3 Research and Study on the Trend of New Areas (Business Methods)-related Inventions

With respect to inventions relating to new areas (business methods), research was conducted last fiscal year about the ideal method of protection for computer programs and business-related inventions under the patent system as well as research and study specifically on the actual situations of examination practices at the tri-lateral patent offices in Japan, the U.S. and Europe.

This fiscal year, another study was carried out about the efforts made by industrial communities in Japan, the U.S. and Europe with respect to business-related inventions, by conducting a questionnaire survey targeting 1,411 Japanese companies, studying how those Japanese companies were actually dealing with business method patents, and interviewing European and U.S. companies. Further research and study on the parliamentary, administrative and judicial trends in Japan, the U.S. and Europe was made on the following issues: the revised Examination Guidelines, and recent court precedents in Japan, the bill of "Business Method Patent Improvement Act of 2000", the movements of the U.S. Patent and Trademark Office, court precedents and doctrines on business method patent, and the AIPLA White Paper in the U.S., and the revision of Article 52(2) of the EPC and the Pension Benefit System Partnership decision in Europe.

I Trend in Japan

1 Revised Examination Guidelines

With the rapid development and diffusion of information technology (IT) including the Internet, business-related inventions have gained more attention and the necessity for clarifying the "Examination Guidelines for computer software related inventions" has been increasing. And as the distribution pattern of computer programs via networks has become popular, proper protection of computer programs according to the actual situations of transactions has been demanded. For these reasons, the "Examination Guidelines for computer software related inventions" (*1) were revised on December 28, 2000.

There are three points achieved in this revision as follows: (1) the revised Guidelines are enriched with more case examples concerning judgments on the inventive step of business -related inventions so that those who are not familiar with the patent system can clearly understand the contents of the "Examination Guidelines for computer software related inventions", and clarify the method for making judgments on the examination of whether persons equipped with knowledge in both individual business fields and the computer technology field (persons skilled in the art) can easily come up with the invention (whether the invention has the inventive step); (2) the revised Guidelines clearly mention that, in addition to "storage medium in which a computer program is recorded" (applicable to the applications filed on and after April 1, 1997) that was included in the patentable subject matter under the Operational Guideline, (*2) a "computer program" which was not recorded in any medium (applicable to the applications filed on and after January 10, 2001) shall be treated as "an invention of product"; and (3) the revised Guidelines clearly state that "software" itself can be treated as an "invention" within the meaning of the Patent Law and demonstrate that "software" shall not be considered as an "invention" unless the information processing using the "software" is actually embodied through the use of hardware resources.

It should be noted that, under the revised Examination Guidelines, a business method itself (pure business) which is a man-made arrangement per se or a method using only such an arrangement shall not come under the "invention" provided in Article 2(1) of the Patent Law, and shall not be patentable subject matter.

2 Recent Judicial Precedents

International Scientific, Co., Ltd. (hereinafter called IS), arguing that Bidcash, Inc., Web Money, Co., Zero, Inc. and Digital Check, Inc. had infringed its Japanese patent granted for the invention of "Charging system for time-limited use of the Internet" (Japanese Patent No. 2939723), filed a petition for provisional disposition (kari-shobun) before the Tokyo District Court for injunction against the use of this system by those four companies. The Tokyo District Court dismissed the petition for

^(*1) Available on URL (http://www.jpo.go.jp/info/tt1212-045.htm)

^(*2) Available on URL (http://www.jpdl.jpo.go.jp/PDF/Sonota/hobin/index.html)

provisional disposition on December 12, 2000.(*3)

The "charging system for time-limited use of the Internet" is a system for charging fees for services delivering music and game data via the Internet through the use of a pre-paid type Internet card so that a user can freely enjoy the Internet without signing up with an Internet provider. In this system, the connection from the client to the provider's terminal server is completed after it is authenticated in the authentication database stored The authentication server. utility time authenticated in the extensible authentication database till the connection-rate of the client becomes zero, and the fees are charged according to the renewal of the connection-rate data in the extensible database.(*4)

The Tokyo District Court concluded that IS's allegation that its patent had been infringed was irrelevant and the petition lacked grounds to stand on, since IS's system patent did not satisfy the requirements for alleging an infringement.

