

Japan Joins Global Efforts to Harmonize Patent Systems

By Tsuchiyama Mahito

The International Convention for the Protection of Industrial Property, signed in 1883 in Paris, established basic rules for patent acquisitions internationally and played a role in harmonizing the uniqueness of each nation's patent system. With increasing mutual economic dependency between countries, however, came an acknowledgment of the limitations of this agreement. Efforts to overcome these limitations through the creation of a framework for a new international patent system have increased and during the last year there was considerable progress, with concrete results.

Following the General Agreement on Tariffs and Trade (GATT) Uruguay Round agreement on trade-related aspects of intellectual property (TRIP) at the end of 1993, Japan and the United States agreed to revise their patent systems during the intellectual property rights sector discussion portion of their framework talks in January and August 1994. In response to this development, a decision was also made to broadly revise Japan's patent laws, leading to the start of a new patent system that will be quite workable from an international perspective.

The Patent Office believes that there will be a renewed, stronger push to adopt the World Intellectual Property Organization's (WIPO) patent accord from the middle of this year, so it appears that as the worldwide patent system enters a new stage, 1995 will be a year to remember.

Different countries; different rules

Japan's first patent law came with the enactment in 1871 of patent regulations which, as part of Japan's national efforts to modernize during the Meiji era, incorporated aspects of Western systems. The patent laws promulgated at that time recognized only individual Japanese applicants and not those of corporations or foreigners. Under the

principles for granting patents as well, patents were granted not to the first applicant but the first inventor. These provisions were enacted using the U.S. system as the model, in particular with the adoption of the "first-to-invent" doctrine drawing heavily upon the U.S. philosophy of protection for the invention. However, these laws were also subsequently revised several times and, with the recognition of corporations and foreigners under the current regulations under the "first-to-file" principle, have come to resemble the European system in many respects.

Because their systems were developed to reward invention and promote the development of each nation's own industries, the methods of viewing patents and patent systems differed widely in Japan, the U.S., and Europe, reflecting each nation's individual history and culture. Unique in philosophy and form, the U.S. system in particular is unlike any other developed nation's.

While the Japanese and European systems protect inventions, they also attempt to maintain a balance so that overprotection does not hinder industrial development. The U.S. system, however, is characterized by a strong emphasis on protection of the inventor's rights and a relative minimization of the cultivation of industry.

For example, in the U.S. only the inventor can apply for a patent, while in Japan and Europe companies to whom inventors have transferred patent rights can also undertake application procedures. Further, the U.S. employs the first-to-invent doctrine, under which patents are granted to the person who first invented an idea, but Japan and Europe apply the first-to-file system, under which rights are granted to the first person who files a claim for the invention, regardless of timing.

The U.S. system also differs greatly from those in Japan and Europe with respect to the length of patent and public disclosure of patent application

details. In contrast to Japan and Europe, where the contents of an application are disclosed 18 months after the filing, there is no system for public disclosure of patent applications in the U.S. where the contents are made public only after the patent has been granted.

Moreover, in Europe and Japan a patent's length is counted from the day a claim is filed up to a maximum of 20 years, while in the U.S. it has been set at 17 years from the day that the patent is granted and, as such, the system functions so that the period during which patent rights are held does not commence until a patent is obtained. This makes it possible for an applicant to intentionally delay the review process, acquiring the patent rights after ensuring that the technology has caught on, referred to as a "submarine patent."

Japan, the U.S., and Europe all have formal protest systems in place, but in contrast to the American and European systems, which follow the granting of patents, Japan's system only recognizes protests prior to the granting of a patent.

Different as the systems were, few problems arose during the period when economic activities primarily took place within each separate nation. However, the thriving cross-border economic and trade activities of today often lead to tremendous problems. In particular, differences between the U.S., which has no system of patent application disclosure and whose system for determining the length of patents rights also differs, and Japan and Europe have mired the industrial world in considerable confusion over the issue of submarine patents.

