks to the easing of “exclusivity” requirement, but it is still difficult to establish an indirect infringement because the



allegedly infringing object must meet the three requirements of “not commonly distributed in Japan”, “indispensable for attaining the object of the patented invention” and “with the knowledge that the invention is patented and that the article will be used for the working of the patented invention” at the same time.

When assuming the virtual claim as a storage medium claim or a computer program product claim, the opinion of the Committee members was that no direct infringement will be established in respect of either type of said claim, just the same as the case for a system claim.

When we consider the possibility of indirect infringement under the Revised Patent Law, the possibility would be higher in the case of a storage medium claim than in the case of a system claim, and still higher in the case of a computer program product claim than in the case of a storage medium claim, assuming the Cases 1 and 2 as well as the server A (versatile use) of Case 3, and also the server B (exclusive use) of Case 3.

When we consider the possibility of infringement by plural subjects, the opinion of Committee members was that the relationship between the server and client will become the issue and that we must further consider the existence of conspiracy and the exclusivity of the use of the hardware, and the establishment of infringement by plural subject would be difficult anyway.

## (2) Opinions Concerning Cases 4, 5 and 6

The model cases illustrated in Cases 4, 5 and 6 are based on a software structure designating ISP with high versatility or ASP with a high level expertise as its server and loading application software within said server.

As a virtual claim, we assumed application software as “APL-A” or “APL-A+APL-B”, and studied each case assuming different types of server or the cases where plurality of application software (APL) is loaded within ISP (or ASP).

It is highly probable that the direct infringement is established in respect of a party who operates “APL-A” or “APL-A+APL-B”, before or after the 2002 Revision, and the probability is still higher in the case of a computer program product claim.

When we consider the possibility of indi-

rect infringement, the exclusivity of the server was the substantial issue under the Patent Law prior to the revision (the exclusivity is deemed higher in the order of versatile server, ISP and ASP) and it was difficult to establish an indirect infringement. Under the Revised Patent Law, the possibility of establishment of an indirect infringement is much higher, although you must clear the provisions for the indirect infringement. If each of “APL-A” and “APL-B” is an exclusive article, indirect infringement will be established for each application software, respectively.

In relation to ISP or ASP, some Committee members expressed their doubts whether the act of uploading data to the server itself (installing data) including application software and the acts of downloading data (including application software) at the request (or requirement) of the client will be deemed as assignment or leasing of such data.

## (3) Opinions Concerning Cases 7 and 8

The model cases illustrated in Cases 7 and 8 are based on the configuration of the product form of the software.

We assumed that the virtual claim covers the final product as its object device.

Direct infringement is established in respect of the final product, before or after the 2002 Revision.

When we consider the possibility of indirect infringement, the exclusivity of the software module generated by Company B would have been the issue under the Patent Law prior to the revision. In general, it is difficult to demonstrate the exclusivity of a software module meeting the “exclusivity” requirement. Therefore, under the Revised Patent Law, the possibility will be higher because the indirect infringement is established as long as the object device meet said provisions for indirect infringement.

When we consider the possibility of infringement by plural subjects, such infringement could not be established under the Patent Law prior to the revision because an independent unlawful act of each of such plural subjects cannot be established without the establishment of a direct infringement. Each of such plural subjects is deemed independently engaged in an unlawful act when an indirect infringement is established under the Revised Patent Law. However, some Committee members presented their opinion that

the judgement on the relationship and conspiracy between or among those subjects will be required.

The claim structure of the model cases illustrated in Table 1 are simple, and therefore easy to make decision. However, inventions relating to computer systems may contain the type of information exchanged between the server and client, or the procedures of any kind, which is claimed moreover, you may further assume cases where the procedures may be intervened by the processing of a client of an individual who utilize the system not in the course of business, and a computer system is worked across the border of countries, and it is difficult to identify the acts of the working of inventions, just like the judicial precedent of UK discussed below.

## 5. Acts Deemed as Indirect Infringement in Other Countries

This Committee made a research of the legal provisions concerning indirect infringement and the judicial precedents in relation to indirect infringement in other countries, in addition to the study of the revised Patent Law in Japan. The result of the research is as follows:

### 5.1 Legal provisions concerning indirect infringement

In Europe, legal provisions concerning indirect infringement are generally the same in Germany, UK and France due to the amendment made in each country following the ratification of the Community Patent Convention (not yet enacted), and therefore this paper will take the German case as an example. Article 10 of the German Patent Law stipulates that an indirect infringement is established when an act for providing "an article in relation to the essential feature of the invention" (objective requirement) "when the person knows that the article is to be used for the working of the invention and the use of such article is described as such, or when such matters are obvious from the circumstances" (subjective requirement). It seems, however, that some judicial precedents held that the subjective requirement is not necessary in

case of an exclusive article. The provisions of Article 10 shall be applicable to so-called staple articles that are available through general transactions, as long as the act of infringement is induced on purpose.