3 Movements in Industrial Communities

(1) Report on the Questionnaire Survey Concerning the Trend of Business -Related Inventions

In the course of this research and study, a questionnaire survey were conducted during the period from November through December in 2000 for the purpose of investigating the trend of business-related inventions, targeting member companies of the Japanese Bankers Association,

the Japan Securities Dealers Association, the Marine and Fire Insurance Association of Japan, the Japan Intellectual Property Association and the Japan Franchise Association and small- and medium-sized and venture companies. Replies were received from 488 companies of the 1,411 target companies, and the response rate was 34.6%.

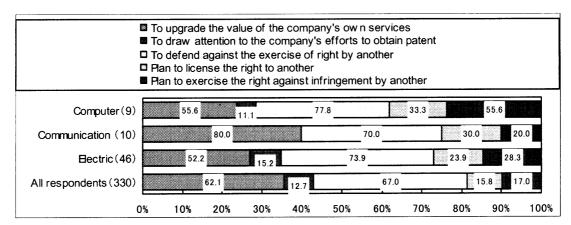
(i) Analyses in general and by industry

Companies that replied to the survey were classified into 12 categories of industry, and comparative analyses in general and by industry were carried out. The 12 categories of industry were: oil and chemical; metal and mechanical; other manufacturing; electrical; communications; computer; software and information services; banking; insurance; securities; trade wholesale and retail companies; and others.

Q2-4 Purpose of patent applications (all that apply selected)

67% of all respondents (330 companies in total for this question) selected "to defend against the exercise of right by another" and 62.1% selected "to upgrade the value of the company's own services." According to the analysis by industry, almost all categories of industries have the same tendency, 55.6% of the computer companies (9 companies in total) and 28.3% of the electric companies (46 companies in total) selected "plan to exercise the right against infringement by another" 33.3% of the computer companies and 30% of the communications companies (10 companies in total) selected "plan to license the right to another".





^(*3) The decision is available on URL(http://www.courts.go.jp/)

Tokyo District Court, H12(Yo)22138, Case of civil provisional disposition on patent right, December 12, 2000

Tokyo District Court, H12(Yo)22139, Case of civil provisional disposition on patent right, December 12, 2000

Tokyo District Court, H12(Yo)22140, Case of civil provisional disposition on patent right, December 12, 2000

Tokyo District Court, H12(Yo)22152, Case of civil provisional disposition on patent right, December 12, 2000

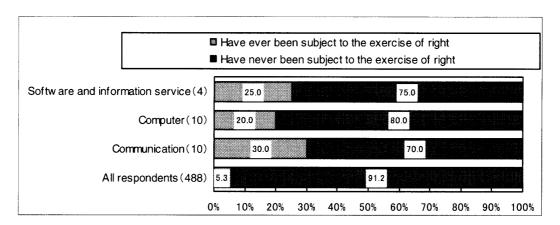
^(*4) Yoshikazu Tani "Business Patent; Sono Shutoku to Katsuyo", p.164 (Japan Institute of Invention and Innovation (*Hatsumei-Kyoukai*), 2000).

Q2-8 Experience of being subject to the exercise of right by another

91.2% of all respondents (488 companies in total) selected "have never been subject to the exercise of right." By industry, 30% of the communications companies (10 companies in

total), 25% of the software and information services companies (4 companies in total) and 20% of the computer companies (10 companies in total) selected "have been subject to the exercise of right."

Q2-8 Experience of being subject to the exercise of right



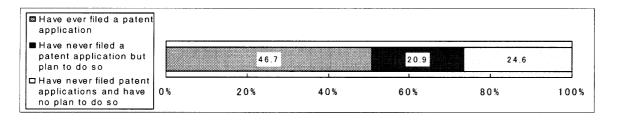
(ii) Comparison analysis between the survey results in 1999 and 2000

Experience of a patent application on business-related inventions in 1999 and 2000 (Q2-1)

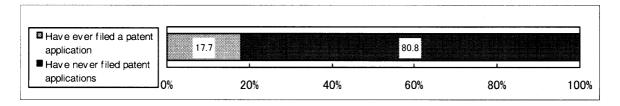
While in the survey of 1999 17.7% of all respondents (469 companies in total) selected

"have filed a patent application", in this years survey, of all respondents (488 companies in total), 46.7% selected "have filed a patent application" and 20.9% selected "have never filed patent applications but plan to do so", the sum of the companies in these answers amounted to 67.6%.

Q2-1 Experience of a Patent Application on Business-Related Inventions in the Survey of 2000 (total respondents: 488 companies)



Q2-1 Experience of a Patent Applications on Business-Related Inventions in the Survey of 1999 (total respondents: 469 companies)



(iii) Analysis by group

Comparison analysis was conducted according to the following three groups of respondents.

