2 Research and Study on Ability Evaluation Systems for Intellectual Property Professional Services

To promote a "Cycle of Intellectual Creation", it is indispensable to expand and improve intellectual property professional services. In Japan, however, there is no system for objectively evaluating the ability of persons involved in those professional services, except for the qualification of patent attorneys. As a result, it has been pointed out by critics that the utilization of human resources having necessary expertise and experience is not sufficient and that not enough newcomers are entering the profession.

Recognizing these circumstances, Section I summarizes the current situation of intellectual property professional services and the ability evaluation systems applicable to persons who provide those services, together with a map illustrating ability evaluation systems for intellectual property professional services.

Section II shows the results of our questionnaire survey on the actual utilization of present ability evaluation systems and the systems required at companies and patent firms, together with comments on the survey results from major industry organizations.

Section III summarizes our investigation of the current situation of ability evaluation systems in major foreign countries.

Section IV concludes with the results of our study on ability evaluation systems for intellectual property professional services.

I Ability Evaluation Systems for Intellectual Property Professional Services

1 Overview of Intellectual Property Professional Services

(1) Background

In today's "Age of Knowledge" where knowledge and information create large added value, both the public and private sectors in Europe and the U.S. are working hard to reinforce their intellectual property strategies in. Under these circumstances, in strengthening the international competitiveness of our national industries and in supporting new business of small and medium-sized enterprises and venture companies, it is necessary to promote a "Cycle of Intellectual Creation" ranging from creation and legal protection to utilization of intellectual property. It is also necessary to encourage business activities based on the strategic utilization of those cycles. In supporting those efforts, it is indispensable to expand and improve intellectual property professional services.

To expand and improve professional services, it is important to effectively utilize persons who are already engaged in work relating to intellectual property. Since employees at intellectual property departments of private companies and patent firms, in particular, have basic knowledge about industrial property rights, technical expertise, or sufficient practical experience through on-the-job training, it is desirable to promote the utilization of those people. It is noted, however, that, generally, the

professional ability of those human resources is not fully utilized because there is no system to objectively evaluate the ability of persons engaged in intellectual property professional services, except for the qualification of patent attorneys. On the other hand, it has also been mentioned that, although considered essential, not enough newcomers are entering this field. This is due to the fact that there is not much incentive for people to enter this field for the same reason.

(2) Proposal to Introduce Ability Evaluation Systems

The document entitled "Report on Revision of Patent Attorneys Law (Benrishi-hou no kaisei-tou ni kansuru toushin)" submitted by the Industrial **Property** Council for Rights (Kogyo-shoyuken shingikai) to the Minister of International Trade and Industry in December 1999 pointed to the need to consider the introduction of ability evaluation systems in Japan for evaluations and transactions of intellectual property. It discussed the matter, considering the background described above, from the viewpoints strengthening incentives to promote the participation of human resources with various talents and the promotion of appropriate transactions of intellectual property.

In the document entitled "Report of Research and Study on Intellectual Property Professional Services (Chitekizaisan-senmon-service ni kansuru houkokusho)" prepared by our institute in March 2000, it was also found that about 60 percent of the companies surveyed felt the need for official ability examination systems to evaluate the skill of intellectual property professional service providers.

2 Current Situation of Intellectual Property Professional Services

(1) What are Intellectual Property Professional Services?

Intellectual property professional services is the collective name for services that occur at all phases of the so called Cycle of Intellectual Creation, ranging from creation and legal protection to utilization of intellectual property.

An inventor may receive various services at each stage of creating a technology, protection and utilization of legal rights. It is possible for the inventor to perform all such services by himself. However, it is much more effective for the inventor to receive high quality services from professionals in order to obtain "broad and strong" rights and to promote their strategic utilization.

Examples of intellectual property professional services include (i) research and development (digging out inventions), (ii) application procedure, (iii) patent translation, (iv) patent information search, (v) patent distribution, (vi) action for disputes over intellectual property, and (vii) other related services.

(2) Summary of Ability Evaluation Systems Applicable to Intellectual Property Professional Service Providers

To ensure the quality of intellectual property professional service providers and to offer an evaluation reference for service users, there are now several ability evaluation systems available, which can be divided into the following two major categories.

In the first one, there are "qualification systems for exclusive provision of services" where the quality of service providers is ensured through state-recognized qualifications based on passing national examinations. In this system, those passing the examinations are given an exclusive license to provide services, like attorneys at law and patent attorneys.

In the second one, there are "ability certification systems" where ability certifications are granted by the state or private organizations. Unlike the first one where the state authorizes the exclusive provision of services, the purpose of these programs is to ensure the quality of the services and to offer references for evaluating the ability of service providers to users by making the results of ability evaluation public. Some of these systems are legislated, but do not provide any qualifications to exclusively provide the service. There are also other systems, not legislated, that authorize persons who have passed examinations to provide services within specific areas under the license of the examining body.

