CWS.ATR.TM.2011.KR

Annual Technical Report 2011 on Trademark Information Activities submitted by Republic of Korea (CWS/ATR/TM/2011/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 2011, compared with 2010 (when measured on a multiple class basis), the number of trademark applications filed at KIPO was 150,977 representing a 1.4% decrease; while the number of registered trademarks was 92,549, representing a 32.2% increase.

Trends or areas experiencing rapid changes with respect to the previous year

Trademark applications have been decreasing consecutively for four years since 2008, while trademark registrations showed a 32.2% increase in 2011, compared to the previous year.

URLs of web pages of the Office's website that provide statistics related to trademarks

http://www.kipo.go.kr/kpo/user.tdf?a=user.english.html.HtmlApp&c=97000&catmenu=ek07_03_01

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

Publishing, printing, copying techniques

Gazette publication
Since July 2001, PDF gazettes of trademark applications have been published on a daily basis and made available on the website of the Korean Intellectual Property Office (KIPO) for two months from the date of publication. In addition, DVD-ROM versions, which include the same publications in XML and PDF formats, are distributed to 29 domestic/foreign organizations, twice a month. In 2011, 99,199 trademark applications were published on the website and on DVD-ROMs.

Data Management Center
Since May 2002, KIPO has been operating the Data Management Center to provide high-quality data services. The center is responsible for generating data, processing and fixing any errors found in KIPO's internal database. In 2011, its main activities were as follows:

• Database building: 269,000 domestic trademark documents
• Data dissemination: 9.84 million trademark documents to domestic/foreign organizations
• Publication: 99,199 trademark applications on the Internet

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

KIPO's Website (http://www.kipo.go.kr)
KIPO's main announcements of trademark information are usually made through its website . Visitors of the website can refer to the PDF gazettes mentioned above and registered customers can receive the gazette data that they are interested in through a push-mail service. Other key information announced at KIPO's website is as follows:

• Announcements about notifications that couldn't be delivered to applicants due to the changes in their postal address without informing KIPO
• Prior notices on trademarks expiring due to unpaid fees
• Other notices, such as changes in laws or fees

Word processing and office automation

With the launch of the KIPOnet system in 1999, almost all Industrial Property Rights (IPR)-related administrative processes have been computerized, including the filing/receipt, examination, registration, and trial-related procedures of trademark applications. Also, examination results are sent to applicants via email or SMS and official gazettes are published on the Internet. Below are the highlights of the upgrades made to the KIPOnet system.

• 2003 - 2005 (migration to KIPOnet II): Integrated and re-designed legacy subsystems, architectures, databases as well as the adoption of middleware and workflows; integrated networks and strengthened security facilities such as EAM, ESM, and SSO; launched a 24/7, nonstop e-filing service, a work-at-home examination system, and a real-time notification service.

• 2006-2009: Set up the infrastructure for sharing trademark information and examination results with other Industrial Property Offices (IPOs); launched WEB-PASS, which is a web-based e-filing system; started having automatic notifications mailed to applicants and improved our e-filing portal so that it allows individual users to more efficiently manage their trademark affairs; developed a commercial MS-WORD-based editor to replace existing filing editors; and enhanced the fee payment system.

• 2010-2011 (migration to KIPOnet III): Launched a 24/7, nonstop examination system and an intelligent search system to assist more efficient prior art searches; started providing convenient functionalities for examinations such as drawing interpretation, electronic memos and a citation analyzing tool; built a Server Based Computing (SBC) environment to prevent document leakages; and adopted up-to-date IT technologies such as government-standard framework, UTF-8 character set, and JAVA.

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

Digitization Center (Data Conversion Center)
In January 2001, KIPO began operating the Digitization Center for digitizing paper-based trademark applications and subordinate documents such as amendments, written opinions, objections, and registration and trial-related documents at both its Daejeon headquarters and its Seoul branch office. The center automatically receives applications, performs formality checks and data conversions on them. Delays and errors during the conversion process are avoided through the use of state-of-the-art technologies, such as, Multi-OCR, dual-key inputs, automated verification of electronic data, and color-scanning technology for documents attached to applications. In 2011, the center digitized 442,755 documents, which were a combination of 1,098 different kinds of paper-based documents, including 8,145 trademark applications.

