

Subsection 3 Requirements for Registration

Item 1 Requirements for Patentability

1. Positive Requirements

(1) Industrial Applicability (Main paragraph of Section 29 (1) of the Patent Law)

Since the purpose of the Patent Law is industrial development, only industrially applicable inventions are protected.

“Industry” in this context includes not only engineering, but also agriculture, forestry and fishery, mining and commerce¹. There is a theory interpreting that the service industry is excluded from “industry” here, but there is no factor sufficient to inevitably interpret that the service industry should justifiably be excluded. It is only that technical ideas utilizing a law of nature are rarely utilized in the service industry.

The question lies in the meaning of “applicability,” and this issue is subject to many theories that cannot be reconciled. According to some of these theories, an invention with “applicability” in this context means: an invention that can be utilized operatively, that is, repeatedly and continuously²; an invention that creates a new value when applied to a certain industry, and indicates only technologies directly related to production of things³; an invention that cannot only be utilized academically or experimentally⁴; and an invention that can be repeatedly utilized in production⁵.⁶

Where the theories are diversified as above, it is necessary to study the issue from a perspective of why industrial applicability is required in the first place. The reason is because the purpose of the Patent Law is to “contribute to the development of industry” (Section 1 of the Patent Law) and inventions that are not industrially applicable should be excluded, accordingly. Because “industry” in this context is, as mentioned earlier, interpreted as a broad concept, “industrial applicability” must also be interpreted as a broad concept. For example, a limited interpretation that the concept of applicability indicates inventions that are directly related to production is not only

¹ The term “*kogaku* (industry/engineering)” was used in the old Law, but it was interpreted as having the same meaning as “*sangyou* (industry)” in the current Law, so the term was changed to “*sangyou*” in order to use a term closer to the actual meaning. JPO, *Chikujou Kaisetsu* (Clause-by-Clause Explanation of Industrial Property Laws): p. 79.

² Toyosaki, *Kougyou Shoyuiken Hou* (Industrial Property Law): p. 153.

³ Kaneko/Someno, *Kougyou Shoyuiken Hou* (Industrial Property Law): p. 89.

⁴ JPO, *Chikujou Kaisetsu* (Clause-by-Clause Explanation of Industrial Property Laws): p. 79; Mitsuishi, *Tokkyo Hou Shoutsetsu* (Detailed Explanation on the Patent Law): p. 133.

⁵ Gaku, *Kougyou Shoyuiken Hou*: p. 66.

⁶ Some people indicate that the applicability requirement is also related to other patent requirements and invention requirements, so it is difficult to consider it as an independent positive requirement. (*Hanrei Tokkyo Jitsuyou Shinan Hou* (Court Decisions relating to the Patent Law and Utility Model Law), edited by Mutai Zaisanken Kenkyukai (Study Meeting on Intangible Property), (Shinnippon-Hoki Publishing): p. 2096).

groundless, but also unfair⁷. Although there are exceptions like the later-mentioned medical services, an invention only needs to be utilizable in some kind of industry. In that sense, “industrial applicability” rarely presents a problem as a patent requirement. Even an appliance or device that is utilized only in universities (such a case may be very rare but, for instance, with a microscope for an academic purpose) is industrially applicable. There are operators that sell appliances and devices to universities, so the Patent Law must give an incentive for technological development to such operators, too. There is no reason that operators selling goods to universities cannot enjoy the benefits of the patent system. Items that are unproductive and not industrial in themselves, such as playthings, can also be considered industrially applicable if their production or sale has an industrial effect⁸. The same applies to weapons.

The most important element in practice is the safety of the invention. The question of whether or not safety is an industrial applicability requirement is not clearly determined in court decisions⁹, but it is not appropriate to strictly demand the safety requirement. The stricter the requirement is, basic inventions in the safety-required fields would be scarcer. For example, even a pharmaceutical for which a side effect is too strong to be certified by the Ministry of Health, Labor and Welfare should be approved to have patentability, in principle, if it has medicinal virtues. Otherwise, such inventions would not be filed and made public and, as a result, would not contribute to raising the technological standard of society. It would, rather, comply with the purpose of the patent system to grant patents to such inventions to make them public and encourage emergence of improvement inventions for preventing side effects.

Even inventions with some faults cannot be denied of industrial applicability

⁷ For instance, a measuring method should not be refused for lack of industrial applicability even if it is not directly related to production.

⁸ The following is a related case under the old Law: the Tokyo High Court decision on December 15, 1956, Court Decisions in Administrative Cases, Vol. 7, No. 12: p. 133 (the Bingo Game case) ([Annotation] Masaaki Suzuki, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 17; Masahiko Takeda, *Tokkyo Hanrei Hyakusen* (Second Edition), Case 31).

⁹ If certain safety is indispensable for an invention, an invention lacking such safety can be regarded as an incomplete invention, and industrially inapplicable accordingly. Under the old Law, there were cases where the court held that “an invention that lacks safety or includes danger on a justifiably expected basis should have a measure for circumventing or preventing such factor in advance in its concrete component” and an invention lacking such measure cannot be approved as being practical (Tokyo High Court decision on May 28, 1968, The Law Times Report, No. 225: p. 198 (the Multiple-way Plug case)) and where the court stated that an invention relating to an atomic energy generator “is not sufficient for developing an industrial technological effect as an energy generator, since it cannot be worked regularly and safely and is considered to be a technologically incomplete invention” (Supreme Court decision on January 28, 1969, Civil Court Decisions by the Supreme Court, Vol. 23, No. 1: p. 54; See Subsection 2, Item 1, 6. “Incomplete Invention,” note 2).

unless they are so serious that the invention cannot be worked¹⁰.

Applicability in the economic sense is not a factor to be considered. The economic value of an invention is affected by the social and economic conditions of the time, so it cannot constitute a patent requirement. For instance, the utility of an alternative energy resource in the economic sense is affected by the price of oil, but its industrial applicability can be recognized regardless of the price of oil.

In practice, medical service is not considered as an “industry.” Inventions of treatment methods and diagnostic methods for humans are denied patentability for lack of industrial applicability¹¹.

However, it seems odd and is inappropriate to simply declare that medical service is not an industry¹². Indeed, in the past the development of medical technologies (particularly treatment methods) was mainly conducted outside the framework of the patent system in the form of medical research in universities and large hospitals. Among medical technologies, medicines and equipment for treatment are often developed also by private companies for profit, so patents function as an incentive for technological development in those areas. However, such a scheme does not apply to medical research in universities and large hospitals. It has also been considered that it is not necessarily appropriate to involve medical research in intensive development competition for profit. Therefore, there are indeed certain grounds for the idea that development of medical technologies is not an “industry” that requires the incentive of the patent. Nevertheless, achievements in other areas of academic research are naturally subject to patents although the research is conducted in universities and other such institutions. There has been a strong trend to obtain patents for the results of research in universities and to commercialize those technologies, mainly in the United States, and such movement has also begun recently in Japan. It is not clear how the situation regarding research and development of medical technologies will change in the future. Future research about medical and other technologies in universities and other

¹⁰ Tokyo High Court decision on December 25, 1986, Court Decisions Relating to Intangible Property, Vol. 18, No. 3: p. 579 (the Bank Note case) ([Annotation] Keita Satou, Jurist, No. 940: p. 118; Noriaki Gotou, Patent, Vol. 40, No. 5: p. 31; Kouzou Mimino, *Hatsumei* (Invention), Vol. 84, No. 9: p. 94; Midori Tanaka, *Tokkyo Kanri* (Patent Management), Vol. 39, No. 6: p. 717). In this case, the court reversed a trial decision which determined that a device consisting of a bank note with punch holes for those who cannot see was not practical, because the durability of the note would be reduced. (This case also involved an issue of offending public order and morals.)

¹¹ Patents are not granted for surgical operation methods, treatment methods, and preventive methods. However, medical equipment and medicines are patentable. (Examination Guidelines (1993), Part II, Chapter 1, “Industrially Applicable Inventions” mentions the methods to operate on, treat or diagnose human as a category of inventions that are not industrially applicable.)

¹² Takeda, *Tokkyo No Chishiki* (Knowledge of Patents): p. 122.

such places is likely to involve large funds, so the idea of justifiably excluding development of medical technologies from the scope of the Patent Law may not necessarily continue to be appropriate in the future¹³. Such discussions can stand in theory, but as this issue involves various complex elements, the conclusion should be formed by observing the future situation in the medical field.

Another reason for disapproving a monopoly for medical inventions is for humanitarian considerations. If a patent is granted for a treatment method, a doctor would have to request a license from the patent owner even when the patient requires treatment urgently. This could put the life and limb of the patient in danger, and obstruct adequate, impartial and expeditious treatment. From a humanitarian standpoint, problems are likely to occur more for treatment methods, which often involve urgency, than for medicines and treatment equipment, but similar problems could occur for medicines, etc. so they should also be taken into consideration. For the purpose of preventing confusion at the treatment scene, inventions do not necessarily have to be regulated at an earlier stage by denying their patentability, but they could also be regulated at a later stage by approving patentability, and then creating a statutory non-exclusive license system for the acts of doctors or by restricting the effect of the patent right in the same manner as for the acts of preparing medicines (Section 69 (3) of the Patent Law). Since only doctors are allowed to give treatment under the Medical Practitioners Law, the practice of excluding certain acts of doctors from the effect of patents may virtually have the same effect as denying the patentability of the treatment methods. Another hypothetical means would be to balance the incentives for technological development with humanitarian issues by approving patentability and then establishing a paid statutory non-exclusive license system.

In any case, it is not necessarily appropriate to uniformly deny patentability based on the idea that medical service is not an “industry.” By excluding medical acts from industry a priori, the status of medical technologies and other technologies may become uneven. Even if monopolies of medical acts were unfavorable, there are other more appropriate regulation methods that could be applied. Inventions should rather be regulated at a later stage based on the assumption that all technologies are patentable. However, if for the sake of argument, treatment methods and diagnostic methods were to be considered as unpatentable under present conditions since there are no regulations in place for the future, the question would need to be handled as an issue of industrial applicability in the interpretation of the current law, or else, a legislative measure would

¹³ Aizawa, *Baiotekunorogii* (Biotechnology): p. 78.

be required. The important thing is to recognize that the above problems underly this issue.

Also, as human beings are an indispensable constituent element for inventions of treatment methods, there also seems to be an ambiguous ethical repulsion against granting exclusive rights for such inventions. However, if the patentability of those inventions were to be denied from such a viewpoint, the matter should be simply discussed as an issue of contravention of public order and morals in relation to Section 32 of the Patent Law, and not as an issue of industrial applicability (See the part concerning Section 32 of the Patent Law in 2. “Unpatentable Inventions”).

Incidentally, Article 52 (4) of the European Patent Convention denies the patentability of surgical and other treatment methods and diagnostic methods for humans as well as animals based on lack of industrial applicability, but patentability is approved for such methods for animals in Japan. That must be because the value of animals in the ethical sense is different from that of humans.

(2) Novelty

(A) Significance of Novelty

The purpose of the Patent Law is to contribute to the development of industry, so, however brilliant an invention may be, subjectively, if it is the same as an existing technology, there is no reason to grant an exclusive right for it. Not only that, but to grant an exclusive right for such a hackneyed invention may have the effect of granting an exclusive right to a part of an existing industry. This would be, similar to monopoly in medieval times, disadvantageous for the development of industry.

Today, it is an obvious fact and universally recognized that a patent right should not be granted to an already existing technology. Section 29 of the Japanese Patent Law stipulates to that effect, but instead of establishing a positive definition of novelty, it mentions three grounds for lack of novelty, and provides that inventions to which these grounds are not applicable are novel. The specific grounds for lack of novelty are when the invention is publicly known, publicly worked or described in a printed publication.

(B) Time and Location Criteria for Determination of Novelty

The time criterion for determination of novelty is not the date of filing, but the time of filing¹. Therefore, if the content of an invention becomes publicly known by

¹ Junior/senior applications (Section 39 of the Patent Law) and use of another person's industrial property (Section 72 of the Patent Law) are determined based on not the time of filing, but the date

presentation at an academic conference in the morning, and another applicant files an application for it in the afternoon of the same day, the novelty of the invention would have been lost, but if the time of the presentation and that of the filing were the reverse, the invention would be novel.

The location criteria for determining novelty apply only to inventions that were made publicly known (Paragraph (i)) or were publicly worked (Paragraph (ii)) inside Japan, and inventions that were described in a printed publication distributed in Japan or elsewhere in the world (Paragraph (iii)).

This interpretation is not subject to any dispute but the appropriateness of the legislation is not completely free from doubt. In the present information era where the economy has become more and more globalized, and various kinds of information are distributed around the whole world through a variety of media, there is no longer a good reason for limiting the criteria to only inventions that were made publicly known or were publicly worked inside Japan². There are more negative effects in limiting the location standard for lack of novelty to inside Japan today, so both Paragraphs (i) and (ii) should be changed into a stipulation similar to Paragraph (iii)³.

(C) Grounds for Lack of Novelty

(a) Publicly known inventions (Section 29 (1) (i) of the Patent Law)

A patent will not be granted for a (publicly known) invention that was known to a third party prior to the filing of the patent application. While a publicly known invention indicates an invention that is no longer a secret, the question lies in the specific details. Thus, the details will be studied below, based on court decisions.

of filing.

² The European Patent Convention specifies the whole world as the location criterion for determining novelty (Article 54 of the Convention; it is referred to as absolute novelty or being publicly known in the world). The U.S. Patent Act adopts a similar system to the Japanese system.

³ Limitation of the reasons for lack of novelty to inventions disclosed or worked inside Japan does not necessarily link to protection of the domestic industry. In Japan, the absolute novelty system had been adopted before the 1909 amendment, but the 1909 Law adopted the system to limit the grounds for lack of novelty to those inventions disclosed or worked inside Japan. This was because, before 1909, people considered that Japan's industry would be pressured if foreign companies were authorized to obtain patents for inventions that were publicly known outside Japan. However, conversely, if a Japanese company were to obtain a patent for an invention that was publicly known outside Japan, it could gain an advantage in the Japanese market. In short, the same legislation could protect the domestic industry and also the reverse, depending on the economic situation of the times.

Even if discloses information on an invention to another person, the invention will not be publicly known as long as that person fulfills the duty of confidentiality, but if the person leaks it to a third party in breach of a duty of confidentiality, the invention could become publicly known. Specific examples in court decisions show that an invention is not publicly known if the inventor merely notifies a few people unofficially about the invention in order to request financial assistance¹. Also, even if the supplier of the wooden form for the frame for a prototype unit saw the prototype unit in the factory, the invention would not be publicly known, as long as the supplier was there under an agreement as to the duty of confidentiality². In addition, an invention is not publicly known even if the person who created the drawings files the application and submits the drawings through a different company³. An invention is not publicly known either if a family member or the like sees the inventor creating and keeping the device inside the house⁴. However, a design drawing included in approved Draft No. 600 of the Bureau of Construction, Tokyo Metropolitan Government, which had been made available for viewing upon request, was determined to be publicly known⁵. Even if the product was already shipped to the factory of the trading partner, it is merely an act between the trading parties, which is different in nature from publishing it to a third party, so the invention is not judged offhand as being publicly known⁶. These are all court decisions for particular cases, which are all different, so it is difficult to derive a unique standard from them.

At the same time, academic theories and court cases have not reached a

¹ Decision by the Supreme Court (in prewar Japan) on September 11, 1928, Civil Court Decisions by the Supreme Court, Vol. 7, No. 10: p. 749 (the **Rotary Seat Mesh Drier Case**) ([Annotation] Hidefumi Egawa, *Hanmin* (Civil Court Decisions) FY 1928, Case 72).

² Decision by the Supreme Court (in prewar Japan) on April 17, 1942, Civil Court Decisions by the Supreme Court, Vol. 21, No. 7: p. 374 (the Lady's Shoes Heel Forming Device case) ([Annotation] Rikizou Uchida, *Hanmin* (Civil Court Decisions) FY 1942, Case 20); Tatsukichi Minobe, *The Journal of the Association Political Social Sciences*, Vol. 56, No. 10: p. 90; Keikichi Hirata, *Journal on Civil and Commercial Law*, Vol. 16, No. 4: p. 139; Osamu Uchida, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions), Case 24).

³ Decision by the Supreme Court (in prewar Japan) on May 18, 1942, Civil Court Decisions by the Supreme Court, Vol. 21, No. 10: p. 560 ([Annotation] Rikizou Uchida, *Hanmin* (Civil Court Decisions), Case 28).

⁴ Tokyo High Court decision on July 12, 1948, Court Decisions in Suits Against Appeal/Trial Decisions 1948-1958: p. 21 (the Hollow Combustion Improver case).

⁵ Tokyo High Court decision on August 18, 1959, Court Decisions in Administrative Cases, Vol. 10, No. 8: p. 1552 (the Drainage Device case) ([Annotation] Riichi Ushiki, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 19).