(i) Patent attorney

The patent attorney is a national qualification provided under the Patent Attorneys Law to grant the qualification holders the exclusive right to services. provide In the patent attorney examination, the applicants are examined on their knowledge of industrial property laws (patent law, utility model law, design law, trademark law, and treaties), as well as technology or other legal affairs, and their ability of practical application thereof. About 70 percent of patent attorneys have a technical background. All patent attorneys are required to become a member of the Japan Patent Attorneys Association where the members are able to keep informed of revisions to various systems and to maintain the ability to deal with up-to-date technology through its training system. (1) Scope of service

For a patent to be issued, the application for a patent on an invention shall be followed by official examination procedures. Only patent attorneys or attorneys at law can act as agents who provide professional services for payment and as an occupation in these procedures (Article 75 of the Patent Attorneys Law (Restriction of Services by Persons Other than Patent Attorneys or Patent Service Incorporations)).

The core service of patent attorneys is acting as an agent for prosecuting applications for industrial property rights before the Japan Patent Office (for example, examination and trial procedures). In addition, their services include providing expert opinions and acting as an agent ad litem for lawsuits of annulment of the trial decision. They are also admitted to act as assistants to attorneys at law in patent infringement litigations or the like. The patent attorneys exclusively provide these services (excluding lawsuit-related services), and other persons are prohibited by the Patent Attorneys Law to provide such services for payment (Article 75 of Patent Attorneys Law).

With the increasing demand for intellectual property professional services, patent attorneys are expected to play a greater role as experts of technology and intellectual property rights. For example, it is suggested that they assist in intellectual property management systems of companies at all stages of the "Cycle of Intellectual Creation" ranging from identification of inventions to utilization of rights.

The most recent revision of the Patent Attorneys Law has extended the services of patent attorneys to include: 1) agent service in the procedure before the customs for injunction against importation of counterfeit products, 2) agent service in the arbitration procedure for industrial property rights, semiconductor circuit layout right (maskwork right), work under the

copyright law, and specific unfair competition or in the settlement procedures accompanying the arbitration procedure (these revisions came into force on January 6, 2001), and 3) intermediary and agent services and consulting service concerning license contracts on industrial property rights, semiconductor circuit layout right, work under the copyright and know-how (this revision is to come into force on a date designated by government ordinance within two years after promulgation (April 26, 2000) of the new Patent Attorneys Law).

2 Number of patent attorneys

The number of patent attorneys is 4,534 as of January 21, 2001. Although their number has been growing in recent years, this number is still not sufficient to support about 400,000 patent applications per year. Therefore, the patent attorney examination has just been reviewed in view of increasing their number.

③ Patent attorney examination

In the patent attorney examination, applicants must take five mandatory subjects in industrial property laws (patent law, utility model law, design law, trademark law, and treaties) and three subjects elected in advance by the applicant from the 41 optional subjects. The rate of successful applicants is around 4%, which shows the difficulty to pass the examination.

In view of increasing the number of patent attorneys, the examination system has recently been reviewed. The contents of the review cover the addition of copyright law to the examination subjects, review of the current 41 optional subjects, simplification and rationalization of examination details, exemption of part of the examination subjects to holders of other qualifications, etc. The newly revised examination is to start in 2002.

(ii) Attorneys at law

① Scope of services

The Attorney at Law is a national qualification provided under the Practicing Attorney Law and is granted to persons who have completed eighteen-month apprenticeship at the Legal Training and Research Institute of the Supreme Court after passing the national bar examination.

An attorney at law exercises legal practice exclusively in litigation and in the handling of other disputes as an agent ad litem and play a major role in general legal services. Attorneys at law are qualified to become a patent attorney, and may, without any further registration as a patent attorney, engage in the business of a patent attorney (Article 3 of Practicing Attorney Law). In the future, attorneys at law are expected to be more positively involved in legal services including dispute settlements relating to

intellectual property.

The number of attorneys at law is about 18,200 as of January 2001. However, the number of attorneys at law specializing in intellectual property and technology is very small. It is recognized that this number of attorneys at law is too small to deal with disputes about intellectual property that are expected to be intensified in the future (The number of attorneys at law who have registered as a patent attorney is 283, and only 10% of them have technical background).

National bar examination and apprenticeship In the national bar examination, the applicants must take examinations on six major Laws (Constitution, Civil Law, Commercial Law, Criminal Law, Law of Civil Procedure and Law of Criminal Procedure). The ratio of successful applicants is around 3%, which shows extreme difficulty to pass the examination. Successful applicants shall complete eighteen-month apprenticeship at the Legal Training and Research Institute of the Supreme Court to obtain the qualification to register an attorney at law. The aforementioned apprenticeship period includes three months of initial training, 12 months of practical training at courts, prosecutors' offices, and law firms, and three months of final training. (iii) Patent translation

① Scope of services

The recent increase in the number of patent applications has led to a growing demand for patent-related translation services, which are now provided not only by specialized patent translators but also by many translators of other fields.

Patent translation services cover translation between various languages for many patent-related documents, including application specifications, prosecution-related documents after application, official gazettes, priority certificates, lawsuit-related documents, contracts, overseas technical literature, etc. The website (homepage) of the Japan Patent Office lists 45 translation companies specializing in intellectual property as of February 2001.

