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Annual Technical Report 2005 on Trademark Information Activities submitted by Republic of Korea (SCIT/ATR/TM/2005/KR)

Where URLs are requested below, it is preferred that either URLs which are likely to remain stable over time (three years or more) are provided, or home (main) page URLs are provided with a short explanation of how to access the corresponding information.

I. Evolution of registration activities

Changes experienced in terms of application filings and registrations with respect to the previous year

In 2005, the number of trademark applications was 115,889, a 6.8 percent increase over the previous year, while the number of trademarks registered climbed to 57,873, an increase of 13.2 percent.

II. Matters concerning the generation, reproduction, and distribution of secondary sources of trademark information, i.e., trademark gazettes

Publishing, printing, copying techniques

Gazette publication
Beginning July 2001, KIPO began posting daily PDF gazettesfor registered trademarks on its web site. This online version enabled KIPO to offer patent information to the public quickly without charge. Anyone can get relevant information on requesting gazettes through the Internet gazettes mailing service.

Additionally, CD-ROM gazettes are distributed to 32 domestic and foreign organizations twice a month, as well as master CD-ROMs of each publication is archived after the Internet gazette publication.

In February 2005, however, KIPO changed the format of the CD-ROM version to XML format from SGML one with relevant forms. KIPO published gazettes on 75,648 registered trademarks for the year 2005.

Main types of announcements of the Office in the field of trademark information

KIPO's Web site
On KIPO's Web site, applicants can find the following:

· Announcements of undelivered notifications due to an applicant's change of address
· Advance notice of patent expiry due to non-payment of fees
· Other notices such as changes in laws or fees

Internet gazette search service
KIPO provided an Internet gazette search service at its web site beginning July 2001. After the publication date, applicants can freely refer to PDF documents via the Internet at any time during the opposition request period. After the opposition request period, applicants can find information on granted and laid open applications from the Korea Institute of Patent Information (KIPI) website . Since May 2003, applicants can see the full text of the corrected applications on KIPO's website. They are also notified about their interests through a push-mail service and Short Message System (SMS).

Word processing and office automation

KIPO automated all administrative processes including receiving applications, examining, granting to publishing gazettes. In 2001, we at KIPO enabled communication of examination results to applicants via the Internet or mobile telecommunication service, published official gazettes on the Internet, and handled most registration and opposition procedures on-line. By starting development of the On-line Trial System in 2002, KIPO computerized most IPR administration.

From 2003 to 2004, in order to implement KIPOnet II, the next version of KIPOnet, we collected approximately 740 customers' opinions through Customer Service Requests (CSRs), suggestions from external users groups, KIPOnet supporters, and other users. Based on the results, we analyzed 1800 existing tasks to make detailed measurements in 2003. Consequently, with the launch of the KIPOnet II in 2005, KIPO enabled to provide nonstop service, a work-at-home examination environment, and real-time notification service.

Techniques used for the generation of trademark information (printing, recording, photocomposing, etc.)

Data Conversion Center
In January 2001, KIPO began operating the Data Conversion Center to digitize paper-based applications for trademarks including patents, utility models, industrial designs, and intermediate documents such as amendments, written opinions, objections, registrations, trials and paper-based gazettes at its Daejeon headquarters and the Seoul branch office.

The Center automatically handles receiving, formality checking and data converting in the same process and prevents delays or errors during the conversion process by applying state-of-the-art technology such as Multi OCR, dual key-inputs, automated verification of electronic data, and color-scanning technology.

In 2005, the Center digitized totaling 297,881 documents, which used a combination of 615 different kinds of paper-based documents, including 15,943 trademark applications.

Data Management Center
Since May 2002, KIPO has managed the Data Management Center. The center provides high-quality data services through systematic analysis; it generates and processes data, and fixes data errors. In 2005, data analysis was conducted on the following:

· Data generation: 162,000 word marks filed in 2005 and 502,000 registered marks
· Data verification: 352,000 word marks registered before 2002
· Data analysis: to understand the causes of data errors and to prevent any delays or errors, KIPO analyzed data of trademarks in KIPOnet database and fixed errors using SQL.
· Data Transfer: In order to improve public data availability and accuracy, KIPO provided KIPI with the 1.4 million raw data pieces for trademarks in 2004. KIPI serves the public by packaging raw data as well making such raw data available through a free patent information search service on the Internet called the KIPRIS .
· Media management system: In 2005, the Center also established a system for managing information on media collected from foreign offices. It gave its own ID number to 388 media each and entered relevant information into the system in 2005.