URLs of web pages of the Office's website that provide access to online trademark gazettes and to other sources of trademark information, including download of bulk trademark data

http://www.kipo.go.kr/kpo/user.tdf?a=user.html.HtmlApp&c=4017&catmenu=m04_03_05
http://eng.kipris.or.kr/

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 using the Nice Classification System in March 1998, and officially became a party to the Nice Agreement in January 1999. In pursuit of greater fairness and objectivity, KIPO also continues to revise its examination guidelines and publish a directory for classifying similar goods and services. In December 2004, an internal study group was organized to investigate the classification of trade and service marks, share information on classification systems, and improve our examiners' abilities. The 9th edition of the Nice Classification has been used since 2007 and the 10th edition will begin to be used in 2012. In 2011, all the data of goods and service marks were refined.

Classification of the figurative elements of marks
KIPO started using the Vienna Classification in October 1999, without joining the Vienna Agreement. In 2002, KIPO developed an examination system that could handle the classification and examination of figurative elements of marks. In the same year, a separate team for classifying figures was formed with the aim to improve the quality and consistency of classifications. The sixth edition of the Vienna Classification has been used since January 2008. In April 2011, KIPO joined the Vienna Agreement and is to use the seventh edition, beginning in 2013.

IV. Trademark manual search file establishment and upkeep

File Building

Trademark Database
KIPO has built a database of registered trademarks published as far back as 1950, including those rejected since 1989, in SGML/XML format. The database also includes referral information such as international pharmaceuticals, international place of origin, foreign trademarks, public marks, and geographical indicators. All of this data is classified according to the Nice Classification, the Vienna Classification, or the Similar Group Code, depending on the type of marks, letters, figures, and designated products. They are periodically updated in a batch file for easier text and image searches. As of the end of 2011, approximately 6.12 million documents on trademarks exist within the database.

Storage, including mass storage media

Depending on the use and importance of data, KIPOnet's storage configuration is divided into two sections: an IPR administration section and a search section. The IPR administration system uses RAID 1 for its integrated database, image data (as original data), and XML data, using 50% of the disk (the rest of the disk is used for mirroring), while forming a Shadow Image that facilitates quick daily backups and recovery. On the other hand, the search system applies RAID 5 using 75% of the disk (the rest of the disk is used for parity) for search data, index data, large-sized images, and representative drawings.

V. Activities in the field of computerized trademark search systems

In-house systems (online/offline)

Trademark Search System
The Trademark Search System enables KIPO's examiners to search for domestic and international trademark information from designated offices under the Madrid Protocol. It provides bibliographic data, images, and SGML/XML data. The online searches can be conducted by the mark name, application number/date, or by the applicant's name. KIPO examiners can conduct step-by-step searches ranging from full-match searches to partial-match searches, as well as searches of classification code of figurative images and representative images. The major improvements and additions to the Trademark Search System in 2011 are as follows:

• Expansion of Similar Group Codes from 50 to 198, for trademark searches
• Addition of a function to search for figurative marks with keywords
• Addition of a function to do keyword searches within search result lists

Online Work-at-Home System
Since March 2005, a remote online work-at-home examination system has supported examiners who volunteer to work from home. They are enabled to securely access the KIPOnet system from the comfort of their homes through a VPN, fingerprint identification system, and a government public key infrastructure (GPKI). To prevent the leakage of undisclosed documents, Digital Rights Management (DRM) technology has been incorporated into the system. In an effort to make the work-at-home system more efficient and better managed, a new system was developed and incorporated into the work-at-home system in November 2008. The new system facilitates the receiving of applications online from prospective work-at-home examiners, recording of their work hours and the management of the list of undisclosed documents. As of the end of 2011, seven trademark examiners were benefiting from this system.