The preparation of application specifications in Japan is only admitted to patent attorneys. (Article 6 of Patent Attorneys Law Enforcement Order).

② Ability certification systems

There is no qualification system to allow the exclusive provision of translation services. As described below, however, state or private organizations operate ability certification systems for general translation. Examples of such systems are the "Translation skill examination (Honyaku ginou shinsa)", the "Examinations of basic translation ability (Honyaku kiso nouryoku kentei)", and the "JTF translation skill examination (Honyaku kentei)". In addition, there

are ability certification systems on English language ability in general such as the "STEP Test in Practical English Proficiency (Jitsuyou eigo ginou kentei)" and the TOEIC® Test^(*1).

As there is no qualification or certification system dedicated to patent translation, ability certification systems for general translation or English are utilized to evaluate patent translation skill. In some of those certification systems, test also includes optional questions to evaluate patent translation skill. However, those questions in many cases are not provided as mandatory, and no information on whether the applicant elected patent-related questions is attached to the certificate.

(iv) Information provision and searching

Patent search services are provided by information service providers. In addition, the Japan Patent Office and information service providers offer various on-line databases to the public. Service users commission information service providers to conduct information searches or search for information by themselves using on-line databases.

In 1999, the Japan Patent Office opened the Industrial Patent Digital Library (IPDL) on their website, which has allowed access to patent information to be rapidly improved. In response to this event, "Search advisors (Kensaku-shidou advisor)", who are experts in patent information search, are now stationed on a full-time basis at Intellectual Property Centers in each prefecture throughout Japan to provide free advice and consultation about patent information search in order to promote IPDL.

Scope of services

Private patent information providers provide various services such as: (a) Internet/online information service (providing their own patent information database on an on-line basis or through the Internet), (b) information searching and retrieval service (pre-application searching, searching for rights, researching the activities of other companies concerning patent applications, etc.), (c) reference service (procurement and copying of domestic and overseas references), (d) preparation of patent maps (producing patent maps, information showing technical trends in specific areas by sorting and analyzing patent information), and (e) CD-ROM production service containing (producing CD-ROMs information about specific areas). The website of the Japan Patent Office provides a list of providers of various patent information services.

② Ability certification systems

There is no officially authorized qualification

to exclusively provide information searching services. As described below, however, ability certification systems are operated by the state and private organizations. These systems concern not only patent searching but also general information searching. One example is the examinations for Qualification of Database Searchers (Database kensaku gijutsusha nintei shiken) that is widely used by information search specialists.

The examination of aforementioned Qualification of Database Searchers includes questions about patent information searching, which account for 20 to 30% of all questions in the examination. However, those questions are optional, and no information on whether the applicant elected those questions is attached to the certificate.

On the other hand, "Search advisors" receive education and training on general knowledge, laws, and practice relating to patent information searching after beginning employment.

(v) Patent distribution

Patent distribution services are provided by patent distributors. In addition, intellectual property departments at companies engage in patent distribution as part of their own business. "Patent distribution advisors (Tokkyo-ryutsu advisor)" offer guidance and consultation services, too. Although patent distribution requires no qualification, no acts such as those provided for under the Patent Attorneys Law and the Practicing Attorney Law can be conducted as business by persons other than attorneys at law and patent attorneys.

At present, there is no ability certification system established for patent distribution business. The Japan Patent Office has commissioned The Japan Technomart Foundation to provide training to foster persons engaged in intellectual property transactions.

① Intellectual property transaction dealers

The "intellectual property transaction dealer" refers to a person who provides consultation, advice, brokerage, and other similar services for technology and methods in intellectual property. Their services cover a wide range from patent license brokerage to supporting commercialization of patented technology. The remunerations for their services take various forms such as retainers and commissions for each contract concluded.

At present, intellectual property transaction dealers do not need any special qualifications to provide services, as long as those services do not

^(*1) TOEIC is a registered trademark of Educational Testing Service (ETS).

conflict with the services such as patent applications and negotiations for contracts exclusively provided by attorneys at law and patent attorneys.

In Japan, intellectual property transaction dealers are small in number and not widely known. (The number of organizations who are registered in Technomart's databsase intellectual property transaction dealers is 33 as of March 2001. See the website of the Japan Technomart Foundation.) For this reason, the Japan Patent Office collects and provides information on transaction dealers on its website to make their services more widely known to the public, to increase social recognition of the industry, the convenience of users, and to improve services by promoting competition among transaction dealers. These activities are aimed at stimulating intellectual property transactions.

The Japan Technomart Foundation holds "basic training" and "practical training" programs for fostering transaction dealers.

② Patent distribution advisers

To promote patent distribution, the Japan Patent Office has commissioned the Japan Technomart Foundation to dispatch patent distribution advisors to the Intellectual Property Centers located in each prefecture throughout Japan. Those advisors offer free advice and consultation service about patent licenses and other matters.

Those advisors are composed of two types: Full-time, generalist advisors (96 as of February 2001), who introduce patents owned by universities and research institutes to local companies, and registered, specialist advisors (about 1,050 as of February 2001) who, while supporting the generalist advisors, provide detailed services on a short-term basis according to the specialized, local needs of each case.