III. Matters concerning classifying, reclassifying and indexing of trademark information

Classification and reclassification activities; Classification systems used, e.g., International Classification of Goods and Services for the Purposes of the Registration of Marks (Nice Classification), International Classification of the Figurative Elements of Marks (Vienna Classification), other classification (please indicate whether goods and services for the registration of marks and whether the figurative elements of marks are classified by your Office and, if so, which classification(s) is (are) used)

Classification of goods and services
For the classification of goods and services, KIPO started to use the Nice Classification System in March 1998, and officially became a party to the Nice Agreement in January 1999. In 2001, it completed the Korean translation of the 8th Nice publication, and in 2002 it began to incorporate the publication into its classification system. In the pursuit of greater fairness and objectivity, it also revised the examination guidelines and published a directory for classifying similar goods and services.

In December 2004, we established a study to investigate classification of trade and service marks within KIPO staff in order to share information on classification systems and improve examiner's skills.

Classification of the figurative elements of marks
We started to use the Vienna Classification in October 1999, but did not join the Vienna Agreement. In 2002, we developed an examination system that could handle the classification and examination of the figurative elements of marks. In 2002, to upgrade the quality and consistency of the classification, we organized a separate team for classifying figures and began to apply the 5th Vienna classification in January 2003.

Bibliographic data and processing for search purposes

KIPO has used the searchable SGML and XML format for its search system. KIPO's examiners can search full text searches of registered trademarks published as far back as 1950 and rejected trademarks from 1989.

IV. Trademark manual search file establishment and upkeep

File Building

Trademark Database
KIPO constructed the Trademark Search System based on a database of bibliographical data, examined trademark images, registered applications and rejected applications. The system also contains referral information such as international pharmaceuticals, international place of origin, foreign trademarks, public marks, and geographical indications.

All this data is classified according to the Nice Classification, the Vienna Classification, and the Similar Group Code depending on the type of trademark, letters, figures, and designated products. The data is updated in a batch file periodically for easier text and image searches.

For the enforcement of Madrid Protocol, KIPO established an English database of those designated goods in order to make a system that can automatically gives a similar group code to further applications filed in English.

As of the end of 2005, we held 3.444 million data for trademarks. In 2005, we also digitalized 502,000 marks registered until 1998.

Storage, including mass storage media

Depending on the importance and usage of data, KIPOnet's storage configuration is divided into two sections; the IP administration system and the search system. IP administration systems apply RAID 1 using 50 percent of relating discs, while search systems apply RAID 5 using 75 percent of relating discs. The rest of those discs are used for parity.

V. Activities in the field of computerized trademark search systems

In-house systems (online/offline)

Trademark Search System
Our Trademark Search System features an image-pattern matching engine and an extensive search of homonyms and homophones, allowing examiners to efficiently search image data and similarly pronounced trademarks. It has been continuously supplemented with referral data such as public marks, and is linked to the automated trademark examination system.

In 2003, we introduced a concept of an intelligent search system that automatically optimizes inquiries for similar scope such as similar names and English-Korean replacement and rapidly shows search results. It can classify the search results by similarity fast and accurately.

In 2005, we also upgraded the System so that our examiners could search international trademarks only: They can search by name for international trademarks filed under the Madrid Protocol and preferentially give the classification code of figurative elements to already –filed applications with a priority or those international trademarks. They can also request correction of application errors with a new user interface.

Administrative management systems (e.g., register, legal status, statistics, administrative support, etc.)

KIPOnet unified approximately 34 subsystems in 2005. Such systems play a role in managing the data produced in each phase of the procedure, dealing with matters that originate in the transfer of data to the next phase, and streamlining the administration of searches.

General Information Management System
The General Information Management System outputs a variety of statistical and policy data related to various types of industrial property such as patents, utility models, trademarks and industrial designs. It does this by using a variety of information retained by KIPO's databases. The system's tools efficiently manage large-volumes of data and provide various features for end-users.