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

KIPOnet has many sub-systems that support managing data produced during the various phases of the IPR administrative processes, such as dealing with matters that originate in the transfer of data from one phase to another and streamlining search-related administration. Below are some of those sub-systems.

General Information Management Subsystem
The General Information Management Subsystem generates a variety of statistical and policy data on patents, utility models, industrial designs, and trademarks by using a variety of information retained in KIPO's databases. The system efficiently manages large volumes of data and provides end-users with various functions and tools with which to access the data.

Electronic Approval and Routing Subsystem
The Electronic Approval and Routing Subsystem enables electronic approvals of IPR and general administration processes. The system is comprised of two major parts: an approval system for IPR examinations that was introduced in 1999; and an approval system for general administration that was launched in June 2000. The approval system for general administration was replaced with the Onnara System in January 2007. The Electronic Approval and Routing Sub-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 of emails
• Electronic bulletin board: for the submission of posts and reviews
• Management and preservation of records

The system has a pop-up window feature, which shows messages on the approval status of documents and could be used for managing individual schedules. The electronic approval system was used for 99.66% of the documents approved in 2011.

Knowledge Oasis
For the efficient management of a variety of knowledge and information created by KIPO staff, the Knowledge Management System was launched in October 2001 and was renamed Knowledge Oasis (KOASIS) in 2006. KOASIS supports KIPO staff members in sharing knowledge through the bulletin board of the KOASIS website. Furthermore, it offers a keyword search function for gleaning details of approved documents and allows them to utilize various management tools, such as knowledge maps, knowledge warehouses, personalized portals, and cyber knowledge communities. In addition, the system enables KIPO to share ideas and knowledge with 18 external R&D institutes including the Electronics and Telecommunications Research Institute through an online Q&A communication corner. Some high quality information posted on KOASIS is available to the public through KIPO's homepage and private search portals like Naver. Since November 2007, it has also been linked to the Government's Knowledge Management System for more extended information sharing between government agencies. In 2008, a 'WIKI Corner' and a multi-dimensional knowledge map were built for more efficient use of KOASIS and in 2010, an integrated search function of the accumulated knowledge and a trading function for "knowledge mileage" were added to KOASIS.

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

Hardware
As of the end of 2011, KIPOnet had 46 UNIX Enterprise servers, 76 NT servers, and 89 Linux servers. For higher availability, individual servers are clustered for the e-filing system, IPR administration system, search system, and particularly between the Homepage Server and the Portal Server. In case of system failures, the cluster paired systems temporarily substitute for each other. The combined storage capacity of the 27 servers is 1,055 terabytes including 12 SANs. The peripherals consist of 6 backup devices, 2 jukeboxes and 460 sets of network equipment. The improvements made in terms of hardware performance in 2011 were as follows:

• Introduction of new IT resources for KIPOnet III: 12 servers
• Establishment of a Server-Based Computing (SBC) environment: 65 servers and 4 disks
• Improvement of the stability of the public search services: a 85% decrease in the disk busy rate (from 100% to 15%)
• System optimization for the improvement of HP-UX systems by fine-tuning 221 items including servers, memories, processes, and files
• Inspection of the availability of administration systems/search systems/homepage systems through server-duplexing tests
• Improvement of the security of KIPOnet system through the installation of a security patch

Network
KIPO's activities to enhance network and security for the KIPOnet in 2011 system include:

• Improvement of transmission speed enough to be perceptible by users (100M1GB)
• Upgrade and introduction of the IP address management tools (V3.5.4XE5.0)
• Replacement of outdated network equipment: L2 Switch (18 sets), L3 Switch (2 sets)
• Regular dual test for more stable operation of network equipment including communication lines
• SBC networking configuration for KIPOnet III: L4 Switch (4 sets), L3 Switch (4 sets)