⁶ Tokyo High Court decision on March 29, 1985, Court Decisions in Suits Against Appeal/Trial Decisions, 1985: p. 391/*Tokkyo To Kigyuu* (Patent and Enterprise), No. 197: p. 50 (the Needle-shaped Pitch Coke case).

consensus on whether an invention needs to be actually known to the public⁷ or whether it is sufficient for it to be available to become publicly known⁸ in order for an invention to be “publicly known.” By literal interpretation, if an invention were considered to be “publicly known” when it was merely available to become publicly known, compliance with Paragraphs (ii) and (iii) would become questionable. However, in reality, it is often difficult to prove that a third party has gained knowledge of the invention, so to a certain extent an invention has to be determined to be “publicly known” when the invention is available to become publicly known⁹. Paragraphs (i) to (iii) all have the same effect, so there is no use in strictly distinguishing between each paragraph.

(b) Publicly worked inventions (Section 29 (1) (ii) of the Patent Law)

A patent is not granted for a (publicly worked) invention that has been worked by a third party prior to the filing of the patent application.

⁷ Toyosaki, *Kougyou Shoyuiken* (Industrial Property): p. 157; Yoshifuji, *Tokkyo Hou* (Patent Law): p. 76; Oda/Ishikawa, *Shin Tokkyo Hou* (New Patent Law): p. 90; Takeda, *Tokkyo No Chishiki* (Knowledge of Patent): p. 126; Hattori, *Tokkyo Hou Yousetsu* (Introduction to the Patent Law): p. 71. The following are cases under the Design Law: the Tokyo District Court decision on September 17, 1973, *Court Decisions on Intangible Property*, Vol. 5, No. 2: p. 280 (the Spray Gun case) ([Annotation] Koue Toyosaki, *Jurist*, No. 618: p. 157; Ryuuichi Takemura, *Kigyuu Hou Kenkyuu* (Study on Business Law), No. 264: p. 31); the Tokyo High Court decision on April 23, 1979, *Court Decisions Relating to Intangible Property*, Vol. 11, No. 1: p. 281 (the Sandpaper case); the Tokyo High Court decision on May 30, 1979, *Court Decisions in Suits Against Appeal/Trial Decisions*, 1979: p. 685 (the Electronic Organ case).

⁸ Mitsubishi, *Tokkyo Hou* (Patent Law): p. 142; Gaku, *Tokkyo Jittai Hou Ron* (Substantive Patent Law): p. 68; Monya, *Chuukai Tokkyo Hou* (Annotated Patent Law): p. 74 [Monya]. The following are cases under the Design Law: the Tokyo High Court decision on January 20, 1976, *Court Decisions Relating to Intangible Property*, Vol. 8, No. 1: p. 1 (the Pachinko Ball Counting Device case) ([Annotation] Kouichi Tonmiya/Masanori Noguchi, *Tokkyo Kanri* (Patent Management), Vol. 28, No. 8: p. 887; Tomoko Takii, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 20; Ryuuichi Takemura, *Kigyuu Hou Kenkyuu* (Study on Business Law), No. 264: p. 31).

⁹ Yoshifuji, *Tokkyo Hou* (Patent Law): p. 76 mentions that an invention needs to be actually publicly known to be determined as such, but if it is available to become publicly known, the invention is presumed to have become publicly known.

Specific examples of publicly worked inventions in court decisions include the following. An invention that was applied to the flat concrete roof of a department store was publicly worked¹. Even if a lubricating oil controller installed in the motor of a three-wheeled motorcycle was not visible from outside by being installed from the back of the chain case and covered by the case cover, the controller was publicly known by being available to become known to the general public and being used in such a state². If a diver's disease treatment device, installed in a diving school in a state in which multiple persons could gain knowledge of its details if so desired, was used as educational material for the trainees at the school, its operations, structure and usage were taught, and the device was opened to the public and explained to general visitors, the device has been publicly worked³. In the case where the inventor transfers the ownership rights and related documents to a building, which are the results of working the invention, to the Japan Housing Corporation, and an official of the corporation resides in the building to examine its habitability, the invention is publicly worked⁴.

As shown from the above, the distinction between publicly known inventions and publicly worked inventions is not necessarily clear, and it rather suits the actual situation not to strictly distinguish between Paragraphs (i) and (ii)⁵.

(c) Description in a printed publication (Section 29 (1) (iii) of the Patent Law)

A patent will not be granted to an invention described in a printed publication that was distributed prior to the filing of the patent application, due to lack of novelty. Under the old Law, such denied inventions were limited to those described in a printed

¹ The Tokyo High Court decision on November 15, 1962, Court Decisions on Administrative Cases, Vol. 13, No. 11: p. 2034 (the Concrete Flat Roof case).

² The Tokyo High Court decision on December 6, 1962, Court Decisions on Administrative Cases, Vol. 13, No. 12: p. 2299 (the Three-wheeled Motorcycle case).

³ The Tokyo High Court decision on September 28, 1965, The Law Times Report, No. 188: p. 198 (the Soft Vinyl Pipe Packaging case).

⁴ The Tokyo High Court decision on June 18, 1974, Court Decisions on Intangible Property, Vol. 6, No. 1: p. 170 (the Wall-type Building Construction Device case) ([Annotation] Yoshinobu Someno, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 21).

⁵ For instance, there would be no need to reverse a trial decision that refused an invention by applying Paragraph (ii) where Paragraph (i) should have been applied, by filing a lawsuit against the trial decision, and to refuse the invention again by applying Paragraph (i) in the re-trial. See the annotation by Someno in note 4: p. 49. Incidentally, under the old Law (Law of 1921), provisions on publicly known inventions and publicly worked inventions were stipulated in the same paragraph of the same section (Section 4 (1)), and the court used the term that an invention lacked novelty due to being publicly known or publicly worked, treating these two without distinction. Partly due to that reason, it is considered difficult to strictly distinguish between the two even under the current Law, in which the provisions on publicly known inventions and publicly worked inventions are stipulated in separate paragraphs and, practically, there seems to be no use in making a strict distinction between the two.

publication distributed inside Japan, but under the current Law, inventions described in a printed publication distributed anywhere in the world are subject to this provision. This amendment is considered to be appropriate because, unlike in the cases of publicly known and publicly worked inventions, it is easy to prove the description of the invention in a printed publication, and the provision conforms to the current globalization and computerization trends.

There are many theories regarding the concept of a printed publication¹, but the general idea is that it is a communication medium such as a document or a drawing reproduced for the purpose of publishing its content to the public through distribution². There is dispute as to whether or not hand-written, type-written and carbon copied documents are printed publications, but their clarity and stability as means of technological disclosure are not drastically less than those of printed documents, so there is no reason for them to be excluded from the scope of printed publications. This simply suggests that it is, in practice, very rare for such a question regarding the scope of printed publication to present an issue.

The term “printed publication” was directly inherited from the term used in Section 4 of the old Law. Before now, it was usually sufficient to take only printed documents into account, but in the current information society, communication media other than printed matter have been developed, and microfilms, CD-ROMs, and optical disks have come into wide use. Some people deny that these new media are printed publications³. There may be some hesitation about including them when the feel of the word “printed publication” is considered, but as they are able to clearly and stably convey the technological content to the same extent as conventional printed publications, under the current status of information distribution exclusion of such information media from the concept of printed publications would bear unfair results⁴. It is clear that denial that such media are printed publications is unreasonable, since much patent information, which is the most important element for prior arts, is distributed in the

¹ For details, see Nakayama, *Chuukai Tokkyo* (Annotated Patent Law), Vol. 1: p. 192 [Nakayama].

² The Supreme Court decision on July 4, 1980, Civil Court Decisions by the Supreme Court, Vol. 34, No. 4: p. 570 (See note 6).

³ Michio Akaoka, *Tokkyo Kanri* (Patent Management), Vol. 30, No. 12: p. 1284.

⁴ The following are cases in which the court recognized that a microfilm was a printed publication: the Tokyo High Court decision on October 23, 1985, Court Decisions Relating to Intangible Property, Vol. 17, No. 3: p. 506 (the Second Leveling Rod case; the Australian Patent Specification case) and its final instance, Supreme Court decision on July 17, 1986, Civil Court Decisions by the Supreme Court, Vol. 40, No. 5: p. 961 ([Annotation] Katsuya Tamai, Journal of the Jurisprudence Association, The University of Tokyo, Vol. 105, No. 3: p. 375; Katsuya Tamai, *Houritsu Jihou* (Law Journal), Vol. 59, No. 1: p. 90; Kazuo Morioka, Jurist, No. 887: p. 243; Takeshi Mizuno, *Housou Jihou* (Bar Journal), Vol. 41, No. 3: p. 743).

forms of CD-ROMs and optical disks⁵.

Usually, a printed publication is reproduced into the number of copies corresponding to the expected level of demand. However, if the original or the like is made public and copies thereof are issued without delay upon request by the public, those reproductions can also be considered as printed publications⁶. The only difference between the two is that the usual printed publication is based on speculative production, while the latter is based on order production⁷, and there is no need to distinguish them in determining novelty⁸.

The next question is whether or not the original itself can be considered as a printed publication when it is laid open to the public and is available for public inspection. There is a theory that recognizes such original as a printed publication for practical reasons⁹. However, since legal interpretation is restricted by the wording of the law, it is hard to recognize the original itself as a printed publication without hesitation¹⁰. In practice, it would be improper today if an invention did not lack

⁵ If such media were not held to be printed publications, more inventions would escape from being “described in a printed publication,” that is, escape from lacking novelty as information becomes more digitized with the development of information related technologies.

⁶ The Tokyo High Court decision on March 9, 1978, Court Decisions Relating to Intangible Property, Vol. 10, No. 1: p. 48 (the Single Lens Flex Camera case; the West German Utility Model Specification case), and its final instance, Supreme Court decision on July 4, 1980, Civil Court Decisions by the Supreme Court, Vol. 34, No. 4: p. 570 ([Annotation] Nobuhiro Nakayama, Court Decision Journal, No. 998: p. 174; Nobuhiro Nakayama, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 22; Hiroya Kawaguchi, Journal on Civil and Commercial Law, Vol. 84, No. 2: p. 196; Shouji Kamon, *Tokkyo* (Patent), No. 72; Seinosuke Matsuoka, Journal of the Jurisprudence Association, The University of Tokyo, Vol. 99, No. 5: p. 786; Yutaka Kosake, *Saikou Saibanrei Kaisetsu* (Explanation of Supreme Court Decisions) (Civil court decisions) FY 1980: p. 232; Michio Akaoka, *Tokkyo Kanri* (Patent Management), Vol. 30, No. 12: p. 1281; Mutsuo Ooya, the book commemorating the seventieth birthday of Professor Uchida: p. 21). Later court decisions include the Tokyo High Court decision on August 31, 1981, Court Decisions in Suits Against Appeal/Trial Decisions, 1981: p. 159 (the Bottle Cap case).

⁷ Yoshifuji, *Tokkyo Hou* (Patent Law): p. 78.

⁸ Some people make the criticism that such interpretation is difficult in literal interpretation (Nakagawa/Toyosaki, *Tokkyo* (Patent): p. 69 [Haruo Gotou]). Even if such reproduction was denied to be a printed publication, the conclusion would be largely the same, if it were only within Japan, because it is likely to be judged to have been publicly known, but the conclusion could be different if it were published outside Japan. Problems actually arose when a foreign patent or utility model was not published in print, but its copies were available through a photocopying service.

⁹ Monya, *Chuushaku Tokkyo Hou* (Annotated Patent Law): p. 75 [Monya], Hiroya Kawaguchi, Journal on Civil and Commercial Law, Vol. 84, No. 2: p. 196; Kazuo Morioka, Jurist, No. 887: p. 243. Seinosuke Matsuoka, Journal of the Jurisprudence Association, The University of Tokyo, Vol. 99, No. 5: p. 786 mentions that the original itself would have to be denied to be a printed publication, but according to the practical interpretation, Section 29 (1) (iii) of the Patent Law should be applied on a presumptive basis.

¹⁰ In other words, if there were no reproductions, but only the published original, it could not be considered as a distributed printed publication. In the Tokyo High Court decision on October 30,

novelty when the original is published outside Japan. Particularly, in the future patent information is also expected to be distributed around the world on-line or by other means, without being issued in the form of a printed publication. In such a case, it is outdated to make a determination based on whether or not a hard copy of the information exists. (A hard copy is regarded as a printed publication, as mentioned earlier.) If a legislative measure were to be taken to deal with this issue, at least inventions described in published specifications of patents or the like anywhere in the world should be considered to lack novelty. However, specifications of foreign patent applications are rarely prohibited from being reproduced, so the following problem may occur.

What would be the case when the original is published, and it is available for anyone to freely reproduce it but, in fact, no one has reproduced it or there is no proof that it has been reproduced. The judgments of the lower courts were divided regarding this point¹¹, but the Supreme Court¹² held that such a case can be considered as a

1978, Court Decisions Relating to Intangible Property, Vol. 10, No. 2: p. 499 (the Improved Polymerization case; Belgian Patent Specification case), the court repealed a trial decision holding that a Belgian patent specification can be regarded as a “printed publication distributed in a country outside Japan,” because “Belgian patent specifications are drawing attention as one of the information resources of the world’s technologies, and patents that can be accessed quickly in the industrial world, due to the development of telecommunications and transportation, progress in the technology of reproductions, and diffusion of copying,” and “a patent should, in its nature, be granted to a novel invention.” It then held that a “printed publication” is distinguished from publicly known or publicly worked inventions, and that term includes documents, drawings and photographs that have been reproduced from the prototype, or the original in print, photographs, photocopies or by other similar means, for the purpose of distribution to a large number of or unspecified people (disclosure) as a style of expressing a technological idea.” Further, in the Tokyo High Court decision on July 21, 1983, Court Decisions Relating to Intangible Property, Vol. 15, No. 2: p. 598 (the First Leveling Rod case; Australian Patent Specification case) ([Annotation] Kazuko Matsuo, Court Decision Journal, No. 1111: p. 189), the court mentioned that even if the original of a foreign patent specification was published and issuance of its reproduction was approved, it cannot be regarded as a “printed publication distributed in a country outside Japan,” unless there is a fact that can lead one to presume and recognize that it was distributed. (With regard to this case, another trial took place over whether or not a microfilm reproduced from the original could be regarded as a printed publication distributed in a country outside Japan, and the Tokyo High Court decision in note 4 was the appeal decision, and the Supreme Court decision (the Second Leveling Rod case) was the trial of final instance.) As for theories, see Katsuya Tamai, Journal of the Jurisprudence Association, The University of Tokyo, Vol. 105, No. 3: p. 381; Masui/Tamura, *Tokkyo Hanrei Gaido* (Guide to Patent-related Court Decisions): p. 25.

¹¹ The court decision in note 10 denied lack of novelty, and the one in note 4 found a lack of novelty.

¹² The Supreme Court decision on July 17, 1986, *supra* note 4. In this case, six microfilms were produced from an Australian patent specification, out of which five were opened to the public at branch offices in a state available for reproduction, and the court found a lack of novelty for the invention in question. Strictly speaking, this is a case where five reproductions were made from the original, and they were published as well as made available for reproduction; therefore, it is not a case where reproduction of the original itself was approved. In other words, it is not necessarily

distributed printed publication. From the fact that there is a printed publication there is a presumption that some kind of reproduction exists, and although it would be difficult to regard the whole system that can potentially be reproduced as a printed publication in literal interpretation, if one gives an eye to an entire system that can reproduce without delay, then instead of regarding merely the published original as a printed publication, it could be viewed the same as a production pursuant to order method for printed publications. If so, it would not be impossible to consider the entire system as a printed publication, though it would be an expanded interpretation and an issue on the borderline of literal interpretation¹³.

In any case, the term “printed publication” itself does not suit the present advanced information era and should be revised.

Novelty is lost when a printed publication is actually distributed. “Distribution” means that the printed publication is distributed in a form subject to public inspection or it becomes subject to public access, and there is no need to specifically prove that it has been inspected by somebody. For instance, if it is acquired by a library and becomes open to the public, the novelty is lost at that point¹⁴.

In addition, the description of the invention in a printed publication must be sufficient to the extent that a person skilled in the art can work the invention without special consideration¹⁵. It is enough to have the constituent elements of the invention

clear whether the court considered the state in which the original was published and made available for reproduction corresponded to a “distributed printed publication” or it considered the microfilms to be “distributed printed publications” since microfilms were reproduced from the original.

¹³ In actuality, a case where nobody made reproductions could be considered as equivalent to a case where no copy of a published book was bought. Also, it is sometimes not easy to prove that the original has been reproduced in the first place. It is unreasonable if existence of a printed publication is recognized only when any reproduction happens to be proved, and is denied when the reproduction cannot be proved. As long as there is a system to clearly and stably disclose technological content, Section 29 (1) (iii) of the Patent Law should be applicable.

¹⁴ The following are cases under the old Law: the Tokyo High Court decision on April 27, 1961, Court Decisions in Administrative Cases, Vol. 12, No. 4: p. 884 (the Hydraulically Affected Structure case); the Tokyo High Court decision on October 22, 1964, The Law Times Report, No. 172: p. 174 (the Quartz-Crystal Oscillator case); the Tokyo High Court decision on February 25, 1965, Court Decisions in Administrative Cases, Vol. 16, No. 2: p. 247 (the Nylon Yarn Manufacturing Method case); the Tokyo High Court decision on April 30, 1968, The Law Times Report, No. 224: p. 264 (the Knitting Machine case); the Tokyo High Court decision on April 27, 1973, The Law Times Report, No. 297: p. 261 (the Laminating Sheet case).