① 313 companies belonging to the Japan

Intellectual Property Association (hereinafter called JIPA members)

2 92 small- and medium-sized enterprises and venture companies (hereinafter called small

/ventures)(*5)

③ 83 companies belonging to any of the Japanese Bankers Association, the Japan Securities Dealers Association, the Marine and Fire Insurance Association of Japan, or the Japan Franchise Association (hereinafter called financial, distribution and others)

Q2-3 Experience of filing the request for substantial examination

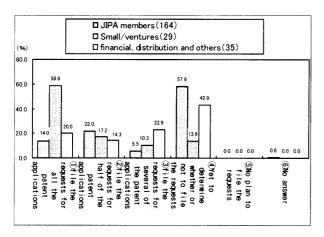
14% of the JIPA members and 20% of the financial, distribution and others selected "file the

requests in all the patent applications" while the small/ventures that selected the same option amounted to 58.6%.

Q2-5 Establishment of business-related inventions in society

8% of the JIPA members and 8.4% of the financial, distribution and others selected "desirable to the company" while the small/ventures that selected the same option amounted to 40.2%.

Q2-3 Experience of filing the request for substantial examination

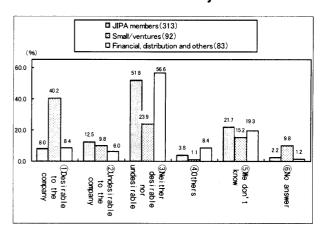


(2) An Example of Efforts to Obtain Business Method Patents in the Printing Industry

As an example of the efforts to obtain business method patents in the printing industry, the actual efforts of Toppan Printing Co., Ltd is reported here.

Toppan Printing filed a Japanese patent application "Method for Supplying on Advertisement Information and Registration Method Thereof" on July 14, 1995, and obtained the patent (Japanese Patent No. 2756483) on March 13, 1998. This seems to be one of the earliest patents related to transactions using the Internet. The patented invention has been embodied as the service called "Mapion" (*6) operated by Cyber Map Japan Corp., a joint venture company that was established by Toppan Printing, Nippon Telegraph and Telephone East Corp., Dentsu Inc., Yahoo Japan Corp., Sharp Corp., and Alps Mapping Co. Ltd., and is often called the "Mapion patent". The history of the "Mapion patent" originally started when the System Development Department with strong

Q2-5 Establishment of Business-Related Inventions in Society



patent consciousness of Toppan Printing consulted with the Legal Department. The outline of the "Mapion patent" is as follows: an advertiser can register advertisement information online so that an icon of the advertiser's store is displayed on a digital map. When a user clicks the store's icon on the digital map online, the advertisement information of the store is displayed on the screen

Toppan Printing recognizes business method patents as an important factor affecting the corporate management and considers acquisition and exploitation of business method patents as actual corporate management strategy and business strategy. In order to promote acquisition and exploitation of business method patents as one of the management strategies, Toppan Printing launched a patent project concerning business methods in October 1999 and has been promoting their activities.

(3) An Example of Efforts to Obtain Business Method Patents in the Electric Industry As an example of the efforts to obtain

^(*5) By definition, small- and medium-sized enterprises and venture companies are companies with a capital of less than 1 billion yen that do not belong to any of the Japan Intellectual Property Association, the Japanese Bankers Association, the Japan Securities Dealers Association, the Marine and Fire Insurance Association of Japan, or the Japan Franchise Association.

^(*6) URL (http://www.mapion.co.jp)

business method patents in the electric industry, the actual effort of Matsushita Electric Industrial Co., Ltd. is presented here.

The Matsushita Electric group has a very wide range of business areas including audio and visual equipments, household appliances housing facilities. information telecommunication apparatus, industrial machinery, and semiconductors and electronic components. The Matsushita group has built a self-responsible management system under which each of its internal subsidiaries, subsidiaries and affiliated companies in every business field manages its business individually on its own responsibility. The management system for intellectual property of the group is based on this system and respective intellectual property departments have been established in every internal subsidiary, subsidiary and affiliated company, each of which is operated in direct connection with the management of each business unit.

The Intellectual Property Center established the Headquarters administers all the intellectual property departments in those various units. On occasions, business enlightening and information-providing activities has been carried out for various levels of personnel from the top managements to the staffs in charge of actual affairs in order to disseminate correct perception and information on business method patents and enlighten the personnel so that they can properly deal with issues based on such perception and information.