Software
For databases, performance tests and recovery practice tests are regularly conducted with support from Oracle. In addition, KIPO introduces and upgrades system software such as DBMS, web servers and middleware to improve the KIPOnet system's performance and functionality. As of the end of 2011, about 239 commercial software applications were in use. The software applications can be grouped into three major groups, as follows:

• 189 perpetual-licensed software including DBMS and web servers
• 15 subscription-licensed software including Vi Robot and other security products
• 35 packaged software for KOASIS, web mail, messenger, performance management system, electronic approval system, career development management system, Call Center, DW, Homepage portal, ITA/EA, DQM, open-end statistics portal, and e-filing portal

VI. Administration of trademark information products and 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 services for the public by managing the IP Digital Library and the e-Filing Portal System, while other departments support customers according to their duties and responsibilities.

e-Filing Portal System
The e-Filing Portal System was established to transform KIPO's website into an online service portal for the online community. Owing to this service, applicants can file their applications online and pay relevant fees via Internet banking and they are informed of the legal status of their applications via e-mail and/or SMS. They can also request and receive certificates such as priority certificates via the Internet and check the progress of their request. In addition, a public service for informing applicants of the time of their applications' examination in advance has been made available since October 2006. Moreover, individual applicants can be informed of the status of their application via email or SMS, while enterprises can through an HTML-based service titled "How is my application going?", while universities, institutes and IP law firms can do the same through a SOAP-based web service. This e-Filing Portal System is linked to the WEB-PASS, which is a web-based e-filing system used for receiving intermediate documents and registration/trial-related documents, as well as all kinds of IPR applications. Furthermore, in 2010, 12 kinds of mobile applications were introduced into this System in accordance with the rapid proliferation of smart phone users. In 2011, for users' convenience, the e-filing software suite was unified, along with the improvement of the 'Help' function.

IP Digital Library
The IP Digital Library located at KIPO's headquarters supports its customers by enabling them to search for trademark information in a variety of formats including online, microfilm, and paper, as well as in the journals and magazines the Library has. They could also order copies of published trademark applications, as filed.

Customer Service Center
To integrate scattered counseling resources and promptly provide technical advice, the Customer Service Center was established in March 2002. Its main services are on the following issues:

• Procedural and technical advice on (electronic) filing, examination, registration, trial, search, and use of trademark information, as well as on international trademark applications
• Use of the Expert System (e-filing support system) and remote consultation
• Consultation through mobile Web/App or Twitter
• Angel Call service to inform applicants in advance that their applications will be extinguished along with suggesting reasonable solutions

Security
In terms of security, the digital signature of electronic documents is used based on a public key infrastructure for encryption and decoding. 24/7 Enterprise Security Management has been introduced for security equipment and servers. Also, a key logger security and a hacking-diagnostic system are used for protecting PCs against other risks, such as spyware; and a single sign-on system has been implemented for tighter security in accordance with the standardized Directory Access Protocol. Diverse security tools have been used to block illegal access to undisclosed databases and unauthorized access to the main database.
Particularly, SBC was introduced to enhance the security of trademark information. Against external attack threats, network based security systems such as UTM, Firewall, IPS, and VPN have been utilized. The extended application of SecureOS is also useful for authorization control to servers.
KIPOnet won the ISO 27001 certification in 2006, recognizing its highly secure web services for applicants, SecureOS for servers, individual information protection marks, and secure site mark. Accordingly, among government departments, KIPO has consecutively won the top spot in security assessment (from 2007 to 2011) and in personal information protection (from 2008 to 2011).

Collection management, preservation

IP Digital Library
The IP Digital Library archives trademark documents, such as bibliographic data, abstracts and full texts collected from seven countries and one international organization in a variety of media such as, paper, microform, CD-ROM or DVD-ROM. The library also possesses 9,082 volumes of trademark-related journals, magazines and books that were either donated or purchased.