The full-time patent distribution advisors receive training about intellectual property laws and search methods for patent distribution databases for about one month after beginning employment.

(iv) Others

Other service providers in intellectual property field include ① Technology Licensing Organizations, ② intellectual property staffs at companies, ③ assistant staffs at patent firms, ④ consultant engineers (Gijutsu-shi), and ⑤ technical illustrators (technical illustration ginou-shi).

As described below, ⑥ the Jurisprudence Examination (Hougaku kentei shiken) (Japan Law Foundation) and the Japan Business Law

Examination (Business jitsumu houmu kentei) (The Tokyo Chamber of Commerce and Industry) are also utilized as a reference system for ability evaluation.

① Technology licensing organizations (TLO)

Technology licensing organizations (TLO) are corporations that engage in patent applications for technology developed by universities and public research institutes and transfer of research results to private companies. With the Law for Promotion Technology Transfer of University (abbreviated)(*2) coming into effect in 1998, TLOs have been making efforts in technology transfer. TLOs are expected to act as a driving force the "Cycle of Intellectual Creation" by creating new industries that have their origins in academic institutes, and by returning part of the profits to researchers for additional research funds to promote research at academic institutes. The number of TLOs approved by this Law was 17 as of February 2001, compared to four in 1998.

② Intellectual property staff at companies

Many of the major and medium-sized enterprises in Japan have their own intellectual property staff who engage in a variety of professional services such as identification of inventions from technological developments, acquiring legal rights, licensing agreements, and utilization of rights resulting from inventions. The total number of staff members throughout Japan is estimated at about 12,000. Some of the leading companies have more than 100 intellectual property staff members each, while many of the small- and medium-sized enterprises and venture companies have no such staff members at all. At any rate, most of the intellectual property staff members have no patent attorney qualification. The total number of in-house patent attorneys is 473. ("Chitekizaisanken ni kansuru kigyo doko chosa", March 1998, Japan Patent Office)

The aforementioned staff members are trained in various kinds of training programs organized by the Japan Intellectual Property Association for its member companies and by Japan Institute of Invention and Innovation.

3 Support staff at patent firms

Patent firms retain not only patent attorneys but also many other staff members engaged in patent services. The number of these staff members is estimated at about 8,000 throughout Japan.

The staff of patent firms is divided into clerical staff who manage costs, deadlines, customer lists, etc. and technical staff who support to prepare application specifications based on their expertise and experience. Many patent

^{(*2) &}quot;Daigaku-tou ni okeru gijitsu ni kansuru kenkyu-seika no minkan-jigyosha eno iten no sokushin ni kansuru horitsu" (Law No. 52, May 6, 1998).

attorneys have years of practical experience as technical staff prior to passing the qualification examination.

Although not directly related to intellectual property services, the following qualifications are also concerned with the services in some points.

① Consultant engineers

The "consultant engineers" is defined as a "legally registered person who provides services such as planning, research, design, analysis, test, and evaluation in areas that require a high-level of expertise in science and technology, or who offers consultation services on these matters, under the name of consultant engineer or *gijutsushi*".

Therefore, the consultant engineer system is an ability certification system for specialists in technology and is closely related to the services in technological development and commercialization of patent technology. However, they cannot provide services that are only admitted to persons qualified under the Patent Attorneys Law and other laws.

⑤ Technical illustrators

In every technical field, the preparation of drawings for industrial products and machines is regarded as a high-level specialized skill, which is also required for the illustration of drawings for patent applications.

This certification system was established by the Ministry of Labor to evaluate the ability to illustrate various drawings, such as those mentioned above, including drawings for patent applications.

Unlike patent attorneys and attorney at law, this certification does not admit the exclusive provision of professional services.

6 Jurisprudence examination and Japan business law examination

With the increased number of legal disputes and litigation, the need for legal action in corporate activities is growing. These systems have been established mainly for law students and other people engaged in legal practice at companies.

As legal practice is exclusively provided by attorneys at law who have passed the national bar examination, these systems do not authorize successful applicants to exclusively provide services. However, it has drawn attention as systems for encouraging students and other people engaged in legal practice, because, until now, there have only been difficult examination systems, as represented by the national bar examination and the civil service examination.

(3) Training Systems

There are several training systems to secure the quality of service providers. These systems provide training and issue certificates to participants who have completed certain training courses. In these systems, trainees are not directly evaluated as in the case of examination systems, but are educated according to the programs for an extended period of time. As a result, the systems are considered to contribute to the development of ability in a different manner from examination systems.

As typical examples, training programs are presented by the Japan Patent Attorneys Association, the Japan Intellectual Property Association, Japan Institute of Invention and Innovation, and the Japan Technomart Foundation. ("Interim Report on the Informal Gathering for Considering the Way of Training in Intellectual Property Field (Korekara no chitekizaisan bunya no kenshu no arikata wo kangaeru kondankai chukan hokoku)" (the Japan Patent Office, November 15, 2000)).

