SCIT.ATR.ID.2007.KR

Annual Technical Report 2007 on Industrial Design Information Activities submitted by Republic of Korea (SCIT/ATR/ID/2007/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.

The expression "industrial designs" covers industrial designs and models. Offices which issue design patents should report their design patent information activities in this series of Annual Technical Reports.

I. Evolution of registration activities

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

In 2007, the number of design applications was 54,362, a 6.5% increase over the number for the previous year. While the number of registered designs was 40,745, representing a 19.1% increase over the number for the previous year.

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

http://www.kipo.go.kr/kpo2/user.tdf?a=user.eng.refermeter.BoardApp&c=1001&board_id=statistics&movePage=ek060300&catmenu=ek60300

II. Matters concerning the generation, reproduction, and distribution of industrial design documents and of secondary sources of industrial design information, i.e., official gazettes

Publishing, including printing, copying techniques and electronic printing

Gazette publication
In July 2001, KIPO began daily-posting PDF gazettes on industrial designs on its website. In addition, XML DVD-ROM gazettes are distributed to 29 domestic and foreign organizations twice a month. The master DVD-ROMs of the publications are archived after the publications are uploaded to the Internet. In 2007, we published gazettes on 1,971 design applications and 40,704 registered designs.

Digitalization Center (Data Conversion Center)
In January 2001, KIPO began operating a Digitalization / Data Conversion Center for digitizing paper-based applications for designs and other intermediate documents, such as amendments, written opinions, objections, registrations, trials and paper-based gazettes at both its Daejeon headquarters and its Seoul branch office.

The Center automatically receives applications, performs formality checks and data conversion on them. Delays and/or errors during the conversion process is avoided through applying state-of-the-art technology, such as, Multi OCR, dual key-inputs, automated verification of electronic data, and color-scanning technology.

In 2007, the Center digitized 166,233 documents, which were a combination of 777 different kinds of paper-based documents, including 5438 design applications.

Data Management Center
Since May 2002, KIPO has been managing a Data Management Center. The Center provides high-quality data services; generates and processes data, and corrects data errors. In 2007, data analysis was conducted on the following:

• Data generation: 4,219,000 domestic data and 887,000 foreign data
• Data transfer: In order to improve on the availability and accuracy of public data, KIPO provided KIPI with 520,000 raw data on designs in 2007. These are available to the public through a free online design information search service – KIPRIS.
• Media management system: In 2005, the Center established a system for managing information about media collected from foreign offices. In 2007, it assigned individual ID numbers to 2868 media and entered relevant information about them into the system.

Main types of announcements of the Office in the field of industrial design information

KIPO's Website
On KIPO's website, applicants can find the following:

• Announcements about notifications that couldn't be delivered due to applicants changing their addresses.
• Advance notice on designs expiring due to the non-payment of fees.
• Other notices, such as, changes in laws, fees etc.

Internet gazette search service
Since 2001, KIPO has had an Internet gazette search service, which is available at its website . At this website, customers can refer to publications from the year 2002 to date in PDF format. In addition, they can be sent notifications about their areas of interests through a push-mail service or a Short Message Service (SMS).

Databases and office automation

With the launch of the KIPOnet system in 1999, KIPO automated almost all its administrative processes, including the receiving of applications, examination of applications, granting and publishing of gazettes. In addition, KIPO enabled the communication of examination results to applicants via the Internet or SMS, published official gazettes on the Internet, and handled most of the registration and opposition procedures online.

Due to the KIPOnet II system, which was developed in 2005 as an upgraded version of the KIPOnet system, KIPO now offers nonstop services, a work-at-home examination service, a real-time notification service, and a public service of notifying applicants of when their applications would be examined.

In November 2007, KIPO started supporting applicants e-filing using the WEB-PASS system. The WEB-PASS system is a web-based e-filing system for all types of IPR applications, including designs.

For the database on industrial designs, please refer to the attached file, below.

DesigndatabasestatusofKIPO

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

http://www.kipo.go.kr/kpo2/user.tdf?a=user.html.HtmlApp&c=4015&catmenu=m03_11_04
http://eng.kipris.or.kr/

III. Matters concerning classifying, reclassifying and indexing of industrial design information according to the classification systems applied

Classification and reclassification activities; Classification system used, e.g., International Classification for Industrial Designs (Locarno Classification), other classification (please indicate whether industrial designs are classified by your Office and, if so, which classification is used)

KIPO uses the Korean Industrial Design Classification System, a unique system comprising of 73 main classes. Although KIPO is yet to adopt the Locarno Classification, it cross-references the Locarno Classification on official gazettes with a search index containing information, such as classification, applicant, application number/date, publication number/date and registration number/date.

Bibliographic data and processing

With regard to prior application and registration, KIPO loaded bibliographic data and images dating back to 1999 into the Industrial Design Search System. It also loaded national designs, bibliographic data and full images extracted from JPO, WIPO, and OHIM.

IV. Search file establishment and upkeep

File building

Regarding the searchable database for KIPO's examiners, please refer to the table attached to the "databases and office automation" of section II. We continued building and updating files, necessary for improving the quality of examinations, with data acquired from domestic and foreign offices and organizations.

As at the end of 2007, we had built a database of 26.5 million data comprising of 17.1million domestic designs and 9.4million foreign designs.