¹⁵ Under the old Law, an invention needed to be described in the printed publication to the extent that “it can be worked easily,” but this has been deleted in the current Law. However, there is no reason to interpret the current Law differently from the old Law in this respect. Oda/Ishikawa, *Shin Tokkyo Hou* (New Patent Law): p. 91; Yoshifuji, *Tokkyo Hou* (Patent Law): p. 82; Hashimoto, *Tokkyo Hou* (Patent Law): p. 190; Gaku, *Tokkyo Jittai Hou Ron* (Substantive Patent Law): p. 76; *Hanrei Tokkyo Jituyou Shinan Hou* (Court Decisions relating to the Patent Law and Utility Model

described, and there is no need to have the purpose of the invention or its effect included in the description¹⁶.

(D) Exceptions to Lack of Novelty

(a) Significance of providing exceptions

Novelty of an invention is determined based on the time of filing. However, strict application of this principle to all cases could bear an unfavorable result. For instance, it is not favorable for technological development to restrain people from presenting their inventions at academic conferences or in research magazines or exhibiting them at exhibitions, or imposing an excess burden on engineers who lack legal knowledge. That is the reason why exceptions were stipulated in Section 30 of the Patent Law.

These provisions on exceptions merely specify that novelty would not be lost by the occurrence of the stipulated reasons for exception, with no retroactivity of the filing date involved, and the patent application would be refused if another reason for lack of novelty has occurred before the filing.

In the case where a person having the right to obtain a patent transfers the right, the successor can also enjoy application of Section 30 of the Patent Law.

(b) Reasons for exception to lack of novelty

(i) Experiment (Section 30 (1) of the Patent Law)

Law), edited by Mutai Zaisanken Hou Kenkyuukai (Study Group on Intangible Property Law), (Shinnippon-Hoki Publishing): p. 309.

¹⁶ The Tokyo High Court decision on November 30, 1971, Court Decisions in Suits Against Appeal/Trial Decisions, 1971: p. 67; the Tokyo High Court decision on January 23, 1973, Court Decisions Relating to Intangible Property, Vol. 5, No. 1: p. 1 (the Ice-Melting Dew Prevention Method for Frozen Fish case); the Tokyo High Court decision on November 22, 1978, Court Decisions Times, No. 383: p. 145 (the Planograph Machine Humidifier case).

Sometimes, experiments need to be conducted even after the completion of an invention. Since some experiments cannot be conducted in secret, a remedy is required for cases where the novelty was lost as a result of an experiment, so an exception was stipulated in the Law. The type of experiment in this context is limited to a technological experiment, and does not include a marketing survey or the like¹.

(ii) Presentation in a printed publication/presentation at a study meeting (Section 30 (1) of the Patent Law)

¹ Yoshifuji, *Tokyo Hou* (Patent Law): p. 85; Nakayama, *Chuukai Tokkyo* (Annotated Patent Law), Vol. 1: p. 242 [Hashimoto].

The inventor's voluntary presentation of the invention in a printed publication is also stipulated as a reason for exception to lack of novelty¹. This is a remedial provision for many engineers lacking knowledge of the Patent Law, who have presented their inventions in a printed publication before filing the application. This provision is also expected to eliminate their concerns about publishing the research results in printed publications and to create an environment that facilitates publication of the results at an earlier stage.

The question of whether or not an invention has been presented in a printed publication is most disputed when it was described in the specification of a published patent or utility model². By literal interpretation, it is apparent that the specification of a laid-open or published patent or the like corresponds to a "publication" as provided in Section 29 (1) (iii) of the Patent Law, so a foreign patent gazette can be considered to be a "publication" under Section 30 of the Patent Law³, but it is too unreasonable to conclude that this case can be regarded as an exception to lack of novelty. The fact that an invention has been filed either inside or outside Japan means that the invention is already prepared for filing, so there is no need to remedy such a case by applying Section 30 (1), the purpose of which is to provide a remedy for engineers who lack knowledge of the law. In addition, a 12-month priority right is recognized for foreign applications under the Paris Convention, so there is no practical reason for extending the remedy under Section 30 of the Patent Law to cases exceeding that period⁴. Therefore, publication of an invention in a patent gazette should not be considered as "presentation in a printed publication" under Section 30⁵.

¹ This reason for exception was added upon adopting the current Law along with the later-mentioned presentation at a study meeting. *Kougyou Shoyuiken Seido Kaisei Shingikai Toushin Setsumeisho* (Explanation on the Council Report on Amendment of the Industrial Property System) (JPO, 1957): p. 3.

² Specifically, this is a problem of whether or not an invention published outside Japan can be filed in Japan within six months from the date of publication abroad by claiming application of Section 30 of the Patent Law.

³ The following is a case relating to the Design Law: the Supreme Court decision on February 16, 1993, Court Decision Journal, No. 1456: p. 150/The Law Times Report, No. 816: p. 199 (the Bicycle Child Seat Design case) ([Annotation] Shinichi Yaamanaka, Court Decision Journal, No. 1473: p. 215; Hiroya Kawaguchi, Jurist, No. 1046: p. 263).

⁴ If application of Section 30 were recognized for such a case, it would also remedy those inventions that were published in a patent gazette of a country not contracting to the Paris Convention, which would serve to eliminate a benefit of contracting to the Paris Convention. Also, if such a remedy were recognized, it would give more advantage to non-Japanese persons, who file more original applications in foreign countries, rather than to Japanese persons.

⁵ Court decisions supporting this opinion are: the Tokyo High Court decision on June 22, 1982, Court Decisions Relating to Intangible Property, Vol. 14, No. 2: p. 467 (the Horizontal Non-Iron-Core Induction Furnace case) ([Annotation] Nobuhiro Nakayama, Jurist, No. 44: p. 121; Sei Takura, Court Decision Journal, No. 1070: p. 211; Genzou Andou, Tokugikon, No. 58: p. 27;

Encouragement of study presentations at research meetings, such as academic conferences, is desirable for technological development. So, presentation of an invention in writing at a study meeting held by a scientific body designated by the Commissioner of the JPO is specified as an exception to lack of novelty. (Provisions on the designation of scientific bodies are found in Sections 19-22 of the Regulations under the Patent Law.) This provision only applies to inventions that have been presented in written form for the convenience of evidence. Many academic conferences distribute documents (prepared articles) in advance, but these correspond to printed publications⁶. Presentation at an academic conference sometimes involves difficult problems, because the presentation could be made by only one of the multiple co-inventors, and the inventor may not make the presentation under his/her own name. There is a case where the court held that a study presentation in this context is one that can be generally accepted as an act of presentation subjectively conducted by the person having the right to obtain a patent⁷.

Kaoru Koumoto, *Tokugikon*, No. 70: p. 40; Hiroaki Jingi, *Patent*, Vol. 35, No. 12: p. 21; Hiroaki Jingi, *Tokkyo Kanri* (Patent Management), Vol. 29, No. 1: p. 3; Kazuhiro Horino, *Kougyou Shoyuukun Hou Kenkyuu* (Study on Industrial Property Law), No. 71: p. 16; Ryouichi Murabayashi, *Tokkyo Kanri* (Patent management), Vol. 33, No. 2: p. 175; Masao Uchiyama, “*Jitsumu Kara Mita Tokkyo Hou 30 Jyou No Mondai* (Study on Issues relating to Section 30 of the Patent Law from a Practical Perspective) (Vol. 1, 2 and 3),” *Hatsumei* (Invention), Vol. 69, No. 7: p. 8/No. 8: p. 20/No. 9: p. 24); Tokyo High Court decision on May 29, 1986, *Court Decisions Relating to Intangible Property*, Vol. 18, No. 2: p. 192 (the Cyclic Amine case); the Tokyo High Court decision on June 30, 1987, *Court Decisions Relating to Intangible Property*, Vol. 19, No. 2: p. 216 (the Fuse Holder case). Later, publication of an invention in a foreign or domestic patent gazette was decisively rejected as corresponding to “presentation in a printed publication” under Section 30 (1) of the Patent Law in the Supreme Court decision on November 10, 1989, *Civil Court Decisions by the Supreme Court*, Vol. 43, No. 10: p. 1116 (the Final Instance of the Cyclic Amine case) ([Annotation] Yuriko Inoue, *Journal of the Jurisprudence Association, The University of Tokyo*, Vol. 109, No. 10: p. 1666; Tatsuki Shibuya, *Journal on Civil and Commercial Law*, Vol. 102, No. 5: p. 598; Hiroshi Itou, *Housou Jihou* (Bar Journal), Vol. 42, No. 11: p. 3179; Kazuo Morioka, *Tokkyo Kenkyuu* (Study on Patents), No. 10: p. 33; Takashi Ooseto, *Jurist*, No. 957: p. 245; Teruo Doi, *Court Decision Journal*, No. 1367: p. 191). Incidentally, this type of case often occurred when the substance patent was introduced with the 1975 amendment of the Patent Law, and the applicant, who filed an application for a substance patent abroad but had filed the invention as a process invention in Japan, tried to obtain a substance patent also in Japan by applying Section 30 of the Patent Law.

⁶ In this case, there is a question that even if the exception provision was applied at the time of the first presentation (presentation of the prepared article), the invention would be refused for lack of novelty pertaining to the second presentation (presentation at the academic conference). The conventional examination guidelines set forth that the invention should be refused in such a case. However, in consideration of the purpose of the system, the invention should not be refused even if the same person presented it for a second time, as long as it is within six months from the first presentation. Takeda, *Tokkyo No Chishiki* (Knowledge of Patents): p. 141; Yoshifuji, *Tokkyo Hou* (Patent Law): p. 88.

⁷ The Tokyo High Court decision on March 16, 1992, *Court Decisions Relating to Intellectual Property*, Vol. 24, No. 1: p. 372 (the Duct Penetrating Part Reinforcing Method case). In this case, the court held that it would correspond to a “presentation” in this context, if the names of all the

inventors were clearly identified and only part of them made the presentation, or if the name of the inventor of an independently-developed invention was clearly identified but a different person made the presentation under the name of the inventor. However, that does not include a case where a person other than the inventor makes the presentation without clearly identifying the name of the inventor as that of the researcher.

(iii) Becoming publicly known against one's will (Section 30 (2) of the Patent Law)

A case where an invention becomes publicly known against the will of the inventor is also treated as an exception to lack of novelty. The greatest problem is to determine what exactly "against one's will" is. The most typical case would be where an invention becomes publicly known by an industrial spy or the like but according to court decisions, the scope of the term "against one's will" is quite broad, including cases where the invention becomes publicly known by carelessness¹. The specific application must be determined case by case, but the point would be whether or not the inventor had the will to accept the fact that the invention would become publicly known.

(iv) Display at an Exhibition (Section 30 (3) of the Patent Law)

A case where an invention is displayed at an exhibition that meets the requirements set forth in Section 30 (3) of the Patent Law is also treated as an exception to lack of novelty. This is the domestic law provision corresponding to Article 11 of the Paris Convention. The Paris Convention itself was originally established upon the holding of the Paris Exposition 1878. Thus, the patent system and exhibitions had from former times been closely related to each other.

The purpose of this provision is to encourage technological development in society by having high quality inventions expeditiously displayed at exhibitions with a sense of assurance.

¹ The Tokyo High court decision on April 26, 1972, Court Decisions Relating to Intangible Property, Vol. 4, No. 1: p. 261 (the Agricultural Tractor Stopping Device case) ([Annotation] Hideichi Araki, Tokkyo Hanrei Hyakusen (100 Selected Patent-related Court Cases) (Second Edition), Case 24). In this case, the invention became publicly known when the oldest son of the inventor exhibited the invention at an exhibition without telling the inventor, but the court held that the novelty was not lost. Incidentally, laying open of an application by the JPO is compulsory, but is not considered to constitute becoming publicly known against the inventor's will. (The issue only involves publication of patent applications outside Japan.) In the Tokyo High Court decision on November 21, 1967, The Law Times Report, No. 215: p. 184 (the Water-Proof Winder case), the court stated that the case where a French patent specification was introduced into Japan and became publicly known prior to the filing in Japan was not considered to have made the invention publicly known against the inventor's will.

In fact, rather strict requirements are imposed for exhibitions to which this exception provision is applicable. The requirements are different for those held inside Japan, those held in a country party to the Paris Convention, and those held in other countries. The relevant exhibitions held inside Japan are limited to those held by the government or by any local public entity¹, or those held by another party that is designated by the Commissioner of the JPO².

(c) Procedure

¹ Specifically, these include the national state, the prefectures, and municipalities. This provision is not applicable to exhibitions that are merely supported by the state or local public entities. Under the old Law, the court held that an exhibition did not satisfy the requirements even if it was held by a special public corporation of which members included the Tokyo Metropolitan Government and of which establishment was approved by the Minister of International Trade and Industry, and even if the exhibition was chaired by the Governor of Tokyo and had received various assistance from the central government and the Tokyo Metropolitan Government, in the Supreme Court decision on November 1, 1968, Civil Court Decisions by the Supreme Court, Vol. 22, No. 12: p. 2383 (the Bagging Machine case) ([Annotation] Norihiro Akiyoshi, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 23; Tsuneo Kabe, *Saihan Kaisetsu* (Explanation of Supreme Court Decisions), FY 1968, Case 91; Ryyuichirou Senmoto, *Journal on Civil and Commercial Law*, Vol. 61, No. 4: p. 697). The provision under the old Law had required an “exhibition held by the government, a prefecture, or the like” (Section 6). For an annotation for the original instance, the Tokyo High Court decision on March 23, 1965, *Court Decisions in Administrative Cases*, Vol. 16, No. 3: p. 433, see Hisao Iijima, *Tokkyo Hanrei Hyakusen*, Case 27.

² The exhibition is designated after submitting to the JPO Commissioner an application form specified under Section 22*bis* onward of the Regulations under the Patent Law, and having the necessary items deliberated. The designation is not made for each organizer, but for each exhibition (Examination Guidelines, 10.44A).

In order to enjoy application of the exception to lack of novelty, one must apply for it within six months from the date on which the reason for the exception occurred, concurrently submitting a document explaining the circumstances, and submitting documents evidencing the reason within 30 days therefrom. However, with regard to an invention becoming publicly known against one's will under Section 30 (2), the party only needs to apply for it within six months from the date on which the invention became publicly known, and is not required to take any further steps, due to the nature of the reason¹.

(d) Problems

¹ For details, see Nakayama, *Chuukai Tokkyo* (Annotated Patent Law), Vol. 1: p. 251 [Nakayama]. In addition, the procedure and example cases are described in 10.32 A onward of the Examination Guidelines.

The exceptions under Section 30 of the Patent Law were basically established for the purpose of saving researchers and others who lack knowledge of the Patent Law from being disadvantaged, and thereby encouraging inventions to be published more speedily¹. If that is so, today when more than one century has passed since the establishment of the Patent Law, and the knowledge of the Patent Law has diffused more widely, these exceptions should either be abolished or reduced².

However, recently, there have been moves to expand these exception measures. These moves are connected with the harmonization efforts of the world's patent systems. If harmonization is to be achieved between the system of the United States, which adopts the first-to-invent system, and the system of Japan and Europe, there would be a need to recognize expansion of these exceptions in place of having the United States abandon the first-to-invent system. This is because such a measure would allow the United States to shift to the first-to-file system without drastically changing the practical details of the first-to-invent system³.

(3) Expanded Scope of Prior Application Rights (Fictitious publicly known invention) (Section 29bis of the Patent Law)

If a senior application is already laid open to the public, an application claiming an invention or device identical to one disclosed in the specification or drawings originally attached to the request of the senior application is refused. If filed after the laying open of the senior application, the junior application is refused for being described in a printed publication (Section 29 (1) (iii) of the Patent Law). However, if filed before the laying open of the senior application, the specification of the senior application is not publicly known yet, because it is kept secret within the JPO. In such a case, the senior application is considered to be a fictitious publicly known invention pursuant to the provision in this section. This is called the expanded scope of the

¹ Nevertheless, the purpose of the legislation is different for the case where the invention became publicly known due to an experiment and for where it became publicly known against one's will.

² At the time of the 1959 amendment there was also an opinion to abolish all of the exceptions upon the 1959 amendment, but as the exception regarding exhibitions could not be abolished due to obligations under the Paris Convention, other exceptions were also maintained (*Kougyou Shoyuiken Seido Kaisei Shingikai Toushin Setsumeisho* (Explanation of the Council Report on Amendment of the Industrial Property System): p. 4). However, the exceptions regarding presentation in a printed publication and presentation at a study meeting were introduced with the 1959 amendment, so the exception provisions were reinforced as a result.

³ The U.S. first-to-invent system does not allow the inventor to claim a senior invention in an unlimited manner, but only allows such claim within one year, in principle. Therefore, even if the United States shifts to the first-to-file system, there would not be such drastic changes in practice if the exceptions to lack of novelty were expanded and the period to apply for them was extended to one year. See Takeda, *Tokkyo No Chishiki* (Knowledge of Patent): p. 142.

rights of the prior application or a fictitious publicly known invention (quasi-publicly known invention).

Formerly, only a junior application that was identical to an invention disclosed in the scope of claims of the senior application had been refused, but the scope of the senior application was expanded in line with the introduction of the request for examination system and the early publication system by the 1970 amendment. The reasons for the legislation were as follows¹.

First of all, the invention disclosed in the specification or drawings of the senior application is due to be laid open to the public in the future, in principle², so a junior application does not provide anything new to society.