(4) A Map of Ability Evaluation Systems for Intellectual Property Professional Services

From the above descriptions, it is possible to draw a map of ability evaluation systems for intellectual property professional services, as shown below:

	Qualifications to exclusively provide services	Ability certification systems		Training systems
		Patents and other intellectual property	Not necessarily intended to evaluate ability for intellectual property	
Applications	*Patent Attorney		-	*Japan
Patent disputes	*Attorney at law			Intellectual Property Association
Patent translation			*Translation skill examination *Basic translation ability examination *JTF (translation examination) *STEP Test in Practical English Proficiency *TOEIC® Test	*Japan Patent Attorneys Association *Japan Institute of Invention and Innovation
Patent searching			*Qualification of Database Searchers *Qualification of Basic Knowledge and Skills for Database Searching	
Patent distribution				*The Japan Technomart Foundation
Others			*Consultant engineer *Technical illustrators *Jurisprudence Examination *The Japan Business Law Examination	

II Survey of Domestic Need for Ability Evaluation Systems

1 Purpose and Summary of Questionnaire Survey

This survey was conducted for the purpose of identifying the present situation of ability evaluation systems and what ability evaluation systems are required for intellectual property professional services.

Questionnaires were given to 1,368 companies (which include 759 member companies of the Japan Intellectual Property Association and 609 small- and medium-sized enterprises) and 586 patent firms that are considered service users. The following questions were asked.

- ① How are you using existing intellectual property professional services?
- ② What kind of ability evaluation systems do you need?
- ③ What do you think of the services covered by ability evaluation systems?

The survey were conducted at the end of 2000, and replies were received from 451 companies (response ratio: 33.0%) and 103 patent firms (response ratio: 17.6%).

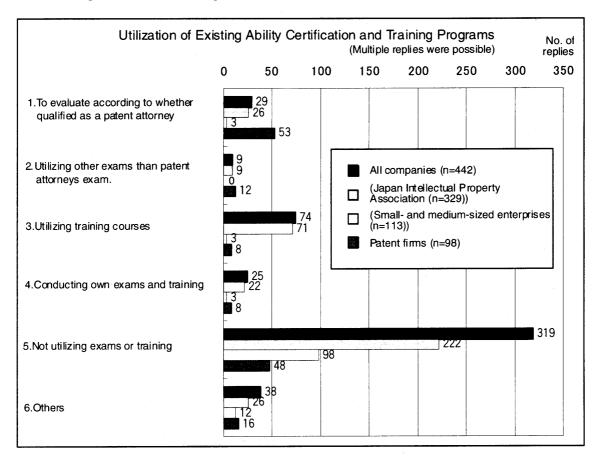
2 Questionnaire Results

(1) Ability Evaluation Systems

(i) Existing ability evaluation systems

For the question regarding whether they have ever utilized existing ability certification and training systems (multiple replies were possible), 72% of the company respondents replied that they have not utilized any such system. Of the responses from patent firms, 54% replied "to evaluate according to whether or not qualified as a

patent attorney", and 49% replied that they have not utilized any such system.



For the question regarding what systems they have utilized among the existing ability examination and training systems, the TOEIC(r) Test was utilized most as an certification to evaluate the "translation ability for technical text", while training programs of the Japan Intellectual Property Association were most utilized as general training systems.

Regarding the deficiencies in the existing ability certification and training systems, many of the respondents replied in their free comments that in the area of general business skill, "negotiation and coordination ability" cannot be sufficiently evaluated. They further responded that in the area of intellectual property services, "ability to identify inventions" and "ability to prepare specifications" cannot be sufficiently evaluated. Most of the comments about the "ability to prepare specifications" were given by patent firms.

- (ii) Patent translation
- ① Present situation of translation services for foreign applications

At many of the companies who responded, the number of translations they dealt with was less than 20 per year, while 13% of the

respondents dealt with more than 100 translations per year.

The answers on outsourcing of translation services showed two clear trends: About 16% of respondents carried out all translations in-house, while about 72% of the respondents outsource all translations.

Regarding the responses from patent firms, the firms that carried out less than 100 translations per year accounted for about 71% of the total, while those performing more than 300 translations per year accounted for only 21% of the total.

The patent firms that held not more than three in-house translators accounted for about 69% of the total, while those holding more than 20 in-house translators accounted for only 7% of the total.

② Evaluation of translators/required ability

Many of the respondents highly evaluated the ability of their translators in terms of "general translation ability" and "patent translation experience".

On the other hand, as for the ability they require of the translators, many of the respondents replied that "knowledge of

technology" is most important, and "patent translation experience", "general translation ability" and "satisfying delivery requirements" are next most important.

Both company respondents and patent firm respondents showed a similar trend in their comments in this respect.

3 Requirements for expertise/need for translators

The respondents who replied that knowledge of technology is important were asked the question: In which technology filed high-level expertise is required in addition to general translation ability? All of them said, in any field, but especially in software and biotechnology.

As for the question concerning areas in which demand for translators are increasing, respondents pointed to "software" and "electrical and electronics fields".

Both company respondents and patent firm respondents showed a similar trend in their comments in this respect.

