

7 New Framework for Protection and Management of Knowledge

Amid the rapid progress in industry and technology in Asian countries such as China, South Korea and Taiwan, it is time for Japan to drastically reform its conventional industrial structure, which is based on cost competitiveness through mass production. In order to survive fierce global competition, Japanese companies need to create technologies of an extremely high level that are unrivaled in foreign countries and make arrangements to prevent foreign companies from easily imitating their technologies.

Under such circumstances, various policy measures have been implemented in the intellectual property area. For further development of the Japanese industry, companies should make a choice, from a strategic perspective, between obtaining exclusive rights for their technologies by filing patent applications that are bound to be published, and applying tight control for their technologies as trade secrets and keeping them confidential. There is also a need to create an environment that enables a flexible response to companies' intellectual property strategies. This study is conducted by a committee consisting of experts from academic and industrial circles in order to discuss a new framework for protection and management of knowledge, focusing on the prior use system.

I Introduction

Under Section 79 of the Japanese Patent Law, a person who has commercially exploited an invention claimed in another person's application or carried out preparations therefor prior to the filing of the application (*prior user*) shall have a non-exclusive license based on prior use (*prior user right*). In response to warning notices or infringement actions, the party targeted by the allegation often defends itself by arguing that it has commercially exploited the invention or made preparations therefor prior to the filing of the application and therefore holds the prior user right.

Some companies choose to keep their inventions secret as know-how, rather than actively filing patent applications, and they frequently take security measures to prepare evidence to prove prior use.

The prior use system is criticized as not being very accessible to users because it is not easy to prove the existence of prior use and the contents of the prior user right are unclear. In particular, many such parties that intend to take security measures to obtain the prior user right point out the difficulty and heavy burden in preparing evidence to prove prior use.

Additionally, in accordance with the first-to-file principle under which the person who has filed the first patent application shall be entitled to have an exclusive right, it is necessary to consider how to design a system to create a balance between the person who has created an

invention first of all but not yet filed a patent application and the person who has filed a patent application and obtained a patent right with respect to that invention.

From this basic viewpoint, we discussed a new framework for the protection and management of *knowledge*.

II Prior Use System in Japan

The prior user right guaranteed under Section 79 of the Patent Law is a non-exclusive license given as an exceptional relief under certain conditions to the person who has commercially exploited another person's patented invention or made preparations therefor prior to the filing of the patent application ("prior user"), so as to enable the prior user to continue the commercial exploitation. The prior user right is effective only as a defense against a patent right that subsequently comes into existence, and it does not give any title or status to the prior user beforehand.

The prior use system was first adopted under the 1909 Patent Law. The 1921 Patent Law adopted this system from the former law and provided for it in Section 37. This provision is construed to clearly state that the prior user right is a statutory license that is granted to correct the defect in the patent system under the first-to-file principle whereby a patent right shall be granted to the first applicant. Under the 1959 Patent Law, the provision on the prior user right was moved to Section 79 and revised to make the

following changes: “bona fide” changed to “without knowledge of the contents of an invention claimed in a patent application, has made the invention by himself or has learnt the invention from another person who has made the invention”; “business to exploit the invention” changed to “business in which the invention is exploited”; “equipment” changed to “preparation.” Subsequent revisions have not changed the meaning of the prior user’s right at all.

The commonly accepted meaning of the prior user right is based on the “equity theory” adopted by the Supreme Court in the *Walking Beam-Type Heating Furnace Case* (judgment of the Supreme Court of October 3, 1986).

Unlike a non-exclusive license granted under an agreement, the prior user right is effective against a third party even if it is not registered, but it may also be secured by registration. It may be transferred together with the business in which the invention is exploited or in the case of inheritance or other general succession.

III Actual Status and Problems of Protection and Management of Knowledge at Companies

The following opinions were presented in regard to the actual status of protection and management of *knowledge* such as know-how.

(1) From the viewpoint of electric machinery manufacturers

Measures that they implement to protect their technologies can be divided into “legal protection” and “self-reliant protection” measures. Legal protection includes protection based on patent applications or copyrights, as well as protection based on the prior user right or under the Unfair Competition Prevention Law or protection as trade secrets. On the other hand, self-reliant protection means protection by measures other than legal ones, such as protection steps for corporate secrets.