The US Patent Law (Title 35) sets forth in Article 271 (c) that the act of distributing (or otherwise) an article "constituting a material part of the invention" (objective requirement) "knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use" (subjective requirement), shall be deemed as an act of indirect infringement (or contributory infringement).

Further, Article 271(b) of the US Patent Law sets forth that "whoever actively induces infringement of a patent shall be liable as an infringer".

Therefore, although the US Patent Law does not set forth any provision for infringement in relation to the so-called neutral article and staple article, an act of indirect infringement may be established by applying the provisions of Article 271(b).

In China, there is no specific legal provision stipulating the indirect infringement. However, according to "Opinion on Some Problems Concerning the Decisions Made for Patent Infringement Cases (test version)", a guideline presented (as of September 29, 2001) by Beijing Municipal High People's Court (that is an equivalent to the High Court in Japan) for treating patent infringement cases, active inducement is deemed as an indirect infringement (see Table 2). The object of the indirect infringement is limited to an exclusive article.

The above-mentioned "Opinion" was issued as a guideline for the People's Medium Courts in treating patent infringement cases. In view of the influence of said High Court, it is highly probable that the People's Court in each district will accept and adopt such "Opinion".

In Korea, the provisions concerning indirect infringement are almost the same as the provisions of the 1999 Patent Law of Japan.

The legal provisions of the countries other than mentioned above are as described in Table 2, and the detailed explanation would be beyond the scope of this paper.

Table 2 Provisions for Indirect Infringement under the Patent Law in each Country

	JP(1999)	JP(2002)	Germany	France	UK	US	Canada	Korea	China
Acts of working an invention	Invention of a product	Manufacture, use, assignment, lease, import, offering to assign or lease of the product.	Manufacture, provision, distribution or use, or import or retaining for the purpose of use, of the product.	Manufacture, provision, distribution or use, or import or retaining for the purpose of use, of the product.	Manufacture, disposition, offer to dispose, use, import or retaining of the product.	Manufacture, use, sale, offer to sell, or import of the product.	Manufacture, assembly, use or sale. No difference whether product or method.	Same as JP (1999)	Manufacture, use, offer to sell, sale or import of the product.
	Invention of a method	Use of the patented method. Use, assignment, leasing, import or offering of the article above of an article manufactured by using the patented method.	Use or provision of the patented method. Provision, distribution or use, or import or retaining for the purpose of use, of an article directly manufactured by using the patented method.	Use or provision of the patented method. Provision, distribution or use, or import or retaining for the purpose of use, of an article directly derived from the use of the patented method.	Use or offer to use of the patented method. Disposition, offer to dispose, use, import or retaining of an article directly manufactured by using the patented method.	Use of the patented method. Import, offer to sell or sale of an article manufactured by using the patented method.		Same as JP (1999)	Use of the patented method. Use, offer to sell, sale or import of an article directly derived from the use of the patented method.
Indirect Infringement	Exclusive article						*Note 1		x (“ ” in Beijing) *Note 2
	Neutral article	x					*Note 1	x	x
	Staple Article	x	x				*Note 1	x	x

(to be continued)

Indirect Infringement	JP(1999) Manufacture, use, assignment, lease, import, offering to assign or lease of an exclusive article.	JP(2002) Manufacture, assignment, import, offering to assign of an exclusive article. Manufacture, assignment etc., import, offering to sell or lease of an article indispensable for attaining the object of the patented invention, with the knowledge of the patent and the fact that such article is to be used for the working of the patented invention.	Germany An act providing or offering to provide an means in connection with the essential feature of the invention, with the knowledge that the article is suitable for the working of the invention and intended for the working of the invention, or when such matters are obvious from the circumstance. Provided that these provisions are applicable only if the act of infringement is induced in the cases of commodities.	France An act providing or offering to provide an means in connection with the essential feature of the invention, with the knowledge that the article is suitable for the working of the invention and intended for the working of the invention, or when such matters are obvious from the circumstance. Provided that these provisions are applicable only if the act of infringement is induced in the cases of important commercial commodities.	UK An act providing or offering to provide an article indispensable feature of the invention. Provided that these provisions are applicable only if the act of infringement is induced in the cases of commercial commodities in connection with mass production.	US An act of distributing, offering to distribute or import an article knowing the same to be especially made or adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use. (contributory infringement) Act of actively inducing an infringement of a patent shall be deemed as an infringement even if the object is a staple article.	Canada No legal provision. *Note 1 There is a judicial precedent admitting a contributory infringement [Slater Steel v. Payer(1968), 55C.P.R.61(Ex. C.)], and therefore it is possible that indirect infringement may be established, whether exclusive, neutral or staple article.	Korea Same as JP (1999)	China No legal provision. *Note 2 “Opinion on Some Problems Concerning the Decisions Made for Patent Infringement Cases (test version)”, a guideline presented as of September 29, 2001 by Beijing Municipal High People’s Court defines the indirect infringement as “an act of working a patented invention that does not constitute a direct infringement of a third party’s patent by itself but that induces, encourages or instigates other person into working a third party’s patented invention, causing a direct infringement by such other person, under which situation the person subjectively induces or instigates other person into infringing a third party’s patent on purpose and objectively provides any necessary condition to cause a direct infringement by such other person.”
Notes	There is a judicial precedent holding a decision that the term “dispose” has the equivalent effect as the term “putting on the market”.								