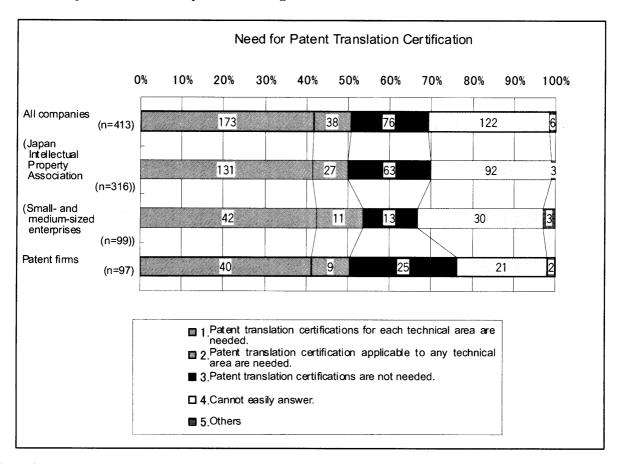
4 Legal knowledge for patent translation The respondents who replied that legal knowledge is important were asked the question: What legal knowledge is important? They said that the knowledge of "laws concerning industrial property rights in foreign countries" is the most important. The next most important is, they replied, a knowledge of "Japanese laws concerning industrial property rights".

Both company respondents and patent firm respondents showed a similar trend in their comments in this respect.

5 Need for ability certification systems for patent translation

As for the need for ability certification systems for patent translation, about half (51%) of the company respondents replied that some certification system is needed. The answers "Not needed" and "Cannot easily answer" accounted for 18% and 30% of the total, respectively.

About half (50.5%) of the patent firm respondents also replied that some certification system is needed. And the answers of "Not needed" and "Cannot easily answer" accounted for 26% and 22% of the total, respectively.



6 Utilization of ability certifications for patent translation

The respondents who replied that ability evaluation systems for patent translation are necessary were asked the question: How would you utilize ability certifications? Most of the replies, whether by company or patent firm respondents, were that they would utilize those systems as evaluation criteria when selecting patent translation contractors.

The most common response by patent firm respondents was that they would use the systems

as "criteria for employment of workers" and for "evaluation of employees". This shows that many of the patent firms are dealing with patent translation in their business.

- (iii) Patent searching
- ① Evaluation of search service providers/ required ability

For the question concerning search service providers whom they are currently using, respondents ranked the ability of the providers as satisfactory, except for their "knowledge for determining patentability" and "fees".

On the other hand, as for the ability they

On the other hand, as for the ability they require of the search service providers, respondents replied that knowledge of technology is the most important. The next most important were "knowledge of technology classification" and "satisfying delivery requirements (speediness)".

Both company respondents and patent firm respondents showed a similar trend in their comments in this respect.

② Need for search service providers

The respondents who replied that knowledge of technology is the most important were asked the question: In which areas is there an increased need for search service providers? Respondents replied that there is a shortage (more than two percentage points) in every area, especially in "software" and "biotechnology".

Both company respondents and patent firm respondents showed a similar trend in their comments in this respect.

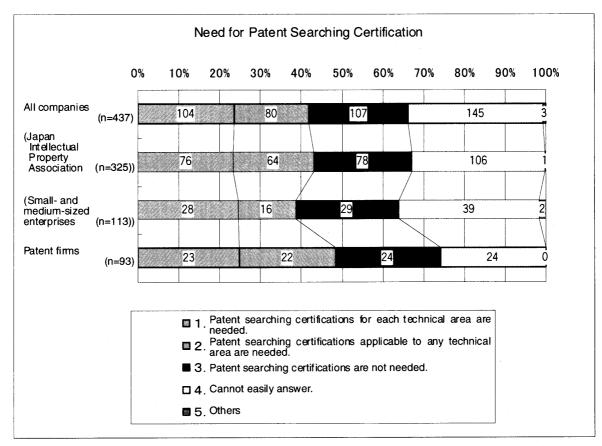
③ Need for ability certification systems for patent searching

About 42% of the company respondents replied that some ability certification system for patent searching is necessary.

The replies "Not needed" and "Cannot easily answer" accounted for 24% and 33% of the total, respectively.

About 48% of the patent firm respondents replied that some ability certification system is necessary. The replies "Not needed" and "Cannot easily answer" accounted for 26% and 26% of the total, respectively.

In comparison with the replies of company respondents, the ratio of replies indicating the need for some ability certification system was larger, while the ratio of the "Cannot easily answer" replies was smaller.



4 Utilization of ability certification systems for patent searching

The respondents who indicated the need for some ability certification system for patent searching were asked the question: How do you intend to utilize such a system? Many of the replies, whether by companies or patent firms, were that they would use it as an evaluation criteria when selecting outside contractors for patent search services.

In contrast to the similar questions offered about patent translation certifications, the replies that they would use it as "evaluation criteria when selecting outside contractors for patent search services" were smaller in number; there were more replies that they would use it for evaluation of employees and for encouraging them to develop their ability.

(iv) Patent distribution

① Ability needed for patent distribution

Regarding questions about the ability needed for patent distribution, most of the replies by company respondents were that the "ability to evaluate the value of intellectual property" is the most important. The next most important was "negotiation ability".