Secondly, the enactment of Section *29bis* of the Patent Law was related to the introduction of the request for examination system. In the earlier system that only recognized the effect of refusing junior applications within the scope of claims of the senior application, the scope effective for refusing junior applications did not become decisive until the scope of claims was determined after the completion of examination of the senior application³. However, under the request for examination system, in principle, examinations are conducted in the order in which the requests for examinations were made, in principle, so the senior application may not necessarily be examined before the junior application. Therefore, the existing system could not be continued. Accordingly, the early publication system was concurrently introduced to lay open to the public all the applications after 18 months after filing, and Section *29bis* was added to the Patent Law to expand the effective scope for refusing junior applications, to include everything from the scope of claims to the specification and drawings. Thereby, the effective scope for refusing junior applications and the examination procedure were separated, and it became possible to determine the scope for refusing junior applications even before the determination of the scope of claims of the senior application.

Thirdly, under the then-existing system, the applicant who filed the senior application was pressed to file even for inventions that he/she did not intend to monopolize, merely for defensive purposes. In other words, unless the inventor filed applications in defense of inventions that were not disclosed in the scope of claims, but were disclosed in the specification or drawings, patents could be granted for their junior

¹ JPO, *Chikujou Kaisetsu* (Clause-by-Clause Explanation of Industrial Property Laws): p. 81.

² The provision on the expanded scope of rights for prior applications is not applicable to any applications that do not go as far as becoming laid open to the public.

³ The scope of claims is subject to amendment, so it is not determined until the examination is complete.

applications. If the inventor did not have the prior user's right in such a case, he/she might not even be able to work the invention despite the fact that he/she made the senior application. Such wasteful applications for defensive purposes could be limited by also giving the effect to refuse junior applications to inventions that are disclosed in the specification and drawings of the senior application⁴.

Due to these reasons, the material scope of the senior application effective for refusing junior applications was expanded. Nevertheless, the differences with Section 39 of the Patent Law, which regulates the relation between senior and junior applications, present problems.

Firstly, the scope effective for refusing junior applications is different in these two provisions. With regard to the scope of timing, the provisions of Section 29*bis* of the Patent Law cover an application filed before the filing date of the junior application, while Section 39 is also applicable to an application filed on the same date. As for the material scope, Section 29*bis* covers inventions disclosed in the specification and drawings, while Section 39 only covers inventions disclosed in the scope of claims.

Secondly, the conditions required for refusing junior applications are different. While Section 29*bis* is only applicable when the senior application is laid open to the public, there is no such limitation in Section 39. Conversely, Section 29*bis* is also applicable when the senior application is withdrawn or invalidated, but Section 39 is not applicable in such a case. While Section 29*bis* is not applicable when the applicant who filed the senior application and that of the junior application are the same person⁵, Section 39 does not have such a limitation.

The two sections have such differences, but in actuality, many cases satisfy the requirements of both. In such cases, the junior application can be refused under either of these provisions.

The next problem is the relation between the right of priority in Article 4 B of the Paris Convention and Section 29*bis*.

The question of whether the filing date of an application claiming a right of priority should be the filing date of the first application or the date of the subsequent filing is subject to a theoretical dispute. In practice, the filing date of the first application is applied in some cases⁶, but this should be determined according to the

⁴ The JPO receives the largest number of patent applications in the world. Therefore, examination is delayed, and this is even growing into an international problem. The revised effect of prior applications is considered to contribute to expediting the examination procedures.

⁵ Identification of the same applicant or the same inventor involves various problems in practice, but for details, see Nakayama, *Chuukai Tokkyo* (Annotated Patent Law), Vol. 1: p. 233 [Gotou].

⁶ See the Tokyo District Court decision on November 26, 1971, Court Decisions Relating to

purpose of the respective provisions. This is where the treatment under Section 29bis of the Patent Law becomes a problem.

Under Article 4 B of the Paris Convention, an application whose priority is claimed shall not be disadvantaged by any acts, including filing by a third party, done during the interval between the filing of the first application and the filing of the subsequent application, during which time the benefits of the right of priority can be enjoyed. In addition, it is provided that such acts cannot give rise to any third-party right or any authorization of use. Therefore, if an application whose priority is claimed becomes laid open, any invention disclosed in the specification or drawings of an application filed in Japan, being the second country in which the application is filed, would have an effect to serve as a basis for refusing an application filed by a third party between the first application and the subsequent filing in Japan, as long as it is also included in any of the filing documents for the first application⁷. In short, the third party's application would be refused, because it is an act done during the period of priority.

Section 29bis (2) of the Patent Law was added in 1978 upon acceding to the Patent Cooperation Treaty (PCT). (It has been deleted in the current law.) Under the PCT, an international application has the same effect as a regular national application (Article 11 of the PCT), so it is basically the same as a national application, but the provision was established since some wording needed to be slightly revised.

(4) Inventive Step (Section 29 (2) of the Patent Law)

(A) Significance of the Inventive Step

Intangible Property, Vol. 3, No. 2: p. 367 (the Vitamin B Manufacturing Method case) ([Annotation] Yoshihiko Satou, *Housou Jihou* (Bar Journal), Vol. 44, No. 12: p. 155; Koue Toyosaki, *Jurist*, No. 540: p. 121; Takeshi Kikuchi, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 79). Nakayama, *Chuukai Tokkyo* (Annotated Patent Law), Vol. 1: p. 225 [Gotou].

⁷ Examination Guidelines, 43.07 A. For an opposing theory, see Takeda, *Tokkyo No Chishiki* (Knowledge of Patents): p. 183.

An “inventive step” (equivalent to “unobviousness” in U.S. patent law) is a term used in studies on patents¹. An invention that can be easily made from an invention that is not novel by a person skilled in the art is called an “invention involving no inventive step.” Under the old Law, no provision requiring an inventive step existed as an essential for registration, but an invention involving no inventive step was refused on the ground that it did not constitute an “invention” as stipulated in Section 1 of the old Law, so the practice was virtually the same as under the current Law.

It is a self-evident truth, which does not have to be backed by legislation, that a patent should not be granted to an invention involving no inventive step. Inventions involving no inventive step are expected to be made even without giving an incentive by granting an exclusive right, and the grant of an exclusive right for such inventions could obstruct the free business activities of third parties. It is desirable for social development to let inventions involving no inventive step be freely used by people.

Although there are differences in expressions and available provisions, a similar patent requirement is also imposed in other countries².

The concept of the inventive step is quite ambiguous, so a variety of court decisions have been made concerning the involvement of an inventive step in an invention. Most of these are disputes over whether or not a person skilled in the art could easily make the invention. This point of dispute, which is an important and frequently discussed point in patent litigation, often needs to be determined from a technological perspective, and it is an issue that is difficult to handle in a book on a legal system, so only the outline of the concept shall be indicated here³.

(B) Person Skilled in the Art

¹ In positive law, the term “inventive step” is used in Article 33 (3) of the PCT (1970).

² For systems in other countries, see Benkichi Jinbo, “*Hatsumei No Shimposei Ni Tsuite* (Involvement of an Inventive Step in an Invention),” Book Commemorating Judge Hara ’ s Retirement, Vol. 1: p. 227.

³ For details, see Nakayama, *Chuukai Tokkyo* (Annotated Patent Law), Vol. 1: p. 197 [Aragaki, Hashimoto]; Yoshifuji, *Tokkyo Hou* (Patent Law): p. 92; Masui/Tamura, *Tokkyo Hanrei Gaido* (Guide to Patent-related Court Decisions): p. 46.

The existence of an inventive step is determined by the technological level of a person skilled in the art at the time of filing the patent application¹. A person skilled in the art means a “person with ordinary skill in the art to which the invention pertains” (section 29 (2) of the Patent Law). However, such a specific person does not exist in reality, but it is only an abstract concept. A technician who is considered to have ordinary skill in the art is conceptually set up to determine whether or not the invention could be easily made based on existing technologies (the inventions set forth in Section 29 (1) (i) to (iii) of the Patent Law) by that person.

The first question to be asked is the meaning of the “art to which the invention pertains.” In recent years, technical fields have become more and more subdivided and specialized. On the other hand, a technology can often be applied to other unexpected fields of technology². Application of a technology to a seemingly a completely different technical field may be easy for a person skilled in the art in some cases, and difficult in other cases. Therefore, it is difficult to decide on a specific technical field a priori, and there is no other way to proceed but to comply judgments from individual cases³.

(C) Methods and Types of Determination concerning Involvement of an Inventive Step

¹ The Tokyo High Court decision on February 18, 1965, Court Decisions in Administrative Cases, Vol. 16, No. 2: p. 194 (the Concrete Reinforcing Steel case); Tokyo High Court decision on January 19, 1978, Court Decisions in Suits Against Appeal/Trial Decisions, 1978: p. 285 (the Sintering Device case).

² For example, it is not rare for a frying pan to develop from rocket technology, or a stealth aircraft to develop from microwave oven technology.

³ In the Tokyo High Court decision on March 23, 1971, Court Decisions Relating to Intangible Property, Vol. 3, No. 1: p. 109 (the Dry-Cleaning Composition case) ([Annotation] Kazurou Sakai, the book commemorating the seventieth birthday of Professor Uchida: p. 445; Shigeaki Manda, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 52), the court stated that the technical field of the composition for dry-cleaning was not the technical field relating to laundry operations, but one relating to research, utilization, manufacture and development of the dirt and stain removing effect of chemical agents or the chemical products of such kind; but this is only one example.

The only stipulated criterion for determination of involvement of an inventive step is whether or not a person skilled in the art could easily make the invention from publicly known technologies, which is extremely abstract. Generally, the core of an invention is the composition of the invention, so the presence of an inventive step is determined mainly from the composition but also by comprehensively considering the purpose and the effect of the invention¹. There are an enormous number of court decisions and appeal/trial decisions regarding determination of this issue, and the JPO has examination standards for it, so specific determination is made according to them. The determinations are not necessarily consistent, and they are different in each technical field.

The determination of the presence of an inventive step can be categorized into a number of types². As the categorization is more or less common in most textbooks, that shall be used to describe the types here.

(a) Juxtaposition invention

Mere juxtaposition of technologies is determined as lacking involvement of an inventive step, but if the invention bears an unexpected effect that exceeds the total of the juxtaposed technologies, the inventive step is recognized as a composite (aggregated) invention. This is the general theory, but in some technical fields, there are many inventions that combine publicly known technologies. In such cases, the question of whether or not the combination could easily be arrived at by a person skilled in the art must be carefully studied.

(b) Replacement/conversion invention

An invention that converts a publicly known technology to another technical field, or replaces a part of a publicly known technology with another known technology is considered to involve an inventive step only if the conversion or replacement was difficult for a person skilled in the art, and its effect was difficult to predict.

(c) Use invention

¹ It is determined by focusing on the composition, or by focusing on the purpose and effect, or by evaluating them equally, depending on the specific cases. It is difficult to set a general standard for this issue. Existence of an inventive step is more likely to be found if the composition of the invention is quite different from that of prior arts, but even if the composition is quite similar, the inventive step is sometimes found based on the difference in the effect of the invention (For details, see Nakayama, *Chuukai Tokkyo* (Annotated Patent Law), Vol. 1: p. 199 [Hashimoto]).

² For details, see Nakayama, *Chuukai Tokkyo* (Annotated Patent Law), Vol. 1: p. 207 [Hashimoto], Yoshifuji, *Tokkyo Hou* (Patent Law): p. 101.

A use invention is an invention composed by changing or limiting the use of a publicly known technology. Involvement of an inventive step is recognized when the use is novel, the effect of the use is notably beneficial, and the change of the use could not be easily arrived at by a person skilled in the art.

(d) Selection invention

An invention that expresses a technology, which was expressed as a generic concept in a prior invention (senior invention or publicly known invention), as a more specific concept is called a selection invention. It is an invention that has selected what had not been specifically disclosed in the generically expressed prior invention as its constituent element³. Involvement of an inventive step is only recognized when the invention expressed as a more specific concept has a notable effect⁴.

(e) Invention limiting numerical values, shape, etc.

The presence of an inventive step in an invention that either limited or changed the numerical values, shape, arrangement, etc. constituting a publicly known technology is recognized when that change or limitation could not be easily arrived at by a person skilled in the art and its effect was difficult to predict⁵.

(f) Chemical substance invention

Involvement of an inventive step for a chemical substance is determined from its chemical structure and the use/property of the chemical substance. If the chemical structure of a chemical substance is considerably different from that of a publicly known chemical substance, that is sufficient for finding an inventive step. The

³ The Tokyo High Court decision on September 8, 1987, Court Decisions Relating to Intangible Property, Vol. 19, No. 3: p. 309 (the Iron Group Element and Boron included Amorphous Alloy case).

⁴ A famous case is Tokyo High Court decision on October 31, 1963, Court Decisions in Administrative Cases, Vol. 14, No. 10: p. 1844 (the Insecticide case). In this case, an invention that was merely a more specific concept of an insecticide expressed by a general formula but had a distinctive feature in its extremely low toxicity for warm-blooded animals, was held to constitute a “novel industrial invention” under the old Patent Law. Another notable case is the Tokyo High Court decision on September 18, 1970, Court Decisions Relating to Intangible Property, Vol. 2, No. 2: p. 457 (the Hazardous Substance Restraining Composition case) ([Annotation] Fumio Satou, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 30).

⁵ For instance, in the Tokyo High Court decision on November 5, 1992, Court Decisions Relating to Intellectual Property, Vol. 24, No. 3: p. 980 (the Gas Treatment Method case), the court recognized involvement of an inventive step, stating that the limitation of numerical values had apparently made the invention better than the conventional technology, and the limitation had the technological significance of making the effect of the technology more prominent.

inventive step is also recognized even if the chemical structure was similar to that of a publicly known substance, as long as it has an unpredictable effect or its property is outstandingly beneficial.

2. Unpatentable Inventions (Section 32 of the Patent Law)

(1) Law of 1959 (Before the 1975 amendment)

In recent years, the idea that patents should be granted to inventions in all kinds of technical fields is becoming more and more prevalent, particularly in industrialized countries. In addition, the TRIPs Agreement also obligates the members to grant patentability for inventions in all fields of technology. However, fundamentally, there is no universal principle regarding what kinds of inventions should be patented. It depends on the industrial policy of the country¹. For instance, in Japan, more inventions were unpatentable under the old Law when the level of technology was lower, than under the current Law.

The old Law (Law of 1921) stipulated foods and beverages, luxury grocery items, medicines and their mixing methods, chemical substances, and inventions that are likely to contravene public order and morality or harm public health as unpatentable inventions, and substances obtained by nuclear transformation were added to this list upon the 1959 amendment (Section 32 of the Law before the 1975 amendment).

Foods, beverages and luxury grocery items are related to a very important field, the national diet, so they were unpatentable since a monopoly in this field could become a great obstruction for national life. Nevertheless, it is not likely that people would starve by granting patents for foods, beverages and luxury grocery items in reality, so they were excluded from unpatentable inventions upon the 1975 amendment.

Medicines and their mixing methods are, similarly to foods and beverages, related closely to people's health, so they were categorized to be unpatentable since a monopoly in such a field was not desirable². However, in the same manner as for

¹ The idea that patents should not be granted for inventions that contravene public order and morality is considered to be based on a matter-of-course reasoning rather than on a reason based on industrial policy, but in general, many of the reasons for unpatentability are based on policy grounds. National policies change with time. In Japan, there were strong calls for protection of the domestic industry in the past, but today, the demand is higher for international harmonization.

² In the case of medicines, the research and development cost is extremely high in contrast to the manufacturing cost. Therefore, if medicines or their mixing methods were treated as unpatentable, people would counterfeit medicines developed overseas in order to manufacture medicines without investing vast development costs and then sell them at low prices. Conventionally, many developing countries had not recognized patents on medicines, and this was based on a policy of providing medicines to people at low costs through such causality. There were fierce conflicts between industrialized countries and such developing countries over this issue, but in the end,

foods and beverages, it was judged unnecessary to include them in unpatentable inventions upon the 1975 amendment. If a monopoly happened to cause harm, it would be sufficient to apply the arbitrary license system (Section 93). In addition, with the 1975 amendment it was stipulated that the effects of patent rights shall not extend to acts of preparing medicines (Section 69 (3) of the Patent Law), in order to prevent confusion at medical treatment sites.

Chemical substances (substances manufactured by a chemical method) had been made unpatentable to protect the domestic industry. Truly, introduction of the substance patent system in a phase where the domestic chemical industry is underdeveloped could serve to allow competent foreign companies to monopolize patents on substances themselves, thereby possibly eliminating development of the domestic industry. On the other hand, without a substance patent system, development efforts would be focused on inventing new manufacturing methods for the new substances developed by others, and the incentive for development of new substances would be lost, which is not favorable for industrial development. Accordingly, whether or not the substance patent system should be introduced in a country depends on the development status of that country's industry. If it is introduced when the level of industry is too low, it would repress the domestic industry, but if the introduction is delayed despite the fact that the industry has developed to a certain level, it would have a disincentive effect on basic research. Japan introduced the substance patent system in 1975 when the domestic chemical industry had developed to a certain extent, and the introduction brought about a great turning point for that industry³.