Electronic Approval and Routing System
The Electronic Approval and Routing System enabled electronic approval for IPR and general administration. The system comprises two major parts: an approval system for IPR examinations, introduced with the KIPOnet system in 1999; and an approval system for general administration, launched June 2000. The system is used for the following:

· Electronic approval: preparation, approval, dispatch, and receipt of electronic documents, management of a document box, and circulation of documents.
· Electronic mail: preparation, transmission, receipt, and management.
· Electronic bulletin board: posting and review
· Management and preservation of records.

This system also offers a pop-up window showing messages on the approval status of documents and for managing individual schedules. The electronic approval system covered 99.9 percent of all documents approved in 2005.

Knowledge Management System
The demand for organized management of knowledge inspired KIPO to introduce the Knowledge Management System (KMS), in October 2001. It is dedicated to the efficient management of a variety of knowledge and information created by KIPO staff while doing their work. It allows KIPO staff to utilize various management tools such as knowledge maps, knowledge warehouses, personalized portals, and cyber knowledge communities. It also provides this information optionally through personalized portals. It helps activate knowledge management by improving the productivity of the IP administrative processes through the Knowledge-Portal system for knowledge-based activities.

Equipment used (hardware, including the types of terminal and network used, and software), carriers used

Hardware
As of the end of 2005, KIPOnet uses 37 UNIX Enterprise servers, and 34 NT servers. For greater availability, we constructed a clustering system between the Receiving and the Sending Severs, the Documents Management and the Publication Servers, the Homepage Server and the Portal Server, and the Administration Automation and the General Information Management Servers. In other words, in case of system failure the partnered server temporarily substitutes for the other. The interoperability of clustering allows time to address the problem. Since servers based on the clustering structure use the same database when applying the Oracle Parallel System, the accuracy and suitability of data is maintained if any failure occurs in the servers.

The storage capacity is 110 terabytes. RAID 1, 5, 0 are used according to the method of data protection. For security, we also keep 32 pieces of equipment such as VPN and IDS. The peripherals consist of four backup devices, 18 jukeboxes and 304 sets of network equipment.

In 2005, we improved the performance of that hardware by establishing the Performance Management System and upgrading the KMS. We also strengthened security with dualizing our search system, which increased the efficiency of server and system resources due to the separation of online management server from search engine server. Comparing with 2004, the CPU capacity increased 56 percent, 92 percent for memory capacity and 34 percent for the logic capacity of disc.

Network
When KIPOnet system launched in 1999, its network architecture was divided into three sections: extranet (or Internet) to enable electronic filing by applicants; patent network to handle internal IPR administration; and intranet to connect to other government offices. Such exclusive networks were used to exchange information off-line.

Together with the upgrading of the KIPOnet to KIPOnet II in 2005, those three networks were integrated into one network based on four backbones. The integrated network is protected by firewall and information protection systems such as Intrusion Detection System, Enterprise Security Management. Its network topology is Giga Ethernet and the bandwidth is different depending on the layer: Core layer - 2Gbps; Distribution layer - 1Gbps; Edge layer - 100Mbps. Each layer has a Fail-Over function (Active & Stand-By).

All the information is exchanged online and users benefited from one-stop access. In particular, internal users can access the Internet while handling their administrative works simultaneously at the same screen and they can do examination tasks at home. For external users (or applicants) can get the services such as real time notification of errors found in their applications and 24/365 service as well as web-based e-filing service for trademarks.

We keep information on all the configuration implemented in KIPOnet II to separately backup to rapidly recover from disaster and measure network performance in real time and accumulate the information to use as basic reference sources for improving the network operation. We also digitize materials generated during managing network such as work plans, work products, and network configurations and use readily and rapidly.

For additional stability, we duplexed the network backbone between our headquarters and Seoul Branch Office to improve its availability.

Software
As of the end of 2005, we use approximately 82 sorts of commercial software, which are mostly related to database or middleware. To provide 24 /365 service for the public, we introduced some software to manage such middleware with development tools for monitoring online service. For databases, we regularly conducted performance tests with the support from Oracle. We continue upgrading backup tools, middleware, and web servers to improve the KIPOnet system in performance and functionality.

VI. Administration of trademark services available to the public (relating to facilities, e.g., for lodging applications, registering trademarks, assisting clients with search procedures, obtaining official publications and registry extracts)

Planning, administration, automation, security

The Information Policy Bureau organizes comprehensive service for the public by managing the Intellectual Property Digital Library (IPDL), while each department supports its external customers. Public services are offered online and offline through the facilities below. Since the launch of the KIPOnet system, almost all of public services are also available online such as filing an application, a variety of notifications by email and SMS, requesting a trial, and ordering a copy of certificates.