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)

Korea Industrial Property Rights Information Service (KIPRIS)
Korean domestic trademark information has been made available free-of-charge at the KIPRIS website (http://www.kipris.or.kr) since January 2001. The service covers up-to-date information on the legal status of trademark applications, bibliographic data, and TIFF images dating back to 1950, as well as full text gazettes in XML/PDF back to 1998. It also provides foreign trademark data from AU, CA, JP, and US on a trial basis. Registered members are allowed to download and print documents of interest. Moreover, a web service, called KIPRISPlus enables users to modify databases retrieved from the website to suit their needs and requirements. The KIPRISMobile service, which was put into full operation in 2009, is an authentication-free web service for trademark searches via mobile devices. In terms of its functions, the KIPRIS service offers a Korean to English (and vice versa) translation service, sorting function on search results, and popular search queries. In 2011, Similar Group Codes were expanded from 50 to 198, for trademark searches.

URLs of web pages of the Office's website for electronic filing of trademark applications

http://www.patent.go.kr

URLs of web pages of the Office's website that provide information on business procedures such as: filing, publication, examination and registration procedures related to trademarks; opposition and appeal procedures related to trademarks; etc.

http://www.kipo.go.kr/kpo/user.tdf?a=user.html.HtmlApp&c=10003&catmenu=m04_01_04
http://www.kipo.go.kr/kpo/user.tdf?a=user.english.html.HtmlApp&c=93000&catmenu=ek04_01_01

URLs of web pages of the Office's website that provide a description of information products and services offered by the Office (e.g., trademark search service(s) and trademark databases), as well as information on how to access and utilize them

http://www.kipris.or.kr

VII. Matters concerning mutual exchange of trademark documentation and information

International or regional cooperation in the exchange of trademark information, e.g., in the form of official gazettes

KIPO regularly offers on DVDs, official trademark gazettes to 19 trademark offices, including the AT, CA, DE, FR, IT, JP, RU, US, and the OHIM.

VIII. Matters concerning education and training, including technical assistance to developing countries (please indicate URLs of web pages of the Office's website wherever appropriate)

Promotional activities (seminars, exhibitions, visits, advertising, etc.)

2011 Trademark-Design Exhibition (December 2011)
Since 2006, KIPO has been holding an annual trademark and design exhibition for raising public awareness of the importance of trademarks and designs as intellectual property rights. The event for 2011 focused on successful management strategies for trademarks and designs to strengthen the competitiveness of interested enterprises. As with last year's, the exhibition displayed themes such as the Brand Explanation, New Trends in Trademarks and Designs, Best Brand Contest Award, Original/Counterfeit Experience, Trademark/Design Rights Conflict Cases, Domestic Design Characters, and an event plaza.

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 an affiliate of KIPO. It initially offered 11 IPR training courses. In February 1991, it moved to the Daedeok Science Valley in Daejeon with the support of WIPO and the United Nations Development Programme. In 2011, the IIPTI ran 13 courses for foreign trainees of the total 71 different courses including international seminars and training courses in conjunction with WIPO and the Korea International Cooperation Agency and customized training courses for 183 trainees from approximately 30 countries, including Indonesia, Malaysia, and Vietnam.

IX. Other general information related to the Office that is available on the Internet -- URLs of web pages of the Office's website that:

provide information on legislation related to trademarks

http://www.kipo.go.kr/kpo/user.tdf?a=user.html.HtmlApp&c=3031&catmenu=m02_02_01
http://www.kipo.go.kr/kpo/user.tdf?a=user.english.html.HtmlApp&c=60201&catmenu=ek07_02_01

contain the Annual Report of the Office

http://www.kipo.go.kr/kpo/user.tdf?a=user.html.HtmlApp&c=3072&catmenu=m02_03_04
http://www.kipo.go.kr/kpo/user.tdf?a=user.english.html.HtmlApp&c=60111&catmenu=ek07_01_01

contain trademark-related news regarding the Office

http://www.kipo.go.kr/kpo/user.tdf?a=user.english.board.BoardApp&board_id=kiponews&c=1001&catmenu=ek06_01_01

X. Other relevant matters