(2) From the viewpoint of electronic parts manufacturers

The outflow of confidential know-how through the publication of patent applications has become an urgent issue. An effective measure to cope with this issue is to separate the inventions for which patent applications should be filed to obtain rights from the know-how that should be used as secret technology, thereby protecting and managing inventions as intellectual property

appropriately. However, under the existing system, there is no option but to “file applications or disclose technology” in order to protect inventions that have yet to reach the stage of commercial exploitation from the “risk of being claimed in competitors’ later applications.”

(3) From the viewpoint of pharmaceutical manufacturers

According to the actual status of protection and management of knowledge based on the prior user right in the pharmaceutical industry, pharmaceutical manufacturers do not select the option to keep candidate drugs themselves secret for the purpose of claiming prior use against a patent obtained by a third party. They also hardly choose this option as a means to protect the technology for manufacturing drugs. However, they claim prior use in rare cases where they receive warning notices from competitors that exercise patent rights for raw materials and preparations of drugs.

The following opinions were presented in regard to problems with the existing prior use system.

(1) From the viewpoint of electric machinery manufacturers

A problem with the existing prior use system is uncertainty of the scope of permissible changes in modes of operation of inventions. Another problem relates to who may claim prior use as a means to strengthen business groups and proceed with corporate transformation through M&A. The Supreme Court allows a party other than the prior user to claim prior use if it exploits the invention “as an organ of the prior user.” However, whether this can be applied to the prior user’s subsidiaries or affiliated companies is an important issue.

(2) From the viewpoint of electronic parts manufacturers

There are three major problems with the existing prior use system: (i) the prior user right cannot be exercised where the invention has not yet been exploited or preparations therefor have not yet been made; (ii) even where the person has exploited the invention before a third party files a patent application with respect to the invention, the person is required to prove that the invention is being exploited at the time of the filing of the third party’s application; (iii) international harmonization of rules has not yet been achieved with respect to prior use.

(3) From the viewpoint of pharmaceutical manufacturers

Pharmaceutical manufactures are unlikely to claim prior use, and therefore there is no particular problem with the existing prior use system and the use of public notaries in this industry.

The following opinions were presented in regard to the clarification of details of the existing prior use system and the relaxation of requirements for claiming prior use.

(1) From the viewpoint of electric machinery manufacturers

For the purpose of making the prior use system more accessible so as to facilitate business activities, it is necessary to clarify and raise awareness of the current status regarding the modes of operation and the parties who may claim prior use. If the need to review the system arises from the perspective of strengthening industrial competitiveness, appropriate measures should be immediately considered and implemented. The requirements for claiming prior use should not be relaxed to the level where mere ideas can also be protected, which would lead to the first-to-invent principle.

(2) From the viewpoint of electronic parts manufacturers

The requirements for claiming prior use should be relaxed so that the exploitation of an invention at the stage of development or experimentation will also be regarded as exploitation based on the prior user right (on the condition that the invention is completely created). It is impossible to defend know-how, which has been obtained as a result of R&D, until it is actually employed in the mass-production process. To avoid such risk, there is currently no option but to disclose the technology or file defensive applications.

(3) From the viewpoint of pharmaceutical manufacturers

The details of the prior use system should be clarified in order to increase accessibility to public notaries for the purpose of proving prior use. The requirements for claiming prior use should not be relaxed, or in other words, a new system to grant a license to a prior inventor should not be introduced, because such a system would lead to the tendency to register any inventions only for the strategic purpose of

securing prior inventor's licenses. In that case, patent applicants who have made large investments at high risk would be easily surpassed by competitors with prior inventor's licenses, and unable to enjoy a monopoly under their patents.

IV Results of the Questionnaire Survey

(1) More than 80% of the respondent companies have received warning notices or sales pitches relating to intellectual property, and one-third of such companies claimed prior use upon receiving warning notices or sales pitches. Thus, the prior use system is used relatively often. The number of companies that have claimed prior use in litigation is smaller, suggesting that in most cases, disputes are settled through compromises or licensing before they are brought to court.

(2) A relatively large number of companies faced difficulty only when claiming prior use, and about 20 companies did not find any difficulty with the prior use system because they had secured enough evidence and due to the existence of industry rules. On the other hand, those that faced difficulty pointed out the burden imposed by the need to collect evidence of exploitation or preparations therefor when claiming prior use, and the uncertain scope of the invention or of the objective of commercial exploitation when responding to the claim of prior use.