Under the U.S. system, third parties cannot discover the content of a patent application until the patent is granted and, as such, once a patent is effected the numerous foreign manufacturers who had continued to employ a widely available technology in manufacturing activities could suddenly one day be faced with a patent infringement claim

Draft of Patent Harmonization Accord and Comparison of Patent Systems in Japan, the U.S., and Europe

WIPO Patent Harmonization Accord Draft	Japan	US	Europe (EPO*)
1. Principle for granting patents First-to-file	First-to-file	First-to-invent	First-to-file
2. Public disclosure of patent application contents To be disclosed after 18 months from the date of application, without delay	18 months	No system of public disclosure (disclosure follows issue of patent) — public disclosure system to be introduced	18 months
3. Time limits for reviews Upon request, screening to commence promptly and be completed within two years after starting	An average of 28 months processing time from the date of a request for review (as of the end of 1993)	An average of 19 months processing time from the date of application (as of the end of 1992)	An average of 31 months processing time from the date of a request for review (as of the end of 1992)
4. Period of patent validity At least 20 years from the date the application is filed	15 years from date of public notice of application; 20 years or less from date of application — to be altered to 20 years from date of application	17 years from date of issue of patent (no ceiling related to patent application date)	20 years from date of patent application
5. Administrative rescission After granting of patent rights	System of formal protests before granting of patent to be changed to protest after granting of patent	Post-patent issuance review system	Post-patent issuance system of formal protest

*EPO = European Patent Office

from the U.S. inventor and compelled to pay huge sums in damages.

In a typical example, an individual American inventor, Jerome Remelson, applied for a patent for "Technology for Automatic Imaging Analysis to Inspect for Product Flaws" in 1954 and was granted a patent in 1992. This technology was already in fairly widespread use by the Japanese auto industry in 1992. In the 38 years between the filing of the application and the granting of the patent no one was able to learn of the existence of the invention, and in 1992 11 Japanese car manufacturers were

suddenly named in a patent infringement suit, demanding that they pay tremendous sums in patent royalties.

Global changes

While it had previously been considered natural that patent systems would vary according to country, re-examination of the confusion arising from those differences tied in with global moves to harmonize patent systems. The following issues in particular were deemed to be problem spots and in need of harmonization: the first-to-invent rule versus the first-to-file doctrine; whether or not

a system of open disclosure of application contents prior to the granting of a patent was needed; methods to restrict the length of the screening process; patent length; and whether, from an administrative standpoint, the system for rescission of patent rights should precede or follow the granting of a patent.

These issues indicated basic principles and future directions and pushed Japan and other nations to study them and adopt the WIPO agreements to harmonize patent systems, starting in 1985, and the December 1993 GATT TRIP pact. The bilateral agreements reached

by the intellectual property rights working committee at the Japan-U.S. framework talks in January and August 1994 were also quite significant.

The draft proposal for a patent harmonization agreement put forward by WIPO in March 1990 was postponed at the beginning of 1994 due to the Clinton administration's reversion to a more cautious stance. The draft drawn up after study and modifications by experts from various nations was deemed the easiest for each country to accept among the several proposals that had been studied and was considered a milestone in the harmonization of patent systems.

With regard to the contentious issues the draft proposed the following: adop-

tion of the first-to-file rule; open disclosure of application contents 18 months after the filing of the application; swift review upon receipt of a request and completion of the screening process within two years of the starting date; patent duration of at least 20 years; and an administrative rescission system to follow the granting of patent rights.

On the other hand, the previously agreed-upon TRIP treaty proposed with regard to patents: priority for a country's citizens, and that most-favored nation treatment be used as the guiding principle; patent protection to apply to all technology sectors, including pharmaceuticals, foodstuffs, and chemical substances; and that the duration of a patent be at least 20 years.

In addition, under the Japan-U.S. framework talks' intellectual property rights agreement, Japan promised to accept applications submitted in English, to change the system for filing protests from before to after the granting of the patent by January 1, 1996 and to implement other measures. From the U.S. side, restricting patent validity to 20 years following the filing date by promoting rationalization of patent lengths, and introduction of an early disclosure system from January 1, 1996, so that the contents of a patent claim would be made public 18 months after the filing date (resolution of the submarine patent issue) were agreed.