Nuclear transformation refers to transformation of an atom into a different atom by nuclear change or atomic fusion using an atomic furnace or other equipment. Substances obtained by nuclear transformation in this context mean the elements and chemical compounds manufactured by the above-mentioned nuclear change and their intermediate products. The methods and devices (e.g. atomic furnaces) for manufacturing them are not included in unpatentable inventions⁴. With the conclusion of the TRIPs Agreement in 1995, inventions in all fields of technology became subject to patent. As the system to make substances obtained by nuclear transformation

inventions in all fields became patentable by conclusion of the WTO's TRIPs Agreement. Although there is a certain grace period, most countries will have no such categories of unpatentable inventions in the future.

³ In Japan, the medical and chemical industries showed great progress after the introduction of the substance patent system.

⁴ Many countries have some regulations, not just under the patent law, for nuclear energy related inventions, not merely for industrial reasons, but for national defense purposes, etc.

unpatentable came to conflict with the TRIPs Agreement, this provision was deleted upon the 1994 amendment. However, the provision that had been in effect before the amendment continued to be applied to the applications that were still pending before the JPO as of July 1, 1995.

(2) Current Law (Law amended in 1994)

The 1994 amendment abolished all the categories of unpatentable inventions that had been based on fields of technology, only to leave inventions that are likely to contravene public order and morality or harm public health as unpatentable inventions. It has been considered as a matter of course to make inventions that are likely to contravene public order and morality or harm public health unpatentable, and a provision to this effect has been stipulated since the establishment of Section 4 (3) of the Patent Monopoly Act of 1885.

However, it has not been elucidated why such a provision is required. The prevailing theory states that such an invention should not be patented because working of the invention is likely to contravene public order and morality or harm public health. This must be based on the idea that a patent has the practical effect or advertising power of having been given a special approval by the government, and if an invention that contravenes public order and morality or harms public health were manufactured and sold as a patented product, it would injure the authority of the patent system.

Nevertheless, this prevailing theory is questionable. Firstly, grant of a patent merely means that no reason could be found to refuse that application (Section 51 of the Patent Law), and it is not a grant of approval by the government. Therefore, recognition of a patent does not necessarily guarantee that the invention can be actually worked (e.g. in the case of medical products), and even a refused invention can be worked if it is not prohibited under other laws. The working of inventions that are likely to contravene public order and morality or harm public health is not desirable, but the Patent Law does not have the power to deter that¹. The reverse, making such inventions unpatentable, would allow all people to work the inventions, in principle. Specifically, sex-related inventions, such as virility enhancing appliances² and birth

¹ This point is precisely indicated in Keita Satou, Jurist, No. 940: p. 116 (Annotation on the Tokyo High Court decision on December 25, 1986, Court Decisions Relating to Intangible Property, Vol. 18, No. 3: p. 579 (the Banknote case)).

² In the Tokyo High Court decision on December 14, 1965, The Law Times Report, No. 191: p. 223 (the Virility Enhancing Appliance case), the court held that the virility enhancing appliance was harmful to health, it was “likely to disturb public order and morality, and in any case, it was not recognized to be an invention fit for being granted a patent right, which is an exclusive dominion, or to have national protection given to it.”

control devices, often become subject to disputes. However, these cases do not need to be handled as patentability issues, and even if they were handled in such a manner, it would not have the effect of deterring the working of the inventions. Therefore, the question of whether or not working of those inventions should be allowed should be resolved by other laws and ordinances.

Also, there is no need to deny patentability for inventions that are not likely to contravene public order and morality or harm public health in themselves, but may have such an effect depending on how they are used³. Such inventions should be regulated by other laws and ordinances (e.g. “gambling,” under the Criminal Code), depending on the mode in which the invention is worked.

Secondly, if determination were to be made concerning public order and morality or public health, the JPO and courts would be involved in issues which involve very subjective and delicate determination, and have to consume considerable time and labor on them. Even if an invention were refused on grounds of being likely to contravene public order and morality or harm public health, it would only mean that under the Patent Law the invention would be available for any person to work. Since the JPO’s efforts in determining whether or not an invention has such harmful effects hardly have meaning in actually preventing such harm, there is no significance in consuming time and labor in making such determinations.

There are also cases like saccharine where the use was first prohibited as being

³ In the Tokyo High Court decision on December 15, 1956, Court Decisions in Administrative Cases, Vol. 7, No. 12: p. 3133 (the Bingo Game case) ([Annotation] Masaaki Suzuki, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 17; Masahiko Takeda, *Tokkyo Hanrei Hyakusen* (Second Edition), Case 31), the court held that the invention of a game device, a bingo game, could not be considered to be likely to contravene public order and morality merely “based on the reason that the device could be used for an illicit act.” Textbooks often cite a banknote counterfeiting machine as an example relating to the provisions of Section 32, but it is questionable that a machine dedicated to banknote counterfeiting actually exists. It is simply the fact that if the government (Bank of Japan) uses the machine, the product is a regular banknote, but if any other party prints banknotes with it, it is counterfeiting (Satou, note 1). Such an invention deserves a patent as a printing machine. In the Tokyo High Court decision on December 25, 1986, Court Decisions Relating to Intangible Property, Vol. 18, No. 3: p. 579 (the Banknote case) ([Annotation] Satou, note 1; Noriaki Gotou, Patent, Vol. 40, No. 5: p. 31; Teruzou Mimino, *Hatsumeimei* (Invention), Vol. 84, No. 9: p. 94; Midori Tanaka, *Tokkyo Kanri* (Patent management), Vol. 39, No. 6: p. 717), the court reversed the trial decision which stated that a device of a banknote having punch holes for those who cannot see to identify the note could not be registered based on the likeliness that it would contravene public order and morality, because “it would tempt illegal acts, if third parties in good faith were to copy this device” (constituting the crime of “alteration of banknotes”). Then, the court stated that “the possibility for the government to work this invention is not nil, and even if someone punches holes in a banknote that has not been punched by taking a hint from this device, that and the question of whether or not the invention contravenes public order are completely different issues.” Since refusal to grant a patent and prohibition of working of the invention are separate issues, this court decision is justifiable.

harmful, but the prohibition was withdrawn afterwards, or a case where a harmless method of use was later developed. It is impossible for the JPO to make a determination by predicting such future changes of status, so it is better not to make such determination in the first place.

Thirdly, the following point should also be taken into consideration. There is a view that a patent should not be granted for a medicinal invention that has a strong side effect or an invention that uses a hazardous substance like PCB⁴. However, an invention should not be judged as being likely to harm public health merely for such reasons⁵. Even a medicine with a strong side effect would raise the technical level of society by publishing the invention, and it could lead to development of technology for preventing the side effect. In addition, if such a medicine were rejected merely for the reason that its side effect was too strong, it would become difficult to obtain basic patents for new medicine, which would run contrary to the purpose of the Patent Law. Even if such a medicine were patented, it could not be manufactured or sold without the approval of the Ministry of Health, Labor and Welfare (Article 12 of the Pharmaceutical Affairs Law). Since a medicine is not likely to bear harmful effects (likely to harm the public health) by the administrative disposition of granting a patent alone, the grant of a patent should be allowed for such an invention. The beneficial side of patenting, which is that even a medicine with a strong side effect can serve as the basis for new technological development, should not be overlooked.

Understanding cannot be had by ignoring Section 32 of the Patent Law as long as it is there, but it seems better to apply the provision in a restrained manner⁶.

⁴ Yoshifuji, *Tokkyo Hou* (Patent Law): p. 139 mentions that if there is no technology for eliminating the harm of the side effect, the determination should be made by comparing the benefits and risks of the medicine, but a medicinal invention whose side effect is likely to cause an unacceptable illness is considered to harm the public health. However, an invention should not be refused as being harmful to public health merely for such a reason, as long as it has some medicinal virtues.

⁵ In the Tokyo High Court decision on November 27, 1958, Court Decisions in Administrative Cases, Vol. 9, No. 11: p. 2486 (the Internal Iodine Preparation Manufacturing Method case) ([Annotation] Shouji Matsui, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions), Case 10), the court reversed the trial decision which held that the invention cannot be patented because injection of calcium iodate is harmful, and ruled that it was unreasonable to state that the invention was likely to harm public health by judging that all of the products obtained by the method of the claimed invention were harmful. This court decision is not necessarily clear, but it reached a reasonable conclusion. Takeda, *Tokkyo No Chishiki* (Knowledge of Patents): p. 97.

⁶ Naoki Koizumi, “*Baiotekunorojii Seikabutsu No Houteki Hogo No Hitsuyousei* (Necessity of Legal Protection for Biotechnological Achievements),” *Jurist*, No. 990: p. 19 mentions that the “industrial property system should not take on a policy aim that cannot be attained through that system by itself and would obstruct technological development instead.” For a similar opinion, see Aizawa, *Baiotekunorojii* (Biotechnology): p. 50. For an opposing opinion, see Katsuya Tamai, “*Doitsu Ni Okeru Baiotekunorojii Seikabutsu Hogoron No Genjou* (Current Status of Discussions on Protection for Biotechnological Achievements in Germany),” *Gakkai Nenpou* (Annual of Industrial

Considering the above points, it would be enough to exclude from patentable inventions only those inventions that are likely to contravene public order and morality or harm public health by the very act of granting exclusive rights for them. Even if this provision were to be applied for the reason that working of the invention would contravene public order and morality or harm public health, an invention should only be unpatentable when it is apparent that it has such harmful effects and it cannot be used in any other way but to bring about such harm, such as an opium pipe⁷.

One notable point is that although an invention that contravenes public order and morality or harms public health is not laid open to the public at present (Section 64 (2) of the Patent Law), more of such inventions would come to be laid open if Section 32 was deleted or applied in a restricted manner. This would not cause much problem, because the applicant is not prohibited from publishing the invention even if it was refused for a reason that it contravenes public order and morality. Nevertheless, if the JPO determines this issue in a restrictive manner, even an invention that cannot be published according to another law or ordinance would become published as long as a patent application is filed for it. Such a situation is not desirable, so an invention that is likely to contravene public order and morality or harm public health by becoming published may need to be denied patentability. However, not many inventions are considered to be prohibited from becoming published in reality⁸.

Inventions that are expected to present a great problem in the future in terms of the relation between public order and morality and patents are biological inventions.

Property Law), No. 17: p. 92. Meanwhile, Makoto Saitou, “*Shiken No Fuyo To Kouhou Jou No Kisei: ‘Biotekunorojii To Hou’ Ni Kansuru Oboegaki* (Grant of Private Rights and Regulations under Public Statutes: Memorandum on ‘Biotechnology and Law’),” Tsukuba Housei, Vol. 15: p. 172 states, though avoids being decisive, that the provisions on public order and morality in the Patent Law fulfill their functions to some extent. In short, the core issue is considered to be the conflict between the claim that the nation should not take part in a proceeding to grant an exclusive right for an invention that contravenes public order and morality and the claim that there is no practical sense in conducting an examination to determine whether or not the invention contravenes public order and morality.

⁷ See Shouji Matsui, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions), Case 10. However, there are hardly any patent applications of such a kind in reality.

⁸ Prohibiting the publication itself of an invention may, in some cases, conflict with academic freedom or freedom of thought. As it is thus difficult to obstruct the inventor from publishing an invention that contravenes public order and morality even if the invention is unpatented, the significance in denying its patentability is small. Nevertheless, while such invention would not be justifiably published if it were not granted a patent, it would be purposely published by the state if it were granted a patent. This is indeed not desirable, so there seems to be at least some reason for denying the patentability of such an invention. Here again, the basic problem is the conflict in the debate on whether it is appropriate for the state power to lend a hand in such publication, and whether it is meaningful for the JPO to take time and labor to make determinations on whether or not inventions contravene public order and morality.

In foreign countries, there are heated debates on whether patents for new animals should be recognized. There are views that creation of a new animal is blasphemy and that such inventions should not be patented from the viewpoint of animal protection, but as mentioned earlier, working of such inventions is still possible and it is still blasphemy even if the grant of a patent were prohibited. If blasphemous acts were to be prohibited by the state, it would not make any difference to make them unpatentable but, instead, the act of creating animals itself needs to be prohibited by another law or ordinance. The limitations of the Patent Law should be recognized.

Unlike the case of an opium smoking device, this issue is largely dependent on subjective elements, especially religious and ethnic consciousness, which need to be handled delicately, so the Patent Law should not be involved in making determination on this matter. The rights and wrongs of creating a new animal should be discussed separately from the Patent Law, and if the state judges it necessary to regulate such a technology, an independent regulation should be established. It would only impose a great, meaningless burden on the Patent Law to try to determine such matter under the interpretation of the Patent Law. The Patent Law has been legislated for an industrial policy purpose, and its processes are often a race against time, so to bring in such an issue would only induce unnecessary confusion. It is necessary to recognize the limitations of the Patent Law as an economic law, and to interpret it so that it can fully fulfill its functions. To bring ethical, consciousness-related or religious issues, which are difficult to solve, into the Patent Law is like driving the Patent Law into a maze.

As the Patent Law has an effect of promoting technology, it is also considered contradictory to grant a patent for a technology when the state hopes to prevent development of such technology. However, if the study or working of such technology is regulated by another law or ordinance, such as in the case of the creation of human clones, the patent system would not have the effect of promoting the technology. Therefore, even if there were theoretical contradictions, it would not cause actual harm. On the other hand, it would be a significant merit for the Patent Law to have no need to be involved in such an issue. This issue also raises a big problem when it is in connection with the human body, but this point has been mentioned in the part on industrial applicability in this book, so it shall not be discussed again in this part⁹.

Article 4*quater* of the Paris Convention stipulates that a patent cannot be refused or invalidated based on a reason that it is restricted under domestic law¹⁰. This

⁹ See the documents in note 6.

¹⁰ This provision was added upon the Lisbon amendment in 1958. It seems to have mainly

implies that restrictions and protection under domestic law are not necessarily the same, but there is an international consensus that any invention which is likely to contravene public order and morality or harm public health can be rejected regardless of this provision of the Convention.

3. Inventions with Questionable Patentability

Patents are granted for all inventions that are not described as unpatentable inventions, in principle. The Patent Law was likely initially legislated with inventions like industrial products in mind, but no such limitation appears in the provisions. However, later technological development has resulted in the emergence of inventions that do not necessarily comply with the conventional patent system, and the patentability of those inventions has become a problem. The following part shall discuss the most notable types of such inventions: “organisms” and “computer programs.”

(1) Organisms¹

(A) Point of Issue

In the past, there was a view that organisms were nothing but “creatures,” and did not satisfy the patentability requirements. However, today, nobody denies the patentability of biological inventions as a whole, but such cases are examined individually to see if they fulfill the requirements under the Patent Law.

Biological inventions can be roughly divided into the following two genres².

The first are inventions of organisms themselves. They include both the inventions of genetically-novel organisms themselves (product inventions³) and the inventions of their creation methods (inventions of processes of manufacturing products⁴).

The second are inventions of novel production methods or uses of organisms, though the organisms themselves are not genetically novel⁵.

The first genre is the area that often involves patentability issues. In contrast, for a long time now many inventions have been patented for the second genre, and patentability is not a problem in this area. Since some items specific to organisms need to be taken into consideration in the first genre, those items shall be examined below.

(B) Repeatability

¹ For a comprehensive study on this issue, see Aizawa, *Baiotekunorojii* (Biotechnology). Another reference is Special Feature “*Baiotekunorojii No Seikabutsu No Houteki Hogo* (Legal Protection for Biotechnological Achievements),” Jurist, No. 990. For research on appeal/trial/court decisions relating to biotechnology, see Institute of Intellectual Property, *Baiotekunorojii No Houteki Hogo Ni Kansuru Chousa Houkokusho* (Investigation Report on the Legal Protection of Biotechnology) (1990).

² See Yuusuke Hiraki, “*Iwayuru Shokubutsu Tokkyo Ni Tsuite* (So-called Plant Patents) (Part I),” *Tokkyo Kanri* (Patent Management), Vol. 23, No. 5: p. 504.

³ Patents have been granted to new plants in the classification of Artemisia: Pentayomogi and Hexayomogi (Patent Publication No. 1983-3646; Patent Publication No. 1983-3647).

⁴ These were conventionally refused, because no completely identical organisms can be reproduced. However, more inventions of breeding methods of specific plant varieties and multiplication methods of plant varieties have come to be patented with the release of the 1965 Examination Guidelines by Type of Industry, “*Biseibutsu To Hakkou Seisanbutsu* (Microorganisms and Fermentation Products),” the 1975 Examination Guidelines by Type of Industry, “*Shokubutsu Shin-Hinshu* (New Plant Varieties),” and the 1993 Examination Guidelines (Part VIII, Chapter 2, “Biological Inventions”).

⁵ Many inventions have been patented in this genre. They include methods for processing organisms posteriori and methods for manufacturing antibiotics by using organisms.

An invention must utilize a law of nature to be a statutory invention (Section 2 (1) of the Patent Law), which means that it must be repeatable¹. The point in question is the phase at which repeatability should be examined in the case of organisms. Since organisms have a self-multiplication function, a once-created organism itself can be reproduced by multiplication. Nonetheless, such multiplication process cannot be considered as an invention². Be it a product invention or a process invention relating to an organism, the point to be questioned should be the creation process of that new product or process, so repeatability of the creation process should be examined.