(3) Various measures are being taken to prove prior use. They differ significantly, and it is difficult to find the most appropriate measures among them. Many companies have found difficulty in proving prior use, mainly because of the difficulty in establishing the date of evidence, the non-existence of evidence, and the unclear scope of evidence that should be retained. On the other hand, a relatively large number of companies retained evidence to prove prior use in advance, by taking a variety of measures.

(4) About two-thirds have used a third party agency for preparing evidence to prove prior use, mostly for the purpose of providing proof for the exploitation of the invention at the time the patent application is filed as well as the technical contents of the invention. A popular third party agency employed is public notaries, which are frequently used to obtain a date of notary effect and less frequently used to obtain notarial deeds of fact observation.

(5) Only a very limited number of companies or about 2% filed patent applications with respect to

know-how, which they had actually sought to keep secret, for the purpose of preventing a third party from obtaining patent rights.

(6) Although a large number of companies agreed to the view that a new prior use system should be implemented by a public agency or the JPO should take charge of implementing such a new system, subsequent interviews with such companies suggest that most of them have not considered this issue in detail but simply believe that such a new system would be helpful.

(7) Based on their requests regarding the prior use system as a whole, they hope that the parties who may claim prior use will be clarified; however, most of them consider that a balance between the prior user and the patent holder should be maintained.

V Court Precedents on Prior User Rights in Japan

1 Supreme Court Judgments on Prior User Rights

Important rulings by the Supreme Court on prior user rights are the Walking Beam-Type Heating Furnace Case (judgment of October 3, 1986) and the Globe-Shaped Transistor Ratio Design Case. In the former case, the Supreme Court pointed out the requirements for claiming prior use, namely, “completion of the invention,” “preparations for commercial exploitation,” and “change or scope of the modes of exploitation.” In the latter case, the court determined the scope of parties who may claim prior use.

2 Study of Court Precedents on Prior User Rights: Focusing on the Scope of Effects of Prior User Rights

(1) Time of the filing of a patent application

If the patent application has priority under the Paris Convention, the date when the first application is filed in another country of the Union, or in other words, the date when priority is claimed, should be the reference date. In the case of division of an application, the date of filing of the original application should be the reference date.

(2) Preparations for exploitation

The prior user right shall necessarily be denied if the products relating to the prior use claim that are manufactured or sold before the date of filing of the patent application cannot be

recognized as products in which the patented invention is exploited.

Regarding exploitation, a problem arises as to the extent of preparations that would be regarded as “preparations for commercial exploitation” under Section 79. Based on the general trend in court precedents, preparations for commercial exploitation are likely to be recognized where at least trial models have been created or specific investment has been made for the invention.

(3) Scope of the invention and commercial exploitation thereof

Where the prior user continues to employ the mode of operation that has been employed at the time of the filing of the patent application, such an act should never constitute patent infringement. The question is whether an allegation of patent infringement can be avoided by claiming prior use even where the prior user has changed the mode of operation. The Supreme Court indicated a specific criterion for this issue: where the invention utilized in a product for which commercial exploitation (or preparations therefor) has been underway at the time of the filing of the patent application (Invention A) is identical to the patented invention (Invention P), the effect of the prior user right shall extend to the whole scope of the patented invention, whereas in the case where Invention A is identical to only a portion of Invention P, the effect of the prior user’s right shall extend only to that portion.

(4) Scope of parties who may claim prior use

Since the prior user right under Section 79 is provided for as a non-exclusive license, in light of the language of the provision, it may be transferred only together with the business in which the invention is exploited or with the consent of the patent holder, or in the case of inheritance or other general succession (Section 94(1)).

It should be noted that parties other than the prior user may claim prior use without obtaining the prior user right. More specifically, (i) parties engaged in manufacturing as subcontractors of the prior user engaged in the manufacture and sale of the invention, or (ii) parties engaged in operating the invention by purchasing products in which the invention is exploited from the prior user engaged in the manufacture and sale of the invention, may claim prior use.