For security, we accept digital signature for electronic documents based on the public key infrastructure for the encryption and decoding. To protect our customers' computers from external attack, we operate IDS, firewall, and VPN with equipments and servers of ESM 24 hours a day, 365 days a year. We also have key logger security and hacking-diagnosing system to protect their PCs from other risks like spyware and applied a single sign-on system for tighter security in accordance with the standardized Directory Access Protocol.

IP Digital Library
KIPO has supported its customers through the Intellectual Property Digital Library (IPDL) located at KIPO's headquarter so visitors can search IPR information in a variety of formats including on-line, microfilm, and paper. They also can order copies of published patent applications as filed.

Local Patent Information Center
To publicize the IPR system and disseminate IPR information on a national scale, KIPO designated local patent information centers in 2000. These centers disseminate IPR information in areas where IT inexperience is widespread, industrial complexes, and in SME-concentrated areas. In 2005, approximately 77,614 people used these centers for acquiring IP information, or receiving consultation via a visit or on the telephone. Also, 16,658 participants received free IPR education through special local programs.

Call Center
To integrate scattered counseling resources and promptly provide technical advice, KIPO established its Call Center in March 2002. Its roles can be divided as follows:

· Counseling: procedural and technical advice for (electronic) filing, examination, registration, and trial, search and use of patent information, and evaluations for disputes such as IPR infringement
· Customer Relationship Management: customized information offerings based on the consultation records of past phone requests and opinions collected through customers' satisfaction survey for better policies and promotional events
· Other: managing a quick response system on the Internet, dispatching a troubleshooter to help applicants with e-filing, on-line meetings between an examiner and an applicant through the local patent information centers and the Multimedia Center in KIPO.

In 2005, the Center introduced a kind of outreach service: KIPO previously informs applicants that their applications would be extinguished and suggested reasonable solutions.

Collection management, preservation

IP Digital Library
The IP Digital Library archives trademark documents such as bibliographic data, abstracts and full texts in a variety of media such as paper, microform and CD-ROM, which are collected from seven countries and one international organization. The library also possesses 6790 volumes of journals, magazines and books donated by or purchased from other sources.

Information services available to the public (including computerized services and search files contained in libraries remote from your Office and trademark information posted by your Office on the World Wide Web)

e-Patent Portal System
KIPO serves the cyber community through the e-Patent Portal System implemented at KIPO's web site.

With the applicant code and digital signature authorized by KIPO via the Internet, applicants can file all kinds of intellectual property online. Also, they can change their own personal information on KIPO's web site. They can pay their fees through Internet banking and are informed of the legal status of their applications by e-mail and SMS (Short Message Service). They can also request and receive seven kinds of certificates, download eight kinds of electronic dossiers such as priority certificates via the Internet, and check how far their requests have been processed.

In 2005, KIPO allowed them to file a trademark application without e-filing software at our website after an initial demonstration.

Korea Industrial Property Rights Information Service
Since January 2001, we have offered domestic trademark information free of charge through the Korea Industrial Property Rights Information Service (KIPRIS), which is a specialized IPR information service provided by KIPI. The service also covers up-to-date information on the legal status of trademark applications, as well as bibliographic data and TIFF images back to 1950 and full text of CD-ROM gazettes from 1998.

In 2005, we also started to offer diverse image viewers such as thumbnail, JPG, and PDF. Additionally, this service is available at other websites linked reaching to 4.4 million users.

VII. Matters concerning mutual exchange of trademark documentation and information

VIII. Matters concerning education and training including technical assistance to developing countries

Training courses for national and foreign participants

International Intellectual Property Training Institute
In 1987, the International Intellectual Property Training Institute (IIPTI) was established in Seoul as a KIPO affiliated organization. It initially offered 11 IPR training courses and moved to Daedeok Science Valley in Daejeon with the support of WIPO and the UNDP in February 1991. As of 2005, of the total 57 courses, IIPTI offers five courses for foreign trainees.

The Institute also jointly launched a distance-learning course with the WIPO Worldwide Academy (WWA) in the March and October of 2005. The course is two and a half month distance-learning course comprising nine English contents of copyrights, international treaty including PCT offered by the WWA, plus three Korean contents of Patent Act, Trademark Act, and Design Act.

IX. Other relevant matters