Formerly, the conventionally prevalent idea was that creation of an organism was not repeatable, and thus did not constitute an invention utilizing a law of nature, and this idea had also been supported by the examination guidelines before 1975. Indeed, in many cases, the probability of success in creating the same organism is small, and it is true that great individual differences exist even if a genetically-identical organism could be created. However, since repeatability is synonymous to utilization of a law of nature, it must not be determined based on whether the creation is practically or economically repeatable, but on whether it can be repeated in theory³. In other words, the causality only needs to be clear for an invention to be repeatable. This causality is clear in some cases⁴ and not clear in other cases⁵ regarding new organisms, and the latter cases are determined to be unrepeatable.

(C) Creativity

An invention needs to be a result of a creative act in order to be a “statutory”

¹ See Subsection 2, Item 1, 2. “Utilization of a Law of Nature.” There is an idea that the stipulation in Section 36 (4) of the Patent Law that an invention must be disclosed to an extent that a person skilled in the art can work the invention assumes repeatability, that is, the issue of repeatability, equals the issue of disclosure (Aizawa, *Baiotekunorojii* (Biotechnology): p. 58). Nevertheless, theoretically, repeatability is the nature of the subject matter, while disclosure is an issue of whether the subject matter (the invention) is described clearly and sufficiently. Thus, they are separate issues. In practice, however, there seems to be no use in discriminating between application of the repeatability requirements and the disclosure requirements, as in the case of incomplete inventions.

² As a matter of course, there are inventions related to multiplication processes, but they can be regarded as the same as ordinary inventions, and they are unrelated to inventions of the genetically-novel organisms discussed here.

³ An invention would be repeatable if it can be confirmed in theory that the creation of the organism can be repeated with fixed probability. Examination Guidelines by Type of Industry, “*Shokubutsu Shin-Hinshu* (New Plant Varieties) (3.11 (1)) mentions that “reproduction of the same result can be supported if the target plant can definitely be created from a prescribed number of population, and there is no limitation to the size of the population required for the reproduction.”

⁴ For instance, a case of creating a new variety by using a biotechnology such as genetic engineering or a case of creating a new variety by using Mendel’s law.

⁵ For instance, a case of merely grafting a bud variation and a case of merely making a selection.

invention (Section 2 (1) of the Patent Law). A mere discovery is not a statutory invention. Therefore, a unique variety that was accidentally found on a roadside is a mere discovery, which cannot be patented. In contrast, the creation of a new organism using a biotechnology such as genetic engineering or cell fusion is creative. Creativity will also be recognized, in principle, for a case where a new organism was created by repeating crossbreeding based on Mendel's law. Creativity in a case where a new plant was created as a result of repeated selection would be questionable, but in many cases they are not patentable due to unclear causality.

(D) Procedural Issues

Even if genetically-novel organisms could be patented in theory either as product inventions or process inventions, various problems could occur in the specific procedures for obtaining the patent.

Patent examination is conducted based on the filed documents, so determination of all of the patentability requirements, including novelty and involvement of an inventive step, is solely dependent on the documents. However, unlike an invention of an industrial product, an invention of an organism often cannot be examined by such document-based procedure alone, due to the great individual differences. Also, the fact that the genetic structure has yet to be elucidated for all of the genes of organisms makes the examination more difficult¹. This was one of the reasons why not many inventions of this kind had been patented in the past². Incidentally, the examination guidelines set forth that an invention of a plant itself pertaining to a new plant variety shall be clarified by specifying the plant based on the genotypic composition, or if that is difficult, based on its distinctive features, while an invention of a plant breeding method pertaining to a new plant variety shall be clarified by disclosing the distinctive features that are subject to the selection to an extent essential for clearly recognizing that a new variety has been created³.

Next, there is a question of whether the technological content of an invention of an organism can be disclosed in the patent specification to the extent required for a person skilled in the art to easily work the invention. In the case of the inventions for which biotechnology was employed in recent years, it may be possible to disclose the technology to the extent that a person skilled in the art can work the invention by

¹ Examination would be easier if the structure of all of the genes of organisms were elucidated and could be described in the specification, but that is expected to take some time to attain.

² The patents on *Artemisia* in note 3 of (A) Point of Issue are rare examples for which patents could be obtained by elucidating even the genetic structure.

³ Examination Guidelines, "*Shokubutsu Shin-Hinshu* (New Plant Variety)," 3.31.

looking at the specification, in the same manner as for inventions of industrial products. However, in the case of inventions applying means like cross fertilization, a person skilled in the art often cannot easily work the invention merely by looking at the specification⁴. This issue is solved for inventions relating to microorganisms by adopting the deposit system⁵, but no such deposit system exists for organisms other than microorganisms. Due to the expected increase of patents on organisms, the issue of disclosure is likely to gain further attention in the future.

(E) Contravention of Public Order and Morality

Creation of a new organism always involves the problem of contravention of public order and morality, but this issue has been discussed in detail in “2. Unpatentable Inventions” (Section 32 of the Patent Law), so it shall be omitted here.

(F) Relation with the International Convention for the Protection of New Varieties of Plants

⁴ Particularly, in the case of F₁ (first filial generation), it is almost impossible to work the invention by merely looking at the specification unless one obtains the parents. However, if cell culture is possible, the same kind of organism could be created easily at least with regard to multiplication.

⁵ An invention relating to a microorganism is deemed to have been disclosed by depositing the microorganism with the institution designated by the national patent office. (The relevant organization in Japan is the National Institute of Bioscience and Human-Technology, Agency of Industrial Science and Technology.) A sample of the microorganism can be furnished (Section 27ter (1) (i) of the Regulations under the Patent Law) after the patent registration when one receives a warning claiming compensation for damages (Section 65 of the Patent Law) or when it is necessary for creating a written argument (Section 50 of the Patent Law). This system is adopted internationally (Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure and Regulations). However, there are differences in the timing of furnishing the samples between the Japanese and international systems.

The International Convention for the Protection of New Varieties of Plants¹ to which Japan accedes had provided that the same plant variety must be protected by a single form of protection. Therefore, the relation between Japan's Patent Law and the Seeds and Seedlings Law was presenting an issue². However, since this provision prohibiting overlapping protection was deleted in the Convention amended in 1991, which was also ratified in Japan, this overlapping protection issue became an issue of domestic legislation policy. While the Seeds and Seedlings Law was fundamentally amended concurrently with the amendment of the Convention, the amended Seeds and Seedlings Law does not include any provisions concerning overlapping protection. Also, the Patent Law does not have such provisions either. Accordingly, it is interpreted that overlapping protection is not prohibited under the current law.

Today when biotechnology is making progress, a provision prohibiting overlapping protection is considered to be unnecessary. There is a great difference between the patent right and the breeder's right under the Seeds and Seedlings Law. While breeder's rights are registered for specific varieties³, patent rights are often granted for inventions of either a broader scope⁴ or a narrower scope⁵ than such varieties. In these cases, there is no problem in allowing both registrations. If any problem should occur in the future, a provision merely needs to be established to coordinate between the two rights.

(2) Computer Software

(A) Point of Issue

1 This is referred to as the UPOV (The International Union for the Protection of New Varieties of Plants) Convention. The Convention entered into force and the Union was inaugurated in 1968. The Convention was amended in 1978, which facilitated accession by Japan and the United States. Therefore, Japan signed the Convention in 1979 and ratified it in 1982. Later, in 1991, the Convention was drastically revised. Japan ratified the amended Convention in 1998 and concurrently made a fundamental revision of the Seeds and Seedlings Law (Law No. 83 of 1998).

² The specific point of issue was how a registered patent on a new variety of *Artemisia*, *Pentayomogi*, should be treated in relation to the provision of the UPOV Convention prohibiting overlapping protection.

³ For instance, registered as a specific variety such as Koshihikari rice that is resistant against a certain disease.

⁴ For instance, granted for a claim such as a rice plant resistant against a certain disease.

⁵ For instance, granted for a claim such as DNA resistant against a certain disease.

The major part of the structure of modern society is managed by computers, and those computers operate based on software¹. Today, most of the investment in computers is dedicated to software. While software development takes an enormous amount of cost and time, software can be very easily reproduced or counterfeited, often at a negligible amount of cost. A considerable amount of capital investment would usually be required for counterfeiting a general industrial product, but hardly any such investment is required for reproducing software, so software is even more vulnerable to patent infringement than hardware.

Software is often protected by the Copyright Law. Programs were included in protected works upon the 1980 amendment of the U.S. Copyright Act, and subsequently stipulated as protected works also in Japan's Copyright Law amended in 1985, and this move became the global trend. However, there has been growing recognition in recent years that copyright protection is not enough for protecting software, and more people have come to obtain patents for software-related inventions.

Conventionally, the Patent Law had been thought to be unsuitable for protection of software. The main reasons were as follows:

- (i) software does not utilize a law of nature;
- (ii) the time-consuming patent examination does not suit the short life cycle of software;
- (iii) software counterfeiting is often difficult to discover, and the patent publication system is likely to induce infringements instead;
- (iv) patent-related procedures are too detailed to deal with the frequent upgrading of software;
- (v) most software does not involve an inventive step; and
- (vi) the JPO cannot cope with the great number of applications with its present processing ability.

The appropriateness of these reasons may be subject to detailed study, but the point about the law of nature in (i) should be the only one that presents a theoretical problem regarding the patentability of software. The points from (ii) to (vi) are practical problems, so they may serve as reasons for inconveniences in using the patent system, but not as grounds for denying patentability.

The mainstream of legal protection for software seemed to be the Copyright Law in the past, but limitations and problems of copyright protection were gradually revealed, and protection under the Patent Law has gained increased recognition

¹ Software could be boiled down to a use method or calculation method for a computer. It includes not only the program itself, but also the system design drawings, flowcharts, and manuals. For details, see Nakayama, *Sofutowea No Houteki Hogo* (Legal Protection of Software): p. 4.

recently.

(B) Utilization of a Law of Nature

The question regarding the patentability of a software-related invention is whether or not it utilizes a law of nature. The details of this issue are as already mentioned in Subsection 2, Item 1, 2. “Utilization of a Law of Nature.” Not all of the results of people’s mental creative activities are protected. The Patent Law limits the scope of protected inventions by the concept of utilization of a law of nature. This could have been a reasonable method 100 years ago, but today, when new technologies are emerging, this requirement of utilizing a law of nature should be once again reviewed according to the present status of technologies. The direct application of the conventional standard could prevent new technologies from being protected but, on the other hand, excessive expansion of the standard would allow even monopolies running counter to the benefits of society in general, and could obstruct industrial development instead. It is important to decide on a new patentability standard when a new technology emerges, but no such standard has been established so far concerning software-related inventions¹.

Under the present practice, software-related inventions that satisfy certain requirements are deemed to utilize a law of nature. The JPO has released the “Examination Guidelines on Computer Program Related Inventions (Part I)” (1975), the “Implementing Guidelines for Inventions Relating to Microcomputer-Applied Technology” (1982), the Examination Guidelines (1993), Part VIII, Chapter 1, “Computer Software Related Inventions” and the “Implementation Guidelines for Examinations in Specific Fields” (1997), and refers to them in conducting examinations.

There is no internationally-unified standard regarding this issue. It is expected to take some more time until an international consensus can be gained on this problem.

(C) Effect of the Patent for a Computer Software-Related Invention

The effect of the patent right shall be discussed later, so only the point of issue shall be indicated here. Although patentability has been somehow recognized for some computer software-related inventions, the effect of the patent right involves many problems that are yet to be solved. The point of issue is whether the patent right can

¹ Kiyokazu Yamagami, “*Sofutowea Kanren Hatsumei No Tokkyosei - Tokuni Hatsumei De Arukoto No Youken Ni Tsuite* (Patentability of Software-related Inventions - Focusing on the Requirements for Statutory Inventions),” *Hongo Journal of Law and Politics*, No. 3: p. 357.

sufficiently protect the most critical part of a computer software-related patent, that is, the software itself.

Since a medium claim had not been recognized in the past, a software-related invention used to be registered either in the form of a product or a process. Thus, many infringing parties only stored the software part of the invention on a recording medium and sold it, without infringing the entire claim. An argument arose on whether such an act constitutes an indirect infringement. However, as mentioned earlier, a medium claim was introduced in 1997, so the act of producing and selling such recording medium came to constitute a direct infringement, no longer needing to take the form of an indirect infringement. In the future, however, greater development is expected for businesses that do not sell software by recording media, but instead have users use the software on-line. Particularly, the mode of service where a user does not need to store the program on his/her computer, but only obtains the results by accessing the host computer on-line is expected to gain more popularity. Then there would be an argument as to whether or not such an act of use constitutes an infringement; that is, whether or not it corresponds to “working (production, etc.)” as defined in Section 2 of the Patent Law. As software-related inventions involve many unsolved problems, they will likely continue to be subject to discussions in the future.

Subsection 4 Legal Status before Registration

Item 1 Nature of the Right to Obtain a Patent

A patent right becomes effective upon registration (Section 66 (1) of the Patent Law), but one kind of right already takes effect prior to registration. This right is called the “right to obtain a patent” under the Patent Law (Section 33 of the Patent Law). The right to obtain a patent has both aspects as a right to demand an administrative disposition of granting a patent from the state and also as a property right¹. The Patent

¹ Conventionally, the nature of the right to obtain a patent was subject to two conflicting theories: one that viewed it as a civil right (Adachi, *Tokkyo Hou* (Patent Law): p. 32; Suehiro, *Kougyou Shoyuiken Hou* (Industrial Property Law): p. 50) and one that viewed it as a private right (Hatsushirou Miyake, *Tokkyo Hou* (Patent Law): p. 80; Takeuchi, *Tokkyo Hou* (Patent Law): p. 229; Kiyose, *Tokkyo Hou* (Patent Law): p. 57; *Tokkyo Jitsuyou Shinan Hou* (Patent and Utility Model Law) edited by the Study Group on Intangible Property Law, (Shinnippon-Hoki Publishing): p. 1204). There seems to be no use in a discussion that determines the nature of the right a priori. The first thing to do is to decide on the specific content of the right to obtain a patent. It is enough to say that the legal nature of the right has both aspects as a civil right and a private right (Toyosaki, *Kougyou Shoyuiken Hou* (Industrial Property Law): p. 136; Kiku Nagata, *Kougyou Shoyuiken Hou* (Industrial Property Law): p. 372; Gaku, *Tokkyo Jittai Hou Ron* (Substantive Patent Law): p. 172; and others). The court also stated that an inventor’s right is a right to demand a patent, while at the same time it is a substantive right to work or transfer the invention in the Tokyo District Court decision on July 5, 1955, Civil Court Decisions by Lower Courts, Vol. 6, No. 7: p. 1303 (the Solid

Law merely provides stipulations on transfer, creation of a pledge, and effectiveness against a third party regarding the right to obtain a patent. Therefore, the whole picture of the right that the inventor originally acquires (the inventor's right or the invention right) needs to be made clear by academic theories and court decisions. The specific content shall be discussed in the next Item.

The inventor's right is originally obtained by the inventor upon completion of the invention, but in order to gain some protection under the Patent Law, the inventor must file a patent application for the invention, to have the patent registered after examination. However, the content of an invention at the time of completion of the invention and that of the patented invention may not necessarily coincide with each other. What had been considered as one invention could be divided into two applications or filed in the form of multiple claims. In reverse, what had been considered as multiple inventions could be filed as a single application. Also, the specification and drawings can be amended after the filing, or an application can be divided (Section 44 of the Patent Law). In addition, it is possible to convert the application by dividing it up into a patent application, utility model application, and a design application (Section 46 of the Patent Law, Section 10 of the Utility Model Law, and Section 13 of the Design Law).

This indicates that the content of the invention is always subject to changes from the time of the completion of the invention until the patent registration, so the relation between the invention and the registration is different from that between the occurrence of the cause and the relevant recording and registration in a change of a real right. It is not appropriate to assume the subsequent processes at the time of completion of the invention, but the completed invention should be viewed retrospectively from the registered patent. Therefore, it would not be necessary to discuss how many inventions or rights to obtain a patent there were or whether it was a right to obtain a patent or a right to obtain a utility model at the time of completion of the invention. All of these items only need to be determined based on the registered patent.

Item 2 Details of the Right to Obtain a Patent

1. Creation of Right

The right to obtain a patent is originally acquired by the inventor upon

Boiler Compounds case) ([Annotation] Koue Toyosaki, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions), Case 98; Koue Toyosaki, Jurist, No. 161: p. 60).

completion of the invention. As a matter of course, whether or not a patent can be granted for the invention, that is, the patentability of the invention, is not determined until the examination is complete. The inventor is able to work, make profits from, and transfer the invention as long as it is not prohibited by a law or ordinance and does not infringe another party's right. The Patent Law calls this right the "right to obtain a patent." The Patent Law uses this denomination because it only has stipulations regarding the filing of patent applications, but this right does not only enable acquisition of a patent, and should more appropriately be called the inventor's right considering the actual substance of the right.

As invention is a factual act, it cannot be made by an agent, and under Japanese legislation a legal entity itself cannot become an inventor either¹.

2. Enforcement of Right

¹ For details, see Subsection 1, Item 3 "Employees' Inventions."