3 Study of Court Precedents on Prior User Rights: Focusing on Means to Provide Proof of Prior Use

(1) Since there are only two cases in which the substantially probative value of the principal evidence of the existence of prior use has been directly challenged, it is difficult to study the necessary means to provide proof of prior use in detail based only on the available court precedents.

(2) In the case of a product invention, documents exchanged with or disclosed to a third party, such as design drawings, written contracts, receipts and research reports, are admitted as evidential materials relatively broadly and recognized as having substantial probative value. Tangible materials other than such documents are also regarded as having probative value as to the date of manufacture if they are handled under a certain kind of management system.

On the other hand, whether internal documents have substantially probative value is uncertain because there is no past precedent where they were admitted or denied as direct evidence.

In addition to evidential materials mentioned above, individuals inside or outside the company may be often admitted as personal witnesses but the content of their testimony has not been disclosed in court precedents available so far.

(3) In the case of an invention of the manufacturing process for a product, sample products manufactured using the process and drawings used for the manufacture were recognized as having substantial probative value.

(4) In the case of a simple process invention, there is no court precedent addressing the prior user right.

4 Analysis of Cases Involving Prior User Rights

With the objective to understand to what extent prior use has been claimed in litigation and what judgments have been made regarding prior user rights, we extracted cases involving prior user rights and conducted a statistical analysis on such cases.

Based on the statistical analysis, both the number of infringement cases and the number of cases in which prior use is claimed as a defense have been increasing. Comparing the number of cases where the prior user right was recognized with the number of cases where prior use was

disputed, the prior user right was recognized in 48 of the 92 cases in the period following the *Globe-Shaped Transistor Ratio Design Case*, whereas it was recognized in 41 of the 68 cases in the period following the *Walking Beam-Type Heating Furnace Case*, indicating that the rate of cases where the prior user right is recognized has been increasing. This upward trend may be because in accordance with the reasoning given by the Supreme Court in the *Walking Beam-Type Heating Furnace Case*, prior use can be claimed as an appropriate defense and reasonable judgments are also made by the courts.

VI Prior Use System in Foreign Countries

We conducted research on prior use systems in foreign countries. The major research results are as follows.

1 United Kingdom

The prior user right is stipulated in Section 64 of the Patents Act. In order for a prior user right to exist, the person who claims prior use is required to exploit the invention or make preparations therefor prior to the priority date of the invention. The prior user may expand the business based on the prior user right and may change the mode of operation if such a change does not affect the essence of the invention. The prior user may assign or transmit his right on death (or in the case of a body corporate, on its dissolution) to any person who acquires that part of the business. Prior use may also be claimed by “any partner of the prior user for the time being in that business.”

2 Germany

The prior user right is stipulated in Section 12 of the Patent Law. In order for a prior user right to exist, the person who claims prior use is required to be in the course of exploiting the invention or making preparations therefor upon the filing of a patent application. The prior user may expand the business based on the prior user right. Regarding whether the mode of operation may be changed, the dominant opinion considers such change permissible. The prior user right “can only be inherited or transferred together with the business”. The prior user may “authorize another party’s plant or workshop to use the invention.”

3 China

The prior user right is stipulated in Article 63 of the Patent Law. In order for a prior user right to exist, the person who claims prior use is required to make the identical product or use the identical process or make preparations therefor prior to the filing date of a patent application. The prior user is not allowed to expand the business or change the mode of operation based on the prior user right. The prior user right can only be transferred together with the part of the company that owns the prior user right. What party other than the prior user may claim prior use is not clear due to a lack of court precedents.

4 South Korea

The prior user right is stipulated in Article 103 of the Patent Law. In order for a prior user right to exist, the person who claims prior use is required to be in the course of exploiting the invention or making preparations therefor upon the filing of a patent application. The prior user may expand the business based on the prior user right, and may change the mode of operation to the extent that those skilled in the art are expected to employ the changed mode. The prior user right can be transferred together with the business, in the case of inheritance or other general succession, or with consent of the patent holder. Prior use may be claimed by a party that serves as an organ of the prior user.

5 Taiwan

The prior user right is stipulated in Article 57 of the Patent Law. In order for a prior user right to exist, the person who claims prior use is required to exploit the invention or make preparations therefor prior to the filing date of a patent application. The prior user is not allowed to expand the business based on the prior user right, but is allowed to change the mode of operation to the extent that the invention has been exploited. The prior user right can be transferred together with the business. What party other than the prior user may claim prior use is not clear due to a lack of court precedents.