Specifically, explanation in various internal conferences, dissemination of the policy through notices, publications in company magazines, and opening of a web site on business method patents for all personnel have been carried out. Briefing sessions at related business sites in various regions have been also carried out.

(4) An Example of Efforts to Obtain Business Method Patents in the Non-life Insurance Industry

Previously, non-life insurance companies, except for a very small number of departments in such companies, could not be described as being familiar with patents, due to characteristics of the goods and services they dealt with. According to the number of patent applications that are disclosed on the "Searching Front Page of Unexamined Patent Gazettes" on the Japan Patent Office's (hereinafter called JPO) web site, two domestic insurance companies had filed only four patent applications over four years from January 1993 to December 1996.

In 1999, the Marine and Fire Insurance Association of Japan held a presentation meeting for member companies and invited the JPO officials to the meeting. The JPO gave ① an

explanation about the outline and trend of the Patent System and ② a presentation of patent examples related to financial business methods. At the meeting, the Association supplied the JPO with reference materials for examination of patent applications (only those published) at the request of the JPO for cooperation.

The above-mentioned questionnaire survey carried out this year showed that domestic insurance companies that "have filed a patent application for business method inventions" amounted to 38.2% of the respondents of the survey. Considering that the respondents that selected "have filed a patent application" amounted to 21.7% in the survey carried out in 1999, the number of companies that filed a patent application rapidly increased for this one year. 14.7% of the respondents selected "have never filed patent applications but plan to do so"; therefore, the sum of the companies that have filed a patent application and that have never filed but plan to do so amounted to 52.9%. Consequently, in the near future, a one out of two domestic insurance company is expected to file a patent application for a business-related invention. With respect to the questions on obtainment of rights for business-related inventions and organizational measures for defending against such inventions, the majority or 50% of the respondents selected "yet to take any measure." However, most of such companies answered that they had no plan to file any patent application for business-related invention. On the other hand, most of the companies that had filed or planned to file a patent application answered that they had taken some organizational measures.

(5) Efforts to Obtain Business Method Patents in the Securities Industry

As of December 2000, the following patent applications were disclosed as related to the securities business, based on the publication on the Industrial Property Digital Library of the JPO.

- ① One patent granted (Merrill Lynch & Co., Inc.)
- Four patent applications published (three for Merrill Lynch, one for Fujitsu Ltd. and Nikko Securities Co., Ltd.)

In the securities industry, few companies have personnel specifically in charge of industrial property at present, so, in fact, it cannot be denied that there is few cooperation and networking with a patent attorney. However, there are such cases that a system development company entrusted by the security company has filed a patent application independently or jointly with such security company. Accordingly, it is becoming general to think that a patent application can be filed for an invention as far as the invention is related to a system. Securities companies are now required to carry out active

trading as well as secure their own positions rather than concentrate on the conventional brokering business. Consequently, they are obliged to spend far more expenses for system development, and they are expected to file more patent applications for business-related inventions in the future.

More securities companies, especially those of large size, are putting their efforts into the filing of patent applications by improving their internal structures. As shown in the questionnaire survey of 2000, the number of companies that have established or will establish a department in charge of intellectual property in their internal structure is increasing.

In the case of Nomura Securities Co., Ltd., the company will actively obtain patents necessary for business development in the securities trading business. The company also intends to aggressively file patent applications for inventions concerning new developments in the consulting business and asset management fields as well as for basic inventions. It is not a desirable situation where the existence of patent would prevent securities companies from carrying out cross-border financial services in real time. However, it is important to secure the right of a prior inventor under the patent. It will be required in the future to consider the issue of jurisdiction for patent and applicability of patent across multiple countries or the issue of how to establish such right as global patent, and securities companies are interested in such important issues.

(6) An Example of Efforts to Obtain Financial Business Patents in the Banking Industry

The key subject of the "G7 Conference of Financial Ministers" held in Fukuoka on July 8, 2000 in line with the Okinawa Summit was "Economic and Financial Impact of the IT Revolution". What drew most attention concerning this subject was the fact that the issue of "financial business patent" had been addressed. It seems to be the first time that this issue has been addressed, and it is meaningful that the issue was addressed at the conference hosted by Japan.