The inventor and the successor to the right to obtain a patent can work the invention by himself/herself or have another party work the invention, in principle. It is only natural that they can work their own inventions unless they infringe on another party's right, whether or not the inventions are patentable. Moreover, the act of having another party work the invention refers to an actual, rather than legal, matter, and it is different from patent licensing. These aspects are similar to the case of know-how. Know-how can also be worked by the party who owns it, but it does not involve any special right. Therefore, although a party having the right to obtain a patent can work the subject invention by himself/herself, the party does not have a guarantee of exclusive working, the right to stop another party's acts¹, or the right to work the invention even by himself/herself if the working infringes on a third party's right. In other words, no special right is created in relation to the working of an invention, even if one has the right to obtain a patent for it.

3. Right to File a Patent Application (Right to Obtain a Patent)

(1) Transferability

¹ The Tokyo District Court decision on July 5, 1955, Civil Court Decisions by Lower Courts, Vol. 6, No. 7: p. 1303 (the Solid Boiler Compounds case). This is a case where the court did not recognize a petition for prevention of a nuisance based on a right prior to publication of the patent application.

The right to file a patent application, which is part of the inventor's right, has the nature of a property right, so it can be transferred (Section 33 (1) of the Patent Law). It seems natural that the right can be transferred since the right is a property right, but this had not always been a self-evident truth in history¹, so there is some significance in stipulating this fact in a provision.

Transfers are only recognized for property rights, so the inventor's right of credit, to be remarked on later, which is a personal right, cannot be transferred. Therefore, whoever the applicant is, the inventor always has the right to describe his/her name as the inventor in the filing documents, etc. (Section 36 (1) (ii) of the Patent Law).

The transfer of the right to file a patent application, which is a property right, does not have to be in a particular form if it is done before the filing of the patent application, but only needs to be agreed on between the parties concerned². After the filing of the patent application, the transfer of the right to obtain a patent must be reported to the JPO in order to be effective against third parties (Section 34 (4) of the Patent Law).

(2) Establishment of a Security Right

(A) Pledge

¹ In Britain, transfer of the right to file a patent application had not been recognized from the time of the Statute of Monopolies of 1624, but it was finally recognized in the Patent Law as amended in 1949. The United States, which inherited the British law, still does not recognize the transfer of the right.

² The patent application must be filed in order to make the transfer effective against third parties (Section 34 (1) of the Patent Law).

It is clear and undisputable from the provisions of the Patent Law that the right to obtain a patent cannot be made subject to pledge (Section 33 (2) of the Patent Law). However, the purpose of the legislation is not necessarily clear, and there remain some questions regarding its appropriateness, so various different theories exist regarding this matter¹.

The assumable reasons for the provision under the current law include that there is no method to publicly announce the right to obtain a patent and that there is no provision as to the consent of the pledgee regarding amendment of the specification or drawings of the pending patent application². However, these kinds of arguments are unconvincing from the point of view of legislation. It is desirable to promote discussion toward at least allowing a pledge of the right to receive a patent after the application has been filed³. Since transfers are allowed for the right to obtain a patent, there should be no problem in allowing establishment of the right of pledge if provisions on the method of public announcement and the method of amendment of the pending application were stipulated. The denial of the right of pledge tends to prevent the inventor from obtaining loans. While the use of technologies as security is coming to attract attention at present, consideration should be made toward recognizing that such use also fosters venture businesses⁴.

(B) Mortgage

There is no provision in the Patent Law concerning the establishment of a mortgage on the right to obtain a patent, so there is no method for public announcement. Thus, such establishment is not possible.

(C) Mortgage by Transfer

The current Patent Law merely stipulates that the right to obtain a patent cannot

¹ For the various theories and problems, see Nakayama, *Chuukai Tokkyo* (Annotated Patent Law), Vol. 1: p. 268 [Nakayama].

² Oda/Ishikawa, *Shin Tokkyo Hou* (New Patent Law): p. 147; Hisao Iijima, *Chuukai Tokkyo* (Annotated Patent Law), No. 197: p. 83.

³ Takashi Hashiba, “*Tokkyo Wo Ukeru Kenri No Shichiire Ni Tsuite* (Pledge of the Right to Obtain a Patent),” Book Commemorating the Sixtieth Birthdays of Professor Onogi and Professor Saitou, *Teitouken No Jikkou* (Exercise of a Mortgage), Vol. 2 (Yuhikaku, 1972): p. 386.

⁴ For such a purpose, consideration should not only be made as to legislation that allows the use of the right to obtain a patent to be pledged, but also to the broader subject of using technologies in general as security or assets, including utilization of the trust system. See Institute of Intellectual Property, “*Chiteki Zaisanken Tanpo Kachi Hyouka Shuhou Kenkyukai Houkokusho* (Report by the Study Group on the Assessment Method of the Security Value of Intellectual Property Rights)” (1995).

be made subject to pledge, and does not particularly prohibit its use in mortgage by transfer, so mortgage by transfer should be recognized.

While the old Law stipulated that the right to obtain a patent “could not be used as security,” there was a court decision that held that establishment of a mortgage by transfer was effective¹. Taking that into consideration, mortgage by transfer can be considered effective under the current Law, which only prohibits pledges.

As mentioned earlier, there is no theoretical ground for prohibiting the use of the right to obtain a patent as security, and from the viewpoint of opening the way for using the right to obtain a patent as an asset for obtaining loans, it is rather desirable to work toward allowing the use of the right as security as much as possible under the framework of the current Law. Consequently, there is no reason for denying mortgages by transfer in interpreting the current Law.

(D) Foundation Mortgage and Enterprise Mortgage

¹ The Tokyo District Court decision on April 8, 1952, Civil Court Decisions by Lower Courts, Vol. 3, No. 4: p. 471 (the English Typewriting Practicing Machine case); the Tokyo District Court decision on September 24, 1956, Civil Court Decisions by Lower Courts, Vol. 7, No. 9: p. 2593 (the Super Bearing case) ([Annotation] Hisao Iijima, Jurist, No. 197: p. 83). In the latter case, the court stated that one reason for denying the right of pledge was that novelty of the invention would be lost by exercising the right of pledge, and held that mortgage by transfer can be recognized due to being free of such outcome.

The specific things that can constitute a foundation for a foundation mortgage are stipulated in the respective hypothecation laws. Article 11 (5) of the Factory Hypothecation Law and Article 2 (6) of the Mining Hypothecation Law provide that industrial property can constitute a foundation. However, the meaning of industrial property in this context is not necessarily clear. Whether or not the right to obtain a patent is included in this industrial property is a matter of interpretation¹.

The significance of mortgage by transfer is in handling the entirety of the actually-operating company as one group of assets, without breaking up the individual assets of the company, and using that as security. Therefore, it would be meaningless if a factory or a mine could not be operated only by the constituents of the foundation. If the right to obtain a patent or know-how could not constitute the foundation, it could become a serious obstacle for the operations of the company, so these things should also be considered to constitute a foundation.

The problem is how objectively the right to obtain a patent can be viewed as an asset. Regarding this point, the right to obtain a patent can be considered as an established transferable asset².

However, as constituents of a foundation must be described in the foundation inventory, the problem of how to specify the right to obtain a patent will still remain in actual practice.

The Enterprise Hypothecation Law makes the total assets of a joint-stock company subject to enterprise mortgage in order to secure its corporate debentures (Articles 1 and 2 of the Enterprise Hypothecation Law), and the right to obtain a patent is naturally included in such total assets.

(3) Compulsory Execution

¹ Under the old Law, there were theories stating that the right to obtain a patent could not constitute a foundation, because the Law stipulated that it “could not be used as security” (Yasukazu Kagawa, *Shintei Koujyou Oyobi Kougyou Teitou Hou* (Newly Revised Factory and Mining Hypothecation Law (Minato Shuppan, 1973): p. 124). However, no court decisions or theories exist under the current Law.

² Know-how, which considerably overlaps with the right to obtain a patent, is traded as an objective asset (Kenichirou Oosumi, “*Nouhau To Sono Jouto* (Know-how and Its Transfer),” Business law Articles Commemorating the Seventieth Birthday of Professor Komachiya (Yuhikaku, 1964): p. 1), and is the subject matter of investment in kind upon formation of a company (For an opposing theory, see Mokichi Hasebe, “*Iwayuru ‘Nouhau’ No Genbutsu Shusshi Ni Tsuite* (Use of ‘Know-how’ for Investment in Kind),” *Shouji Houmu* (Business Law Affairs), No. 191: p. 4).

Under the Law of Civil Execution, there is no provision to prohibit seizure of the right to obtain a patent. However, Article 131 (12) of the Law¹ mentions things relating to unpublished inventions and copyrighted works as movable property not subject to seizure². This makes it clear that things relating to unpublished inventions (e.g. a machine) cannot be seized, but since unpublished³ inventions themselves are not movable property, their seizure is not directly prohibited by this provision.

The right to obtain a patent is not a thing, so compulsory execution relating to it would mean such an execution on other property. This interpretation is supported by some theories⁴, but denied by some other theories⁵.

The grounds for the theory recognizing compulsory execution include the fact that it is not particularly prohibited under the Law of Civil Execution, and that it is only natural that a transferable property is subject to compulsory execution.

On the other hand, the grounds for the theory denying compulsory execution include the fact that the invention would be made public by the compulsory execution, there is no method for public announcement, the denial can be analogized from the right being prohibited from use in the case of pledge, and it is suggested from the purport of Article 131 (xii) of the Law of Civil Execution.

Compulsory execution concerning the right to obtain a patent involves difficult problems. For instance, there is a need to solve issues such as dealing with the fact that the invention becomes published due to compulsory execution, and there are problems with specifying the subject property, determining the actual execution method, and dealing with the inventor's right of credit. On the other hand, the right to obtain a patent, as well as know-how, which considerably overlaps with that right, are actually

¹ A similar provision was stipulated in Article 570 (1) (xii) of the Code of Civil Procedure before the 1979 amendment, and the provision in the Law of Civil Execution is a colloquial version of it.

² A similar provision is stipulated in Article 75 (1) (xi) of the National Tax Collection Law (except that “*mono* (things),” which is written in kanji in the Law of Civil Execution is written in hiragana in the National Tax Collection Law).

³ The meaning of “unpublished” in this context is not quite clear. There is no doubt that if one describes an invention in a printed publication without filing a patent application for it, the invention is published. However, if a thing relates to a filed invention, there is a question of when it is deemed to be published: upon filing, being laid open, or registration of the invention. By considering the general meaning of “published,” an invention should be regarded as being published when it is laid open to the public, but there is no reasonable ground to conclude that property subject to seizure should be determined based on whether or not the invention has been laid open to the public.

⁴ Gaku, *Kougyou Shoyuiken Hou* (Industrial Property Law): p. 166; Mitsuishi, *Tokkyo Hou* (Patent Law): p. 195; Takino, *Kougyou Shoyuiken Hou* (Industrial Property Law): p. 30.

⁵ Toyosaki, *Kougyou Shoyuiken Hou* (Industrial Property Law): p. 140; Oda/Ishikawa, *Shin Tokkyo Hou* (New Patent Law): p. 148; Kaneko/Someno, *Tokkyo Shouhyou* (Patents and Trademarks): p. 25; Hisao Iijima, *Jurist*, No. 197: p. 84.

being traded as property, so it is unfair not to recognize compulsory execution for them⁶. Prohibition of seizure means that the right to obtain a patent will remain as property of the debtor and that it will not be included in the bankrupt estate (Article 6 (3) of the Bankruptcy Law). If so, then particularly in the case of bankruptcy of a legal entity, there would be trouble as to how the right to obtain a patent should be dealt with after the bankruptcy.

Due to these reasons, compulsory execution for the right to obtain a patent should basically be allowed. The only problem is the actual method. Interpretation should develop toward recognizing compulsory execution, but if there are any inconveniences, legislative measures should also be taken to solve the problem.

The right to obtain a patent is categorized as “other property” under the Law of Civil Execution, so compulsory execution would be conducted in the same manner as the execution of claims (Article 167 (1) of the Law of Civil Execution). According to that law, the court carrying out the execution can order transfer of the right to obtain a patent to the creditor at a value specified by the court instead of bringing it to auction, or can order its conversion into money by an adequate way (Article 161 (1) of the Law of Civil Execution)⁷. Use of this method could prevent the situation of an invention becoming laid open due to compulsory execution. This seems to be the only appropriate method, especially for the right to obtain a patent before the filing of the application.

Next, the subject property must be specified in order to implement compulsory execution. It would actually be considerably difficult to specify the subject property in connection with the right to obtain a patent before the filing of the application, just like in the case of know-how. As there is no means of public announcement, the situation would be inevitably unstable⁸. The creditor naturally cannot file the patent application by mere seizure, but he/she can file the application after the debtor is ordered to transfer the right to the creditor.

The Patent Law does not have any provisions concerning such a disposition for the right to obtain a patent after the filing of the application, so it would be processed by

⁶ The main purpose of a provision to prohibit seizure of certain property is to secure the minimum standard of living and to protect the religious feelings and reputation of the debtor, so it is unfair not to recognize seizure when it is general property of the debtor.

⁷ Although this provision would not have had the right to obtain a patent in mind, it would not be irrational to apply it to the right to obtain a patent.

⁸ Thus, there is much difficulty and instability involved, but this does not serve as a reason for denying the compulsory execution itself. The denial of compulsory execution is unfair for it would only benefit the debtor by sacrificing the creditor. The issue of specifying the property should be solved to a certain extent by accumulation of instances of actual practice.

the same method as in the case of the right before the filing⁹. However, since the procedure is already pending before the JPO in such a case, there should be a provision about a public announcement procedure¹⁰.

4. Inventor's Right of Credit

⁹ There is a theory stating that it is possible under the current Patent Law to give an order to the JPO, which is a third party debtor, not to take the procedures for changing the name of the applicant (Article 145 (1) of the Law of Civil Execution) (Gaku, *Tokkyo Jittai Hou Ron* (Substantive Patent Law): p. 189), but one could say that it is questionable whether the JPO could be regarded as a third party debtor.

¹⁰ The right to obtain a patent is not fixed like a patent right, but may change its form even after the filing by amendment or division. In that sense, legislation may be quite difficult, but it is necessary to get it settled in some way.

The inventor acquires the inventor's right of credit upon completion of the invention. However, in the course of the application procedure the inventor's right of credit is materialized in the form of having his/her name described on the request (Section 36 (1) (ii) of the Patent Law), the Patent Gazette for laying open the application (Section 64 (2) (iii) of the Patent Law), the certificate of patent (Section 66 of the Regulations under the Patent Law; Forms 67 and 68; Article 4^{ter} of the Paris Convention), and other documents. Therefore, it only has a latent existence before the filing. However, it already exists before the filing, so an infringement of it could constitute an act of tort¹.

The inventor's right of credit, which is a personal right, cannot be transferred. However, while the current Law requires recording of the inventor's name in the filing of an application, the Law does not include the description of an erroneous name in the reasons for invalidation. (It is not listed as a reason for invalidation in Section 123 of the Patent Law.)²

5. Relationship with Third Parties

The right to obtain a patent is originally acquired by the inventor upon completion of the invention, and then, after the filing and the laying open of the application to the public, the patent right is finally established by registration. During this process, the content of the right to obtain a patent changes in each phase.

This part studies the right to obtain a patent in relation with third parties.

¹ For instance, if a person files an application for another person's invention by describing that he/she is the inventor, it could constitute an act of tort by infringement of the inventor's personal right.

² Filing of a patent application by a person who does not have the right to file the application is regarded as a misappropriated application, which can constitute a reason for invalidation. However, the question here is not whether or not the application was filed by the lawful right holder, but whether or not an erroneous name has been filled in as the inventor's name in the specification.

Mere working of an invention by a third party does not constitute an act of tort¹. However, if a third party to whom the invention was disclosed or who unlawfully acquired the invention works the invention without prior consent of the right holder, it could constitute an act of tort depending on the mode of the act².

It is clear from the provision of the Patent Law that when the application is laid open to the public the right arises to demand compensation from the person who worked the invention (Section 65 of the Patent Law), but no provision is found on creation of a right to demand an injunction based on the inventor's right³. An invention is often kept secret until the laying open of the application, but it is a separate issue that it can be protected under the Unfair Competition Prevention Law amended in 1990 as long as it satisfies the requirements for a trade secret.

The most important point to be examined here is what kinds of remedies the true right holder has against filing of a misappropriated application by a third party.

Firstly, there is the issue of demand for compensation for damages under the tort law. If a person who does not have the right to obtain a patent files the patent application without the prior consent of the true right holder, it could constitute an act of tort in principle but, specifically, the illegality would be determined by comprehensively considering the mode in which the third party learned about the invention and the circumstances underlying the act of filing, among other factors⁴. Nevertheless, even if it could constitute an act of tort in general terms, it would not be easy to prove the causal relation of the act to the damages and the amount of actual damages.

If a person who filed a misappropriated application has falsely described the name of the inventor, it could constitute an act of tort by infringement of the inventor's right of credit.

The next issue is whether or not the true right holder would be able to demand that the person who filed the misappropriated application return the right to obtain the

¹ The Tokyo District Court decision on July 24, 1968, The Law Times Report, No. 229: p. 231 (the Hard Substance Crushing Device case) ([Annotation] Toshiaki Iimura, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions) (Second Edition), Case 81; Haruo Gotou, *Tokkyo Hanrei Hyakusen* (Second Edition), Case 97). In this case, the court stated that this fact was an extremely apparent truth under the Japanese Patent Law.