According to the replies by patent firms, the most important was the "ability to evaluate the value of intellectual property", and the next most important were "knowledge of business establishment", "knowledge of technology", and "negotiation ability".

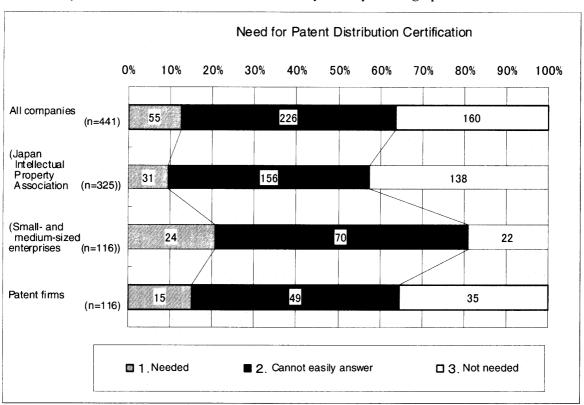
② Need for ability certification systems for patent distribution

When asked about the need for ability certification systems for patent distribution, 12%, 36%, and 51% of the company respondents replied "Needed", "Not needed", and "Cannot easily answer", respectively.

Regarding the responses from patent firm respondents, 15%, 35%, and 50% of them replied "Needed", "Not needed", and "Cannot easily answer", respectively.

Regarding the responses from company respondents, most of the member companies of the Japan Intellectual Property Association replied "Not needed" (42%), compared with the replies by small- and medium-sized enterprises where "Needed" surpassed "Not needed" (20% v. 19%).

Comparing the response "Needed", the patent firms surpassed the company respondents by three percentage points.



3 Utilization of ability certification systems for patent distribution

The respondents who replied that ability examination systems are necessary were asked the question: How do you intend to utilize ability certification systems? Many of the company respondents replied they would use them as "evaluation criteria when selecting outside contractors".

Many of the replies by patent firms were that they would use them as "evaluation criteria when selecting outside contractors" and "evaluation criteria when recruiting new employees".

4 Implementation of ability certification systems for patent distribution

The respondents who replied that ability certification systems are necessary were asked the question: How do you think ability certification systems should be implemented? Most of the company respondents said that the ability certification should be conducted through an "practical skill test with a model case".

On the other hand, many of the responses by patent firms were that the ability certification can be "to certify the completion of training courses".

⑤ Reason for "Not needed"

The respondents who replied that ability certification systems are not necessary were asked the question: Why are they not necessary? About 80% and 60% of company respondents and patent firm respondents, respectively, replied; "It is impossible to evaluate the ability of patent distribution through certification systems".

(v) Others

Many comments were given regarding other ability evaluation systems that respondents think are necessary. Many companies replied they need ability evaluation systems for "preparation of specifications and other documents" and "in-house legal protection work (such as identification of inventions and development of patent strategies)". On the other hand, "preparation of specifications and other documents" occupied the greater part of the replies by patent firms.

(2) Required Specialty of Patent Attorneys

(i) Replies by company respondents

The question was: In which areas do you think there is a shortage of patent attorneys? "Litigation" occupied the largest part of the replies, and next were "software" and "license agreements". There was not much shortage in the areas of "trademarks" and "designs".

Comparing the member companies of the Japan Intellectual Property Association and small-and medium-sized enterprises, the former suggested an extreme shortage for only "software" among the technical fields, while the latter expressed a general shortage for "software", followed by "biotechnology", "chemistry" and "mechanics".

As for other areas, the member companies of the Japan Intellectual Property Association indicated a great shortage for "litigation" and "license agreements". The small- and medium-sized enterprises indicated an extreme shortage for "license agreements".

Comparing the shortage by type of industry, "software" has the greatest shortage of patent attorneys among all industries (except chemistry).

As for other fields, the shortage was high for "litigation" and "license agreements" in the electrical and mechanical industries, "litigation" for the chemical industry, and "license agreements" for the construction industry.

(ii) Replies by patent firms

The question was: In which areas do you intend to employ or add specialist patent attorneys at your patent firm? In technical areas, "electrical and electronics fields" was first, and

"software" was mentioned next. No shortage was indicated for "designs", "technology transfer", and "copyrights".

In reply to the question: In which fields do you think there is a shortage of specialist patent attorneys in the intellectual property business circle, the answers were that there was a great shortage of specialist patent attorneys for "software", "electrical/electronics" and "biotechnology" in technical areas. For "litigation", "license agreements", "technology transfer", "copyrights" and "unfair competition prevention law", there was indicated an impression of a greater shortage than in the case of individual patent firms.

3 Comments on Survey Results by Organizations Concerned

The Japan Patent Attorneys Association, Japan Intellectual Property Association, Japan Institute of Invention and Innovation, and other organizations concerned gave the following comments about the results of the "Questionnaire for Intellectual Property Professional Services".

(1) General View about Qualification Systems

There were some comments said that there is no need for new systems to evaluate professional ability because there is no specific inconvenience with the existing systems. On the other hand, there were comments that since quality of service is emphasized today, it is desirable to have measures to evaluate it objectively.