It can probably be said that the issue concerning financial business patent was first raised nine years ago, in 1992 when a patent was granted (publication of the examined patent application: tokkyo-koukoku) for the invention "Multiple Purpose Bank Account with Swing Function" to Omron Corp. After that, another patent issue arose with respect to the invention "Electronic Currency System" made by Citibank,

N.A. during the period between 1994 and 1995. This issue put actual international pressure on Japan, and there was a fear that it would be difficult for Japanese banking industries to develop electronic money systems on their own in the future, so major Japanese banks (Daiichi Kangyo, Sakura, Fuji and Sanwa) filed oppositions against Citibank's patent. Consequently, the patent was finally established in December 1999 with a significant part of its claims being deleted.

According to the financial liberalization between 1993 and 1994, the liberalization of financial plans implemented in the autumn of 1995, the abolition of instruction and notification by the Banking Bureau of the Ministry of Finance concerning electronic financial settlement services (so-called "notification on automation") in 1997, and JPO's Operational Guidelines for examination on "computer software-related inventions" was revised in April 1997, an environment where financial institutions would file patent applications was developed and more patent applications have been filed by individual banks such as major commercial banks, especially for electronic financial settlement services. In the midst of such trend, Sumitomo Bank filed a patent application for "Payment Check Service ("Perfect")" which has recently become very famous.

The scope of subject matter of financial business patent has been expanding from conventional electronic financial settlement services to include market transactions such as derivative transactions and structured product transactions. Banking institutions should make policies for dealing with the situation, including measures for fostering specialists and establishing specialist meetings. In light of this, not only individual banks but also the whole banking industry is under pressure to consider measures for tackling the issues related to financial business patent at the management level.

II Trends in the U.S.

1 "Business Method Patent Improvement Act of 2000"

On October 3, 2000, members of the House of Representatives Mr. Howard L. Berman and Mr. Rick Boucher submitted a bill for the "Business Method Patent Improvement Act of 2000" (the so-called "Berman/Boucher bill").

The points of this bill are as follows.

- ① Definition of "business method" is proposed.
- 2 Within 12 months after the earliest filing

date of an application for a patent, whether any invention claimed in the application is a business method invention shall be determined, and the so-determined application shall be published promptly after the expiration of a period of 18 months after the filing date.

- 3 Any person may file a request for an opposition to a patent on a business method invention not later than 9 months after the date of issuance of the patent.
- 4 In the case of reexamination, interference, opposition or other legal challenge to a patent on a business method invention, the party producing evidence of invalidity shall have the burden of showing by a preponderance of the evidence the invalidity of the patent.
- ⑤ If any prior art reference which differs from what is claimed in a patent only in that the claim requires a computer technology to implement the practice of the invention, the invention shall be presumed obvious.
- 6 An applicant for a patent for a business method invention is required to disclose in the application the extent to which the applicant searched for prior art.

Movements of the United States Patent and Trademark Office (USPTO)

(1) Business Methods Patent Initiative: An **Action Plan**

The State Street Bank case boosted a number of patent applications for business method inventions, and a several infringement lawsuits were filed in this area, causing the issues of influence and the problems of business method patents to be highlighted in the U.S. In response to concerns, the USPTO released the "Business Methods Patent Initiative: An Action Plan" in March 2000 detailing the measures it will take.

(2) USPTO White Paper "Automated Financial or Management Data Processing Methods (Business Methods)"(*8)

This White Paper describes the origins of business method patents and the history of development thereof, types of technologies included in Patent Classification Class 705 and the filing situation in this class, and measures to be taken by the USPTO for dealing with technological changes. It also presents specific action plans for improving the quality of examination on inventions of Class 705 as follows.

- Improvement of the Scientific and Technical Information Center (STIC) and the Electronic Information Center (EIC)
- ② Commercial and NPL (non-patent literature)

databases

- Training of examiners
- 4 Customer partnership

According to the ranking of applicants in Class 705 during the period from 1997 to 1999 indicated in this Paper, applications in Class 705 represented only about 1% of the total patent applications filed at the USPTO in FY1999, and the 2658 applications filed in Class 705 did not even place it among the top five Communication and Information Processing technologies.