² For unlawful gain, see Shouen Ono, "Tokkyo Touroku Mae No Hatsumeishi Shingai Kouji To Hutou Ritoku (Infringement of an Invention and Unlawful Gain Before Patent Registration)," Book Commemorating the Sixtieth Birthday of Professor Taniguchi (1): p. 228.

³ Tokyo District Court decision on July 5, 1955, Civil Court Decisions by Lower Courts, Vol. 6, No. 7: p. 1303 (the Solid Boiler Compounds case) ([Annotation] Koue Toyosaki, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions), Case 98). Although it is a case under the old Law, the same interpretation applies under the current Law.

⁴ For the relationship with an act of tort, see Kawaguchi, *Kouzou To Kadai* (The Structure of and Problems in the Patent Law)," p. 57.

patent⁵.

Although a misappropriated application constitutes a reason for refusal (Section 49 (6) of the Patent Law) and a reason for invalidation after the registration (Section 123 (1) (vi) of the Patent Law), under the current Law there is no provision for the right to demand return of the right to obtain a patent⁶. The prevalent theory in Japan is not to recognize the right to demand return, but there is also a minority theory that tries to recognize it⁷. In general theory, it is difficult to construe the right to obtain a patent as a right having a real right aspect and to recognize that it includes a specific right to demand return, or to construe the right as having an aspect of “quasi-management of affairs” (which allows presumption of the right holder’s amount of damages to be the amount of profits gained by the infringer) as an interpretation of the current Japanese Patent Law. This issue should be examined in detail by dividing it into the following cases:

(1) Firstly, if the person who filed the misappropriated application and the true right holder have agreed to return the right to obtain a patent, procedures can be taken with the JPO to change the name of the applicant as a result of that agreement. Even if it was after the patent registration, a request for registration of transfer of the patent can be recognized as a result of the agreement⁸.

In this case, the true right holder would be in a similar position as the assignee of the right to obtain a patent, so he/she can submit a written agreement or a declaratory judgment and change the name independently, or make a demand of the other party for registration of transfer as a result of the agreement⁹.

⁵ The most prominent treatise on this issue is Kazuhiko Takeda, “*Tokkyo Wo Ukeru Kenri No Henkan Seikyuu Ni Tsuite* (Demand for Return of the Right to Obtain a Patent),” Patent, Vol. 34, No. 7: p. 2. Much of this book owes to Takeda’s treatises.

⁶ The old Japanese Patent Law had stipulated that when a patent could not be granted due to existence of a misappropriated application, the patent application that was later filed by the true right holder would be deemed to have been filed at the time of the filing of the misappropriated application (Section 11). Also, the same applied when the misappropriated application was invalidated. (Section 12). These provisions were not about the right to demand return, but the party whose right was misappropriated had been protected to the above extent.

⁷ Kawaguchi, *Kouzou To Kadai* (The Structure of and Problems in the Patent Law),”: pp. 63-; Gaku, *Tokkyo Jittai Hou Ron* (Substantive Patent Law): p. 175.

⁸ Tokyo District Court decision on May 29, 1987, Court Decision Journal, No. 1240: p. 130 (the Stopper case) ([Annotation] Hidefumi Kuroda, *Tokkyo Kanri* (Patent Management), Vol. 38, No. 7: p. 939).

⁹ In the Tokyo District Court decision on December 21, 1992, Court Decision Journal, No. 1454: p. 139/The Law Times Report, No. 809: p. 199 (the Polyester Composition case), the court stated that the change of the name should be conducted independently. Further, the Tokyo District Court decision on May 29, 1987 (note 8) was a case where one (Y₁) of the joint right holders (X and Y₁) of the right to obtain a utility model changed the name of the applicant to become the sole owner without the consent of the other party, and later agreed to return part of the right to the true right

(2) Secondly, there is the issue of cases where a third party having no authority to do so changes the name of the applicant after the true right holder files the application. In these cases, a change of name to the true right holder should be allowed. Specifically, it would be sufficient to obtain a declaratory judgment on ownership of the right to obtain a patent, and to independently submit to the JPO a notification of change of applicant together with the verdict¹⁰. The JPO must accept this notification of change.

(3) Thirdly, there is the issue of whether or not the true right holder has the right to demand return when a third party who does not have the right to obtain a patent files the application without consent of the true right holder.

Since a misappropriated application has no prior right (Section 39(6) of the Patent Law), if the true right holder files an application later, the patent is granted to the true right holder. However, if a third party files an application before the true right holder, or if any reason for lack of novelty occurs, the application of the true right holder will be refused, so the right to demand return would become a problem. Basically, this case should also be handled by submitting a notification of change of the applicant, attaching the declaratory judgment stating that the person is the true right holder¹¹. However, there remains the problem of whether it is proper for the true right

holder, while at the same time had the utility model registered as a joint owner with Y₂. In this case, the court ordered Y₁ to take procedures to request registration of transfer of the utility model, and ordered Y₂ to take procedures to request registration of the deletion of Y₂ from the names of the applicants.

¹⁰ In past court decisions, the court has held that although it can confirm that the person is entitled to the right to obtain a patent, it cannot go so far as to authorize execution of the procedures for changing the name of the applicant. The Tokyo District Court decision on June 5, 1963, Civil Court Decisions by Lower Courts, Vol. 14, No. 6: p. 1074 (the Automatic Continuous Power Supplying Machine case) ([Annotation] Minoru Iriyama, *Houritsu No Hiroba* (Law Plaza), Vol. 16, No. 9: p. 38; Souji Wakui, *Tokkyo Hanrei Hyakusen* (100 Selected Patent-related Court Decisions), Case 81; Hidekazu Araki, *Tokkyo Hanrei Hyakusen* (Second Edition), Case 108; Nobuo Monya, *Shouji Hanrei Kenkyuu* (Study on Commercial Court Decisions) FY 1963, Case 55; Masuji Hara, *Tokkyo Hanrei Hyakusen*, Case 35). The Yokohama District Court decision on March 29, 1985, Court Decisions Relating to Intangible Property, Vol. 17, No. 1: p. 116 ([Annotation] Hidefumi Kuroda, *Tokkyo Kanri* (Patent Management), Vol. 36, No. 9: p. 1139). The following is a case relating to a trademark right: the Tokyo District Court decision on June 29, 1988, Court Decisions Relating to Intangible Property, Vol. 20, No. 2: p. 260 (the **Chureza case**) ([Annotation] Tatsuki Shibuya, *Jurist*, No. 935: p. 236; Tatsuki Shibuya, *Jurist*, No. 1004: p. 91; Tatsuki Shibuya, *Court Decision Journal*, No. 1291: p. 214; Hiroya Kawaguchi, *Hatsume* (Invention), Vol. 86, No. 2: p. 94).

¹¹ The Tokyo District Court decision on October 30, 1985, *The Law Times Report*, No. 576: p. 88 (the Plastic Element Manufacturing Method case). The court confirmed that the plaintiff has the right to obtain the patent in the above case where the plaintiff asked his friend to file the patent application on his behalf, but the friend filed in his own name as the inventor and applicant. This court decision is considered to have presumed that the plaintiff can independently change the

holder to transfer the title to himself/herself merely by the declaratory judgment, when he/she has not performed any act regarding the patent application. Nevertheless, the true right holder has no other way to recover the right but to take the procedure of changing the applicant, and since the right to obtain a patent still remains even after filing the application¹², the change of the applicant should be recognized based on the declaratory judgment. Yet, it is necessary to prove that the invention made by the true right holder and the invention actually pending before the JPO are identical, and proving this is considered to involve considerable difficulty in some cases¹³.

(4) Fourthly, there is the issue of double assignment of the right to obtain a patent. This issue is resolved as an issue of effectiveness against third parties, and in principle, it is not an issue of demand for return of the right to obtain a patent. However, if the later assignee is in bad faith, the right is not effective against third parties even if the requirements therefor are satisfied. Such case should be treated in the same manner as in (2), and the true right holder should be recognized as being eligible to change the applicant by attaching a document proving that he/she is the true right holder.

(5) Finally, there is the issue of whether the true right holder can demand return when the patent is granted to the person who filed the misappropriated application. Although some theories support the effectiveness of such demand¹⁴, it is considered problematical as an interpretation of the current Law¹⁵. The right to obtain a patent

applicant with this declaratory judgment.

¹² This point may be subject to opposition, because whether or not to file an application is left to the choice of the applicant, and the value of the patent would differ depending on the filing skill of the applicant, while the content of the application could also change by amendment after the filing. The important point here, though, is how the right to obtain a patent should be considered to have changed by the filing of the patent application, from the viewpoint of changing the applicant.

¹³ The fact that the two inventions are the same could be recognized relatively easily in a case where the right to obtain a patent for an employee's invention has been transferred to the employer in an agreement, etc., but the employee filed an application for the invention under his/her own name. In contrast, a complicated problem would occur when the person who filed the misappropriated application has invented something of his/her own and added that achievement to the invention in filing a single application. In such a case, the right to obtain a patent would be jointly held, in principle and, in theory, the true right holder would demand the transfer of his/her share of the right to obtain a patent according to the degree of contribution. Practically, however, it would be difficult to provide proof in many cases.

¹⁴ See note 7.

¹⁵ The court decision in 1963 mentioned in note 10. For details, see Kazuhiko Takeda, "*Tokkyo Wo Ukeru Kenri No Henkan Seikyuu Ni Tsuite* (Demand for Return of the Right to Obtain a Patent)," Patent, Vol. 34, No. 7: pp. 6-. The theory that the conclusion would be the reverse after the patent registration may naturally be subject to argument. For instance, a lawsuit for determining the true right holder cannot stop the progress of the examination process, so the patent could be registered

and the patent right are decisively different, so it cannot be dealt with by merely taking the procedure to change the applicant. The Patent Law stipulates a misappropriated application as a reason for invalidation of a patent (Section 123 (1) (vi) of the Patent Law), so this provision cannot be neglected¹⁶. In that case, the true right holder will demand a trial for invalidation, but if the decision of invalidation is finalized, the patented invention would basically become available for all people to work¹⁷, resulting in an unfavorable outcome for the true right holder¹⁸. Therefore, if a legislative measure were to be taken, it would become necessary to recognize the right to demand return of the right, but there is a mountain of problems to be looked into when the solution of this issue is attempted.

The above are theories about interpretation of the present law attempting to deal with the right to demand return of the right to obtain a patent from the person who filed the misappropriated application within the framework of the procedure to change the name of the applicant. Therefore, the issue cannot be fundamentally resolved merely through interpretation of the law, but rather would require legislative measures.

Item 3 Requirements for Effectiveness Against Third Parties

It is clear from the provisions of the statute that the right to obtain a patent can be transferred, but the requirements for effectiveness against third parties change in each phase from the arising of the right to lapse of the right upon patent registration. The following part reviews such changes in each phase.

1. Before Filing

during the proceeding of the lawsuit. The relation between court lawsuits and the JPO's appeals/trials also involve various other problems, which need to be studied and solved in the future.

¹⁶ There is a fundamental question of whether or not it is appropriate to make a misappropriated application subject to a trial for invalidation. See Nobuhiro Nakayama, "*Mukou Shinpan No Arikata* (Desirable Form of a Trial for Invalidation)," *Gakkai Nenpou* (Annual of Industrial Property Law), No. 5: p. 208.

¹⁷ If the decision of invalidation become finalized, the invention would become available for all people to work, but there are exceptional cases where such working is not possible (e.g. when another right holder exists as in the case of double patenting).

¹⁸ In reality, such a dispute is often solved by sharing the right or concluding a license agreement after consultation between the true right holder and the person who filed the misappropriated application.

As for the right to obtain a patent before the filing, that right only becomes effective against third parties when the patent application is filed (Section 34 (1) of the Patent Law). As there is no means of public announcement before the filing¹, the filing of the patent application is considered to be the only means for the right to become effective against third parties.

When the two assignees of a double assignment file an application on the same date, only the one agreed upon by mutual consultation shall be the applicant with rights effective against third parties (Section 34 (2) of the Patent Law)².

2. After Filing

¹ Possession is regarded as the means of public announcement for movable property, but since inventions are intangible goods, a concept of possession similar to that for tangible goods cannot be applied. Therefore, mere working of an invention or owning of it cannot be regarded as a public announcement. In other words, working or owning of an invention cannot be considered as the basis for presuming a legitimate title to the right, and possession of an invention cannot be made a requirement for effectiveness against third parties.

² The provision in Section 34 (2) of the Patent Law is described as an issue of effectiveness against third parties. However, it was originally prescribed as a provision on the relationship between the applicants and the JPO and, basically, not on the issue of effectiveness against third parties. For details, see Nakayama, *Chuukai Tokkyo* (Annotated Patent Law), Vol. 1: p. 283 [Nakayama].

The succession to the right to obtain a patent after the filing does not take effect unless it is notified to the JPO Commissioner (Section 34 (4) of the Patent Law)¹, so the same naturally applies to its effectiveness against third parties. If the two assignees of a double assignment of the right to obtain a patent make notification about the succession on the same date, only the one agreed upon by mutual consultation shall be the applicant whose succession shall be effective, in the same manner as for the case before the filing (Section 34 (6) of the Patent Law).

A notification of the change of the applicant can be made independently by the successor to the right pursuant to a specific format^{2, 3}. Nevertheless, the JPO Commissioner may order submission of a document proving that the person is the successor⁴, if necessary (Section 5 of the Regulations under the Patent Law).

In the case of an ordinary succession, notification is not required for the succession to take effect (Section 34 (4) of the Patent Law), but the right is transferred concurrently with the occurrence of a ground for succession. However, the successor must notify the JPO Commissioner without delay (Section 34 (5) of the Patent Law). A delay in the notification does not give rise to any special legal effect, but there could be a practical disadvantage in that the JPO would continue to contact the former right holder regarding the right.

Item 4 Joint Ownership of the Right to Obtain a Patent

The joint ownership of the right to obtain a patent occurs in the case of a joint invention or in the case where one's share of the right to obtain a patent is transferred.

In the case of joint ownership, the application must be filed by all of the joint owners (Section 38 of the Patent Law). An application filed by only one of the joint owners will be refused (Section 49 (2) of the Patent Law) or will serve as a reason for invalidation even if a patent had been granted (Section 123 (1) (ii) of the Patent Law).

Generally, one's share of a jointly owned right can be freely transferred under

¹ The old Law stipulated that such notification was required for making the succession effective against third parties (Section 12 (3)). However, with respect to the transfer of a patent right, the act of registration was changed from a requirement for making the transfer effective against third parties to requirement for transfer of the patent right to take effect.

² Form 19, Regulations under the Patent Law.

³ Under the Trademark Law, the court denied the request for carrying out the procedure for changing the applicant, because an application for changing the applicant cannot be submitted by multiple parties in the Tokyo District Court on June 29, 1988, Court Decisions Relating to Intangible Property, Vol. 20, No. 2: p. 260 (the **Chureza case**). It would be sufficient for the party requesting the procedure to take the procedure independently by receiving a declaratory judgment.

⁴ For instance, a written sales agreement, a certified copy of register concerning a merger of legal entities, a declaratory judgment of the right to demand transfer, etc.

the Civil Code, but one cannot transfer his/her share of the right to obtain a patent without the consent of the other joint owners (Section 33 (3) of the Patent Law). This is based on the same reason as that for the similar restriction on the transfer of the share of a jointly owned patent right (Section 73 (1) of the Patent Law).

The fact that one's share cannot be transferred freely means that neither establishment of a mortgage by transfer nor compulsory execution can be carried out without the consent of the other joint owners.

Item 5 Lapse of the Right to Obtain a Patent

The right to obtain a patent lapses in the cases mentioned below¹.

(1) Registration of a patent right

The right to obtain a patent lapses upon patent registration, but rather than becoming lapsed, this can be considered as attaining the original purpose and changing into a more complete right.

(2) Finalization of the decision of refusal

There are various reasons for receiving a decision of refusal (Section 49 of the Patent Law). They include cases where the right to obtain a patent did not exist in the first place or where the right lapsed during the registration process, but the reason is conclusively revealed upon finalization of the decision of refusal.

(3) Absence of an heir

There is a stipulation providing that a patent right lapses when there is no person claiming to be an heir (Section 76 of the Patent Law), but there is no such provision concerning the right to obtain a patent. According to the principle of the Civil Code, property without an heir belongs to the national treasury (Article 959 of the Civil Code), but there is no benefit in attributing the right to obtain a patent to the national treasury. It is more reasonable to have the right lapse in the same manner as a patent right so that all people can work the invention, and such is the prevalent interpretation.

(4) Loss of eligibility to enforce the right

When an alien having an individual eligibility to enforce patent-related rights later loses such eligibility due to abrogation of a treaty or other reason, the right to obtain a patent also lapses.

(5) Abandonment

There is a theory that the right to obtain a patent cannot be abandoned, because

¹ The term “lapse” is used here for convenience, but apart from the original meaning of “lapse,” it also refers to a case of confirming that no right existed in the first place or a case where the right to obtain a patent changed into a more complete right, that is, a patent right.

it is a civil right². Apart from the question of whether or not it is appropriate to consider the right as a civil right, there is hardly any ground for stating that the right cannot be abandoned due to its being a civil right. Since the right to obtain a patent is one kind of property, there should be no inconvenience in recognizing its abandonment.

² Oda/Ishikawa, *Shin Tokkyo Hou* (New Patent Law): p. 150; Adachi, *Tokkyo Hou* (Patent Law): p. 57).