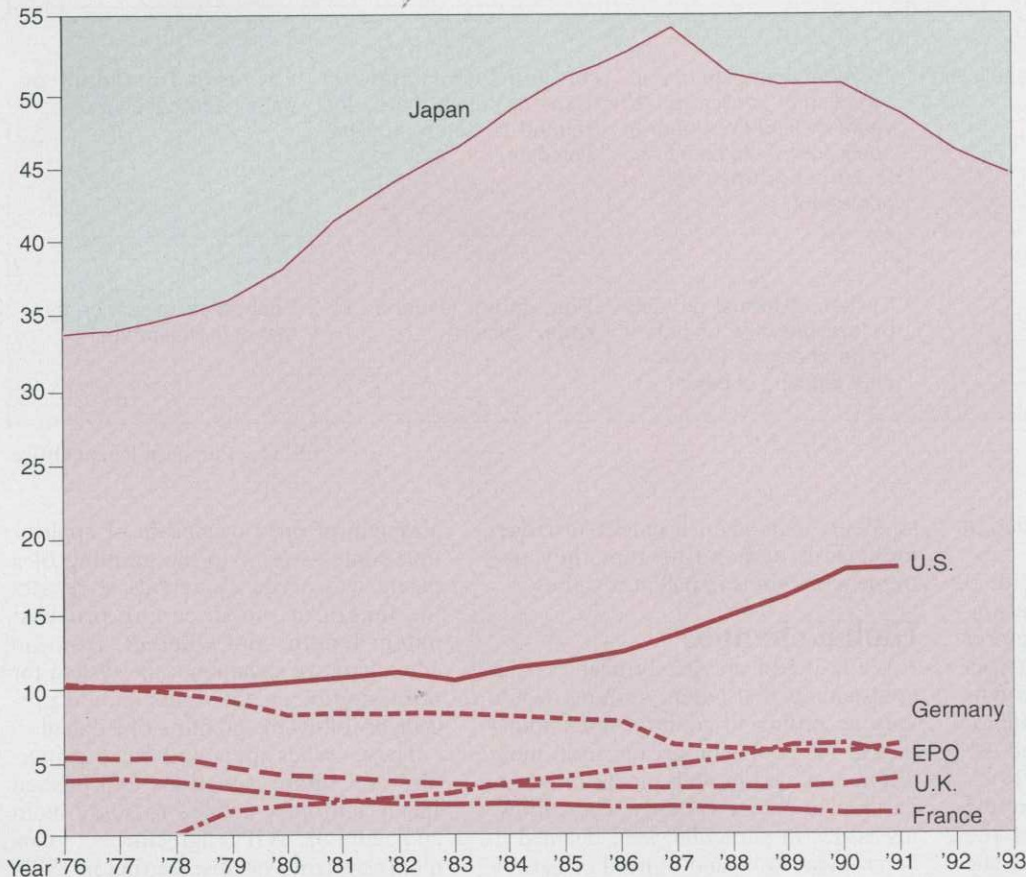
While referring to this as a "bilateral" agreement, the revisions to the systems will be applied to third countries, therefore the significance of the U.S. agreement to introduce a public disclosure system that will do away with submarine patents. According to sources at the Patent Office, "European nations could hardly believe their own ears when they heard this."

In response to these global trends and multilateral/bilateral agreements, the Ministry of International Trade and Industry (MITI) submitted proposals for amendments to the Patent Law, incorporating extensions of patent lengths and additional items that would be eligible for patents (in accordance with the TRIP agreements) and acceptance of English applications (in line with the framework talks' intellectual property rights subcommittee agreement), to a recent special Diet session, where they were successfully passed. The amended law took effect July 1, 1995, and the Patent Office expects that "from an international perspective, the Japanese system will then have absolutely no defects."