(Reference Materials)  
 - AIPPI JAPAN, “Gaiikoku Kogyo Shoyu-ken Horei-shu (Laws and Regulations on Industrial Property Rights in Foreign Countries)”  
 - Shuji SUMI, “Canada Tokkyo-ho Oyobi Tokkyo-Shingai-Sosho (Sono-2)(Canadian Patent Law and Patent Infringement Suits (2))”, CHIZAI KANRI (Intellectual Property Management), Vol.49 No.1 1999, p.21

## 5.2 Noticeable Judicial Precedents in Other Countries

We selected some judicial precedents of other countries in relation to indirect infringement. The followings are the noticeable cases among those judicial precedents.

### (1) UK

*Menashe Business Mercantile Ltd., Julian Menashe v. William Hill Organization Ltd. (No. HC-01C-04669, U.K. High Ct., Chanc. Div.)*

In this case, the court held that the server system installed outside the United Kingdom in which a part of configuration requirement of a system claim is connected via a network might constitute an indirect infringement under the UK Patent Law if such server system causes the effects of the working of an invention inside the United Kingdom.

### (2) US

*Rotec Industries, Inc., v. Mitsubishi Corporation, Tucker Associates, Inc. and Garry Tucker (99-1275, CAFC, June 13, 2000)*

In this case, the court held that the act of offering to sell a system, for which any and all component may be manufactured outside the United States for the installation and use outside the United States, shall not be deemed as an "offer to sell" stipulated in Article 271(a) of the US Patent Law as long as such offer is made within the United States, and therefore shall not constitute an infringement of any US patent.

## 5.3 Matters to be Noted

Currently, only Japan grants patentability to so-called "program claim" under the express legal provisions.

Recently in EPO, the trend is that they grant software-related patents in broad range in practice with the requirement of "technical effect", irrespective of the formality of claims. However, under Article 52 of the European Patent Convention, the "methods for doing business" and the "programs for computers" are not regarded as patentable inventions.

In US, there is no statutory provision that sets forth the patentability of a program-related invention. Although the Examination Guideline excludes computer programs from the scope of

protection, there are many cases where program-related inventions are granted as patent in the form of program-product claims.

In this way, the treatment of program-related inventions in each country is still changing and reflects uncertainty. However, it should be noted that, even in the countries where a program claim is not accepted or where such acceptance is uncertain, there is a possibility that a computer program itself might be a subject of patent infringement by applying a provision setting forth an indirect infringement like "active inducement", if any.

## 6. Conclusion

As discussed in this paper, when we look at the provisions for indirect infringement under the Revised Patent Law, the criteria for judging each requirement is unclear in many points, and it is difficult to determine to what extent the provisions for indirect infringement will be applicable. Moreover, there is still a room for further easing of the criteria, comparing with those provisions of US and Germany extending the scope of indirect infringement to "staple articles" by admitting active inducement. However, it is an undoubted fact that the scope of indirect infringement was extended compared with the Patent Law before the revision. Therefore, as an enterprise, it is desirable to examine the measures to be taken both as a proprietor and as a party who may work a patented invention. For example, as a proprietor, we should carefully examine the content of a cease-and-desist letter concerning an indirect infringement (we should explain that the object component is to be used for the working of a patented invention, as well as the existence of the patent in respect of such invention) before sending it to the infringer. On the other hand, as a party who may work a patented invention, it would be necessary, for example, to be aware of the use of a component by our customer when we supply said component to such customer, and we should examine the possibility of indirect infringement on account of such use by customers.

We hope this paper will be a good reference upon such examination by the readers.

**Notes:**

- 1) Report Presented by the Intellectual Property Committee of the Industrial Structure Council (<http://www.meti.go.jp/report/data/g11225aj.html>) (Japanese only)
- 2) JPO: Commentary on Industrial Property Law (<http://www.jpo.go.jp/shiryoushiki/index.htm>) (Japanese only)
- 3) Compiler: A program that translates source code written in a particular programming language into object code that a computer may execute instructions.
- 4) Code Generator: A program having a function of a generating source code or machine language automatically. The term may indicate a single step for generating a machine language for the processing of a compiler or may be used to indicate a source code generator for automatically generating source code from a program specification. One common example is a program to automatically generate a source code of HTML.
- 5) Module: A part of a program, which is a collection of routines and data structures that performs a particular task. Module is retrieved by another routine in the program to perform a particular task.
- 6) Library: A collection of routine program parts stored in a file that is used for reducing programming workload and can be read and used by plural programs.
- 7) “Law Concerning Limitation of Damages to Specific Telecommunications Service Provider and Disclosure of Sender Information” (issued on November 30, 2001, Law No. 137) sets forth a provision indemnifying the ISP against an infringement of copyright, etc. by the sender of information.

(Date manuscript received: January 31, 2003)