(3) Formulating and Communicating under Rejections 35U.S.C.103 for **Applications Directed to Computer** -Implemented Business Method **Inventions**

"Formulating and Communicating Rejections under 35 U.S.C.103 for Applications Directed to Computer-Implemented **Business** Method (hereinafter "Formulating Inventions called Rejections under 103")", published concurrently with the White Paper, describes items when examiners carry out the examination based on 35 U.S.C. 103: what and where to search, the rationales for rejections, and case examples of inventions of specific business methods and the rejections for them. These descriptions suggest how examiners examine inventions based on 35 U.S.C. 103. "Formulating Rejections under 103" introduces 19 case examples, each of which includes the outline of the invention, the claim, prior art references and proper or improper statement of the rejection. They indicate the USPTO's present idea on the kinds of inventions that are considered business method patents and the rationales on which nonobviousness is determined.

Judicial **Precedents** and **Academic Doctrines on Business Method Patent**

The trend in court precedents and doctrines on business method patents under the U.S. Patent Law is reviewed here. In the examination guidelines as well as major instruction books concerning the U.S. Patent Law, the Hotel Security case^(*9) in 1908 was considered as a court precedent that first formed the concept of "business method exception". However, several judgments related to "business methods" are found in the precedents prior to the Hotel Security case. The earliest one among such judgement is the United States Credit System Co. vs. American Indemnity Co. case in 1893.

Later, the following judgments on business methods were delivered: Thompson vs. Citizen's

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^(*8) A USPTO white paper "Automated Financial or Management Data Processing Methods" (Business Methods).

^{(*9) 160} F. 467 (2nd Cir. 1908).

National Bank of Fargo^(*10); In re Patton^(*11); Loew's Drive-In Theatre, Inc. vs. Park-In Theatre, Inc.^(*12); Paine, Webber, Jackson & Curtis, Inc. v. Merrill Lynch, Pierce, Fenner & Smith, Inc.^(*13); In re Gram^(*14); In re Schrader^(*15); and State Street Bank^(*16).

According to the review of these precedents in which how to deal with business method patents under the U.S. Patent Law was mentioned, it is concluded that there was no case where an invention was judged to be non-statutory subject matter under the Patent Law based directly on the "business method exception". The Hotel Security case, which has been considered as a leading case for forming the "business method exception", is considered not as a judgment stating that a business method should be excluded a priori from the statutory subject matter under the Patent Law as often cited, but as a noteworthy case clearly indicating that whether or not a system for conducting business constitutes statutory subject matter should be judged by separating the specific means for embodying the system and the concept and idea of the system itself.

The series of cases seems to be roughly divided into two groups: cases from the early period of the 1990s to the 1940s and cases in an after the late 1960s. Specifically, the business method inventions dealt in the former group of cases were often those essentially involving human acts and mental activities or those related to bookkeeping or tickets, but in the latter group, the inventions were mostly data processing systems that used computers.

In light of this, the Merrill Lynch case can be, in a sense, considered as a case in which an invention using computers was acknowledged to constitute statutory subject matter prior to the State Street case, whether or not it was a business method invention. However, the court conducted examination on the algorithm and

evaluation focusing on the useful effect of the efficient operation while considering such an invention only from a computer program aspect, and gave hardly any consideration to the general scope of business method invention. As for In re Schrader case, there was the minority opinion expressed by Judge Newman in criticism of the "business method exception", who evaluated it as a principle that should be abolished. And in the State Street Bank appeal case, the existence of the "business method exception" principle was completely denied. In this case, it was made clear that when determining whether a business method invention in which a computer was a requisite element constituted statutory subject matter, the judgment should be made based on two aspects; the practical application of an mathematical algorithm and the existence of a useful, concrete, and tangible result.

Thus, as far as based on the chronological analysis of the precedents, it was clarified that the "principle" itself of "business method exception" was extremely ambiguous in terms of various aspects including its legal grounds, formation process and scope of application, and it may be impossible to accept this principle as a solid legal theory supported by the court precedents. Nevertheless, for about 100 years since the Hotel Security case in 1908, the existence of such "principle" has been generally believed and affected judgments on whether inventions constitute statutory subject matter. It can be said that also in past appeal decisions, from early ones to the latest ones, the "business method exception" was consistently applied in the conclusions.

Lastly, the transition of doctrines is briefly reviewed here. It can be said that in the field of doctrines, the "principle" itself of "business method exception" has not been sufficiently discussed in light of its grounds as a legal theory, validity and scope of application. Consequently,

^{(*10) 53} F. 250 (8th Cir. 1892) the validity of the patent for an invention concerning an improved account book for use by a bank was contested in the infringement lawsuit.

^{(*11) 127} F. 2d 329 (C.C.P.A. 1942) the patent application for an invention concerning a fire protection system against air raid was brought into question.