For example, under the current law a patent's duration is

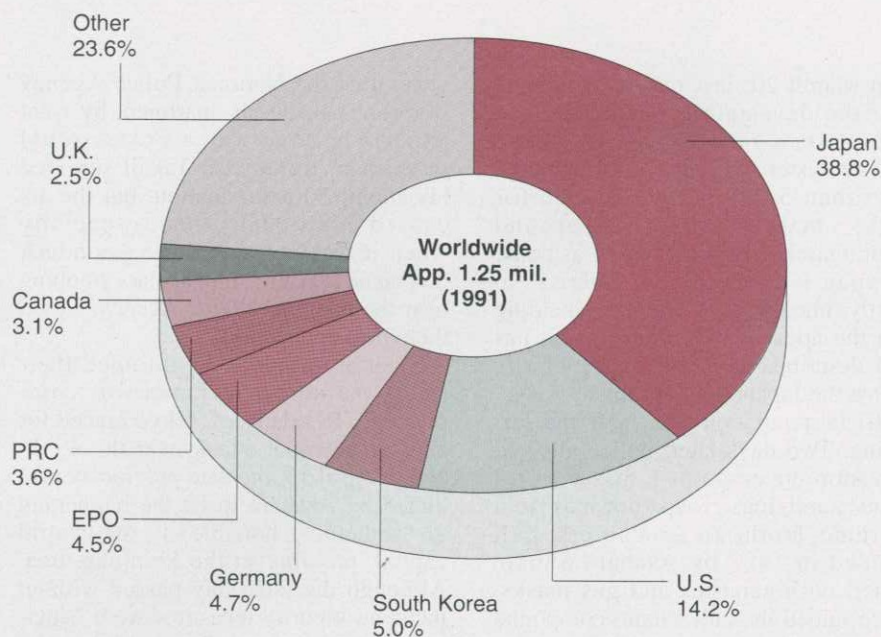
Number of Patent and Utility Model Applications in Major Nations

Patent applications (10,000)



Note: Until 1993 for Japan and 1991 for other countries, does not include designated number of EPC (European Patent Convention) applications

Percentage of Patent and Utility Model Applications by Country



Source: 1991 WIPO Statistics, EPO Annual
Note: Designated EPC applications not included

considered to be 15 years from the date of publication in the *Patent Gazette* of the official notice of granting of a patent for an idea for which an application had been made, and 20 years or less from the date of the application. Under the revised law, the review period will be included in the term of the length of the patent, and patent lengths will uniformly be made 20 years from the date of application.

Moreover, "new materials manufactured by manipulating atomic nuclei," excluded from eligibility for patents since 1959 based on the premise that Japan was technologically behind, have now become eligible, making inventions from every sector of every field of technology patentable. This change was made in the estimation that in the future materials would increasingly be produced through atomic nucleus conversion engineering in medical care, biotechnology, and other fields.

English applications will be accepted

to make it even easier for foreign individuals and corporations to file for patents, on the condition that within two months a Japanese translation be submitted for review. The previously complex procedures for recognition of corrections to translation mistakes will also be eased and reformed.

Further, the switch from a system of formal objections prior to the granting of patents to following a patent's approval promised by Japan in the intellectual property rights subcommittee of the framework talks has been incorporated into the latest revisions to the law.

With these amendments MITI and the Patent Office have on the one hand placed a heavy emphasis on expediting the granting of patents and are in the process of promoting "paperless" patent applications, an increase in the number of qualified examiners, the employment of private expertise, and rationalization of patent applications in an effort to

achieve an average of 24 months for screening during 1995, an objective of the ongoing Structural Impediment Initiatives (SII).

Efforts to computerize patent applications began in December 1990, and with electronic applications already making up 95% of the total, attempts are now being made to penetrate and expand the online notifications of assessment results and rejections that were begun in July 1993.

The Japanese, U.S., and European patent offices have already begun moving forward rapidly on the creation of an integrated, tripartite database containing English summaries of patent publications, the development of CD-ROM-based programming and user software containing information about patents in an effort to disseminate patent data to the general public, and other forms of cooperation related to patent information. In November 1994 it became possible to use a portion of the CD-ROM programming software containing patent data being developed by the three patent offices. The Japanese Patent Office has already begun preparations to produce a CD-ROM containing English summaries of patent information with diagrams and plans to begin offering it to developing countries and the private sector in summer this year. The three patent offices are also moving ahead with plans to release the AIDS-related patent data they possess on a worldwide information network, the Internet.

In the past it was accepted as a matter of course that patent systems would differ from country to country, but in the effort to cope with a global economy and technological advances, perceptions have changed significantly. Today, efforts to coordinate systems internationally and cooperate on their management are quickly moving forward while computerization and networking of patent data is increasing.

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