There was a comment: It is thought that many people among the public and persons in charge of patents at small- and medium-sized local enterprises recognize the necessity of ability evaluation systems. However, the survey results show that recognition of the need for ability evaluation systems by company and patent firm respondents was much lower than expected.

In addition, there were comments such as: qualifications should be authorized considering the experience of providing services; evaluation systems should accurately reflect the actual quality of service and provide continuous maintenance of quality of professionals; patent attorneys should be required to take "qualification renewal examinations" at regular intervals to improve their ability.

(2) Patent Translation

Most of the comments showed agreement to establishing an certification system for "patent translation". The comments were varied with regards to details: Certification systems should be separate in examination categories and contents according to technical fields (many); it is concerned that advanced machine translation in the future will lead to a decrease in demand for labor-intensive translation (multiple); successful applicants should be given a certificate after receiving training for patent systems and preparation of specifications.

(3) Patent Searching

There were pros and cons concerning the need for ability evaluation systems for "patent searching". Some of the affirmative comments said that the certification systems should be separated in examination categories and contents according to technical fields.

(4) Patent Distribution

Many of the comments questioned the need for certification systems for "patent distribution".

(5) Establishment of Other Certification Systems

The following comments were given.

- There should be an certification system for auxiliary staff at patent firms to evaluate their ability in patent practice such as preparation of specifications.
- There should be a "general certification system for industrial property rights" withmultiple levels.

The proposal for a "general certification system for industrial property rights" as described above suggested that certification systems for specific abilities such as "patent translation" and "patent searching" should not be separate but integrated into a certification system including supplement examinations for necessary for the applicant's expertise in addition to a common examination for "industrial property rights in general".

Ⅲ Situation in Foreign Countries

To get information on the situation of ability evaluation systems in intellectual property in foreign countries (excluding attorney at law and patent attorney), we investigated the current situation of those systems in developed countries (the U.S., Germany, and the U.K.).

(1) The U.S.

There is no special ability evaluation system for "patent translation", "patent searching", or "patent distribution" in the U.S. The ability evaluation for those services is left to the market.

As for "patent distribution", service providers are required by law to disclose information about their achievements so that their ability can be fairly evaluated in the market.

Although not specialized for intellectual property, people called "paralegal" provide legal

services as assistants to attorneys. Some of the organizations in the legal community have their own ability evaluation systems.

(2) Germany

"Patent Attorney Assistant" (Patentanwaltsgehilfe) is an ability evaluation system for intellectual property in Germany. This system is provided in law as an authorized certification to assist patent attorneys.

There is no special ability evaluation system for "patent translation", "patent searching", or "patent distribution" in Germany. However, general translation services are regulated under a professional training and qualification system. Although this qualification does not allow for exclusive provision of translation services, it is actually needed by people when engaging in translation services.

(3) U.K.

There is no special ability evaluation system for "patent translation", "patent searching", or "patent distribution" in the U.K. In the area of "patent searching", patent attorneys provide a variety of services.

With respect to "patent translation", a translation must be accompanied by the signature of translators when filed with the UK Patent Office. It is said that anyone can act as an agent for patent applications in the U.K.

IV Conclusion

As described above, this study covers I the present situation of ability evaluation systems in intellectual property field, II the need for ability evaluation systems in intellectual property field, and III ability evaluation systems in intellectual property field in foreign countries. From the results of the study, we have reached the following conclusions:

- 1. There is no ability evaluation system for directly evaluating the ability of intellectual property professional services other than the "patent attorney" and "attorney at law" as qualification that authorize the exclusive provision of services.
- 2. The results of questionnaire survey covering major companies, small- and medium-sized enterprises, and patent firms showed that existing ability certification and training programs are not utilized much. The following points were also revealed.
- ① 50% of the member companies of the Japan Intellectual Property Association, 54% of the small- and medium-sized enterprises, and 51% of the patent firms expressed the need for an ability

evaluation system for "patent translation". On the other hand, 20%, 13%, and 25% of them, respectively, replied that such a system is not needed.

- ② 43% of the member companies of the Japan Intellectual Property Association, 39% of the small- and medium-sized enterprises, and 48% of the patent firms expressed the need for an ability evaluation system for "patent searching". On the other hand, 24%, 26%, and 26% of them, respectively, replied that such a system is not needed.
- ③ 10% of the member companies of the Japan Intellectual Property Association, 21% of the small- and medium-sized enterprises, and 15% of the patent firms expressed the need for an ability evaluation system for "patent distribution". On the other hand, 43%, 19%, and 35% of them, respectively, replied that such a system is not needed. As for the reasons that such a system is not needed, the reply "it is not possible to evaluate the ability for patent distribution through certification systems" accounted for 78% of the total.
- ④ Some of the respondents suggested that there should also be ability evaluation systems for "identification of inventions" and "preparation of specifications and responses to official communications".
- 3. The "patent attorney assistant" system (Patentanwaltsgehilfe) in Germany is included as one example of ability evaluation systems in the intellectual property area (excluding attorney at law and patent attorney qualification systems). However, we were unable to locate any other ability evaluation systems in foreign countries.

(Researcher: Takashi Ohno)