6 France

The prior user right is stipulated in Article 613-7 of the Intellectual Property Law. In order for a prior user right to exist, the person who

claims prior use is not required to exploit the invention or make preparations but required to possess the invention upon the filing date or priority date of a patent application. The prior user right can be transferred “together with the business, the enterprise or the part of the enterprise to which it belongs.” Prior use may be claimed by companies of a business group that owns the prior user right.

7 Belgium

The prior user right is stipulated in Article 30 of the Patent Act. In order for a prior user right to exist, the person who claims prior use is not required to exploit the invention or make preparations but required to use or possess the invention prior to the filing date or priority date of a patent application. The prior user right can be transferred “only together with the business.” Prior use may be claimed by companies of a business group that owns the prior user right.

8 United States

The prior user right is stipulated in Section 273 of the Patent Act. . In order for a prior user right to exist, the person who claims prior use is required to exploit the invention before the effective filing date of a patent application. The prior user may expand the business based on the prior user right, and may also change the mode of operation within the scope of the subject matter of the invention. Transfer of the prior user right is allowed in cases where it is transferred to the patent holder, it is transferred to the prior user’s subsidiaries bona fide, or it is transferred together with the business as a whole. What party other than the prior user may claim prior use is not clear due to a lack of court precedents.

VII Use of Notarial Methods as a Means to Prove Prior Use

Major notarial methods available as a means to prove prior use include obtaining a date of notary effect, authentication for private or sworn documents and notarial deeds of fact observation. A date of notary effect can be obtained by applying a seal to photos, operation manuals and products, as well as to CD-ROMs that record software applications. It should be noted that a date of notary effect only proves that the subject existed on that date, irrespective of the contents of the subject. Regarding authentication of

documents, companies should have relevant documents authenticated before storing them, including operation reports, research reports, and technical experiment reports prepared at the stage of technology development, and establish a system for securing objective and reliable evidence for future needs. Notarial deeds of fact observation can be prepared by: (i) stating the fact that the product was purchased on the market; (ii) observing the invention exploitation and recording the production process and technical details; (iii) recording (on video) the presentation of the invention.

Regarding the actual use of notarial methods as means to prove prior use and problems with such systems that should be resolved in the future, notary services have been recognized as an effective means to deal with the challenges posed by intellectual property and are used more frequently than before. However, they have not yet become very popular because many public notaries are not so familiar with the intellectual property field. Although the Japan Notary Association has been making efforts to raise awareness among companies and promote their use of notarial methods for dealing with intellectual property matters, companies have not yet fully grasped the significance or importance of such methods. It is hoped that various measures will be taken in the future to improve their understanding and promote the active use of notarial methods, including development of guidelines (collections of examples). At present, public notaries are authorized to observe facts at the notary public's office or the Legal Affairs Bureau or District Legal Affairs Bureau to which they belong. Considering that public notaries who are well versed in intellectual property matters are not available in some prefectures, such jurisdiction-related limitations create a disincentive for companies to actively use notarial methods.

VIII Future Framework of the Prior Use System

1 Clarification of the System

(1) Statement of the issue

Most users positively evaluate the existing prior use system to a certain extent with respect to the balance between the patent holder and the prior user and the scope of effect of prior user rights. However, at the same time the system is criticized for its uncertainties arising from interpretation of the provisions of Section 79 on

the following points:

- (a) To what extent the prior user is allowed to change the mode of operation, e.g. introducing a new model;
- (b) Who may claim prior use in cases where the prior user authorizes its subsidiaries or affiliated companies to operate the business in line with business expansion plans;
- (c) How to interpret the requirement of “at the time of the filing” when preparing evidence of the operation of the business (if this requirement is strictly interpreted, it would be extremely difficult to prove prior use);
- (d) To what extent preparations for the operation of the business are required to be made in order to prove prior use.

(2) Past court rulings and interpretations

While uncertainty of the prior use system is pointed out in terms of how to interpret the provisions of Section 79 as mentioned above, court rulings and the prevailing mindset in related fields have clarified the details of the system.