^{(*12) 174} F. 2d 547 (1st Cir. 1949) the validity of the patent for an invention concerning a drive-in theatre was brought into question.

^{(*13) 564} F. Supp. 1358 (D. Delaware, 1983) Merrill Lynch case, the validity of the patent for the invention "Securities Brokerage-Cash Management System" was contested. Specifically, this invention was related to the Cash Management Account (CMA) Program developed by the integration of three services, Securities Account, Money Market Fund and Visa Account.

^{(*14) 888} F. 2d 835 (Fed. Cir. 1989) the case relates to the patent application for an invention concerning a method for testing whether or not a complicated system is in order.

^{(*15) 22} F. 3d 290 (Fed. Cir. 1994) the case relates to the patent application for an invention concerning a competitive bidding system for multiple related items.

^{(*16) 149} F. 3d 1368 (Fed. Cir. 1998) it can be said that the case triggered the recent series of disputes concerning business method patent. In this case, the validity of the patent for an invention "Data Processing System for Hub and Spoke Financial Services Configuration".

this "principle" itself has continued to exist by a tacit understanding. Considering the background of this situation, it may be hard to deny that the issue of this principle has been, in a sense, buried in other major arguments that have been developed with respect to statutory subject matter, because there is no major immediate problem with this issue.

4 Movements in the Industrial Communities

Since the State Street Bank case, patent applications for business method inventions have surged in the United States. Patent applications in Class 705 numbered 447 at the end of 1986, increased to 1,370 in 1998 and reached 2,600 in 1999. The number is expected to double in two and a half years.

A large number of U.S. companies started to file patent applications for business method inventions and various business method patents were granted, such as Cybergold's "Attention Brokerage Scheme" (U.S. Patent No. 5,794,210), Amazon.com's "1-Click Ordering System" (U.S. Patent No. 5,960,411), Priceline.com's "Reverse Auction System" (U.S. Patent No. 5,794,207) and so forth. Businesses using the Internet flourished due to the infrastructural development for the Internet and widespread use of personal computers. As more business method patents were obtained, patent lawsuits also increased.

Most of the companies and law firms which we visited for the overseas research of this year expressed that business method patents have already became ordinary patents, just the same as patents in other fields, so it was inappropriate to give discriminatory treatment only to business method patents. They also mentioned that the purpose of filing a patent application for a business method invention was to improve the value of the company by obtaining a patent for a useful business method invention that was made by the company. In the present situation in the U.S., however, most of the visited companies and law firms were aware of the problem that quite a few patents had been granted for inventions that appeared to be obvious. Nevertheless, majority opinion was that it was important to build up a proper and quality database and improve the quality of examiners at the USPTO rather than to treat business method patents in a discriminatory manner, so that such obvious inventions could be rejected. They also stated that the budget for the USPTO should be increased.

In the U.S. to date, network venture companies such as Priceline.com and Amazon.com have aggressively filed patent applications for business method inventions. Such network venture companies have focused their business on

B to C (Business to Consumer) transactions, i.e. transactions targeting final consumers in which they sell their products to the general public on their websites. However, B to C transactions have come to a deadlock because the growth of business results from such transactions is less than expected while more costs than expected are required, so more companies are trying to shift their business from B to C transactions to more profitable B to B (Business to Business) transactions. Microsoft announced to the press in January 2001 that they would put most of their efforts into B to B business. Accordingly, with respect to business method patents, more patent applications will be filed for business method inventions focusing on B to B business.

5 "Patenting Business Methods" - A White Paper of the American Intellectual Property Law Association (AIPLA White Paper)

On November 27, 2000, the American Intellectual Property Association (AIPLA) issued a white paper entitled "Patenting Business Methods".

This white paper contained nine recommendations in total as follows.

- A. Business method inventions should be protected under the same framework of laws under which other inventions are protected.
- B. No special test or interpretation of the paten laws should be applied to business method inventions.
- C. U.S. inventors of business method innovations should not be substantively or procedurally disadvantaged compared to their foreign competitors by changes in the U.S. patent laws.
- D. The PTO should collect non-patent business methods prior art, including that describing business methods not implemented on a computer.
- E. The USPTO should continue to hire more examiners with business backgrounds, such as MBAs, and should continue to aggressively improve the skills and training of new examiners.
- F. Congress should restore to the USPTO full use of fees collected from patent applicants and patentees.
- G. The current laws should be amended to provide for early reexamination with a third party right to appeal to the Federal Circuit, and with no estoppel attaching to USPTO decisions not reviewed by the Federal Circuit.
- H. The new laws regarding publication of U.S. applications after eighteen months should be

- allowed to have their effect.
- I. The first inventor defense should be interpreted broadly to encompass claims to methods of doing business regardless of the area of technology and regardless of the form of the claim.