(3) Major discussion on how to clarify the system

Negative views were dominant regarding the idea of changing the balance between the patent holder and the prior user by revising the requirements for prior use. The majority of participants were positive about the idea of clarifying the prior use system so as to make the existing system more accessible and more reliable for companies.

(4) Future discussion

It would be most appropriate to analyze court decisions and academic theories on the points for which the provisions of Section 79 are criticized as being uncertain, and develop guidelines (collections of examples) with cooperation from the legal and industrial circles, with the aim to clarify the prior use system. It is also important to thoroughly publicize such guidelines (collections of examples) while paying attention to issues and court decisions that may arise in the future, so as to promote effective use of the prior use system.

2 Reduction of difficulty in proving prior use

(1) Statement of the issue

The difficulty and burden imposed by the

requirement to prove prior use are pointed out because of the fact that what kind of evidence should be retained to provide proof of the “operation of the business” or “preparations for the business” and to what extent and how such evidence should be retained are uncertain. Although notarial methods are used in some cases as active measures to prepare evidence to prove prior use beforehand, public notaries are required to be able to grasp the technical matters in such cases.

(2) Major discussion on how to reduce the difficulty in providing proof of prior use

The majority argued that guidelines (collections of examples) should be developed to provide examples of the use of notarial methods. While there were calls for a new notification system, concerns were also presented about this idea, such as a possible increase in administrative costs and workload and abuse of the system through registration without restriction.

(3) Future discussion

In order to make the prior use system more accessible, it would be appropriate to develop guidelines (collections of examples) that provide examples of means to provide proof of prior use, including the use of notarial methods, while referring to the means of proof that are recognized in court decisions or academic theories or those actually employed by companies, and clarify what kind of proof should be retained as evidence to prove prior use and to what extent and how such evidence should be retained.

3 Harmonization of prior use systems

(1) Statement of the issue

Along with the globalization of economic activity, Japanese companies are establishing plants and facilities overseas. However, they face difficulty in launching stable business operations overseas because each country has a different prior use system.

(2) Future discussion

From the perspective of encouraging Japanese companies to use prior use systems in foreign countries, it is important to harmonize these systems in terms of the scope of permissible changes to the mode of operation and the scope of parties who may claim prior use. Therefore, it is necessary to approach foreign countries through various channels in order to

bring about rule harmonization.

4 Others

From the perspective of reducing difficulty in keeping know-how secret, opinions have been aired that a new system should be established to grant a statutory non-exclusive license to the person who “possesses the invention”. However, strong opposition has been raised to this idea among users because such a system would change the balance between the patent holder and the prior user, and it would be an unusual system based on worldwide comparisons and run contrary to the international harmonization of systems.

There are also concerns that publication of patent applications causes unintentional outflow of technologies. This is not an issue of system design but relates to each company’s strategy for filing applications.

IX Conclusion

The prior user right guaranteed under Section 79 of the Patent Law is a non-exclusive license given as an exceptional measure of relief under certain conditions to the person who has commercially exploited another person’s patented invention or made preparations therefor prior to the filing of the patent application (“prior user”), so as to enable the prior user to continue the exploitation of the patented invention. If the prior user right were regarded as giving any title or status to the prior user beforehand, this would change the existing balance between the patent holder and the prior user significantly. The idea of granting a license to a prior inventor would cause a greater change to such a balance.

The existing patent system is based on the principle that a person who discloses an invention shall be entitled to have an exclusive right to the invention. Making changes to the prior use system as mentioned above would mean changing the core of the patent system. It is difficult to say that a consensus has been established for making such fundamental changes that would weaken the patent holder’s right or for officially starting discussion in that direction. It has been reported that the United States has introduced the publication system and is likely to shift from the first-to-invent principle to the first-to-file principle. A system to grant a license to a prior inventor would be an extremely peculiar system based on worldwide comparisons.

Rather, what we should do now is to identify problems with the existing prior use system from a practical perspective and clarify to the greatest possible extent the details and features of the system that should be noted when using it. In this context, we have concluded that it would be desirable to develop guidelines and improve understanding on prior use. Academic societies are expected to deepen discussion on a future framework for the prior use system. Attention should also be paid to court decisions on this issue.

Japanese companies need to give sufficient consideration to whether they select to file patent applications with respect to technologies that they have developed while disclosing such technologies to the public, or keep these technologies as secret know-how, and manage filing procedures appropriately.

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