III Trends in Europe

1 Article 52(2) of the EPC

The European Patent Office (EPO) initially intended to delete the term "programs for computers" from Article 52(2)EPC, that is, to revise this Article. At the meeting of the Administrative Council held in September 2000, the draft revision of Article 52(2)EPC was adopted, despite the opposition by the U.K., Germany and France. However, at the diplomatic conference of the European Patent Organization held in November 2000, the revision of Article 52 (2)EPC was postponed. This postponement will not change the current examination standards for or handling of software patents at the EPO or in European countries.

In the overseas research of this year, we visited major patent firms in the U.K. and Germany for their opinions. The followings are their opinion. The Linux group and the FFII are promoting the "Open Source Campaign" and have expressed a strong opposition to the protection of computer programs under the patent system. It is said that the revision of Article 52(2)EPC was postponed, because, due to the stronger resistance than expected by the "Open Source Campaign", Germany and France feared that unnecessary chaos would be caused when the deletion was dared despite the fact that there was no need to revise the Article so hastily since the current examination process was being carried out without trouble. The U.K., on the other hand, might venture to advocate the postponement of the revision, considering that the revision should be finally decided not by the European Patent Organization but the European Commission. In any case, though there is not confusion in the practice, it is necessary to revise and clarify Article 52(2)EPC, which will be achieved sooner or later.

2 Movements in the Industrial Communities

"The Open Source Campaign" is aggressively promoting various actions against software patents. FFII has established its own website and strongly revealed its policy against software patents. The FFII is also taking an action to collect thousands of opinions against software

patents from the general public on the website and send them to the Competition Commissioner and other committee members of the European Union (EU).

In Europe, while some companies strongly demand protection for software patent including business method inventions, many other companies are against such protection; therefore, a uniform opinion is yet to be built. However, in the overseas research of this year, it was told that there was an opinion that the "Open Source Campaign" is the movements occurring only in a part of Europe and major European companies rather actively file patent applications for software inventions and business-related inventions. boosting the number of applications filed all over Europe. Also some of the small- and medium-sized enterprises that conventionally supported the "Open Source Campaign" have begun to keep themselves at a distance from the campaign.

3. Pension Benefit Systems Partnership Decision

On September 8, 2000, the Pension Benefit Systems Partnership decision (T0931/95) was delivered which would have a great impact on the future examination of business-related inventions in Europe. The invention in this case is related to a method for effectively managing pension benefit through the use of life insurance. The question in this case was whether an invention of a pure financial or economic method for operating pension benefits was patentable. The Board concluded that method only involving economic concepts and practice of doing business was not inventions within the meaning of Article 52(2)EPC; on the other hand, a concrete apparatus for performing such a business method was an invention within the meaning of Article 52(2)EPC.

IV Consideration of Protection of Business-Related Inventions

Considering the protection of business -related inventions in the future, we will be faced with the following tasks.

(1) Improvement and Reinforcement of Information on Prior Art in the Business -Related Field

Lack of information on prior art in the business-related field would invite the situation where patents are granted for inventions which do not satisfy the requirements of "novelty" and "inventive step", so the database of prior art

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should be steadily improved and reinforced.

(2) Patent Infringements

Various problems are pointed out concerning patent infringements: whether or not a patent infringement on the Internet caused by more than one person constitutes a joint direct infringement of patent; interpretation of the transmission of programs or services provided on the Internet under the Patent Law; application of the doctrine of equivalent in defining the scope of the protection of a business-related invention which comprises a general-purpose computer, and indirect infringement of patent. Desirably, these problems should be considered in the future.

(3) International Harmonization

For a business-related invention is achieved on a computer network such as the Internet where the information or services are distributed beyond national boarders. international harmonization is further strongly desired; especially harmonization in operations at the JPO, USPTO and EPO is expected. And additional issues are presented concerning the concept based on the principle of territoriality for the patent system and the decisions on jurisdictions and applicable laws for patent cases, and approval and enforcement of such decisions. These issues are associated with the deliberations at the Hague Conference on Private International Law, and further review will be required.

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