Storage, including mass storage media

Design data are stored on disks either in Text, TIFF or SGML/XML formats.

Documentation from other offices maintained and/or considered part of the available search file

In addition to the searchable data introduced under the file building and updating section above, for easy public access, the official gazettes of the GB, CA, CN, TW, RU and TH are also available at KIPO's IP Digital Library on microform, roll film and tape cartridge. We also have 1.9 million design data records obtained from Germany, Benelux, etc.

V. Activities in the field of computerized search systems for industrial designs

In-house systems (online/offline)

Industrial Design Search System
The Industrial Design Search System enables KIPO's examiners to electronically retrieve and display domestic and foreign databases, including gazettes, design catalogues, and typefaces from Korea, Japan and WIPO. It provides bibliographic data, images, and SGML/XML data. The system features an electronic folding screen system that compares examination results with reference searches on two monitors.

Specifically, in 2007, we improved on the search functions for KIPO examiners to view detailed images of foreign designs and design applications on examination. We also improved on the automatic classification system embedded in the Industrial Design Search System. Due to the upgraded version of the system, searches for design applications can be viewed on the examination evaluation window, and the accuracy of automatic classifications has increased.

Trial and Court Decision Documents Search System
With the launch of the KIPOnet system in 1999, KIPO established the Trial and Court Decision Documents Search System for its examiners. Due to this system, examiners can easily access detailed information on trial and/or court decisions on designs and relevant texts.
In 2007, we upgraded the search system to enable them to:

• Search for the chief trial examiner of each trial decision
• Check whether an application is on trial or not
• Check and view trials on controversial issues
• View each trial decision along with the relevant alterations made afterwards
• View brief information on recent trial decisions

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

In 2007, the KIPOnet system integrated approximately 39 subsystems. Each subsystem plays a role in managing the data produced during the various phases of the procedure; such as, dealing with matters that originate in the transfer of data to the next phase, and streamlining the search administration.

General Information Management System
The General Information Management System generates a variety of statistical and policy data related to industrial designs, trademarks, patents, and utility models. 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 to end-users.

Electronic Approval and Routing System
The Electronic Approval and Routing System enable electronic approvals for IPR and general administration. The system comprises of two major parts: an approval system for IPR examinations, introduced with the KIPOnet system in 1999; and an approval system for general administration, launched in 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.

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 99.9% of all the documents approved in 2007.

Knowledge Oasis
In 2006, the Knowledge Management System that was launched in 2001, was renamed Knowledge Oasis (KOASIS). The KOASIS does not only represent a change in name, but also represents a significant upgrade to the previous version of the system. The system is dedicated to the efficient management of a variety of knowledge and information created by our staff. It's for assisting them in their work, and enables them to discuss and share knowledge through the bulletin board of the KOASIS website. Furthermore, it offers a keyword search function for gleaning details of approved documents and allows our staff to utilize various management tools, such as, knowledge maps, knowledge warehouses, personalized portals, and cyber knowledge communities.

In addition, some high quality information posted on the KOASIS is available to the public through KIPO's homepage and private search portals like Naver. Since November 2007, it has been linked to the Government's Knowledge Management System for more extended information sharing between government agencies.

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

Hardware
As at the end of 2007, KIPOnet had 57 UNIX Enterprise servers, 57 NT servers, and 15 Linux servers. For higher availability, we setup a clustering system between the Receiving and the Sending Severs; the Documents Management and the Publication Servers; the Homepage Server and the Portal Server; Document Management Server and Gazettes Server; and the Administration Automation and the General Information Management Servers, including Search DB1 and DB2, Search Engine 1 and 2. In other words, in case of system failure, the paired servers temporarily substitute for each 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 even when server failures occur.

The storage capacity is 290 terabytes. RAID 1, 5, 0 are used according to the method of data protection. For security, we have deployed 43 pieces of equipment, such as, VPNs and IDSs. The peripherals consist of 6 backup devices, 5 jukeboxes and 207 sets of network equipment.

In 2007, we improved the performance of our hardware by introducing more IT resources, such as, 18 servers, 29TB disc, and 46 copies of commercial software to enhance the IT infrastructure. We also analyzed the availability of server resources; adjusted them; optimized the storage and backup devices; and installed duplicate network cards for improved availability.

Network
In 2007, KIPO increased its communication line from 20Mbps to 40Mbps for improved services at the Call Center, targeting applicants and the public. We also replaced 13 old communication devices with new ones.

In November 2007, in order to create an e-Government infrastructure that can cope with future IT environment and to facilitate the sharing of informational resources between government offices, KIPO's IT resources were incorporated into the National Computing & Information Agency (NCIA), which has two branch offices. The relocation of KIPO's IT resources and network equipment were as follows:

• KIPO's headquarters is connected to the 2nd NCIA office on 622Mbps and 2 lines.
• KIPO's IT Center was relocated to the 2nd NCIA office.
• The Disaster Recovery Center, which has always been in Seoul, was relocated to the 1st NCIA office.
• In case of disaster at the 2nd NCIA, the 1st NCIA will run the online public services via a DWDM link of 2.5Gbps

Software
For databases, we regularly conducted performance tests with support from Oracle. We continued upgrading the backup tools, middleware, and web servers to improve the KIPOnet system's performance and functionality. As at the end of 2007, we were using approximately 154 sorts of commercial software. The software can be grouped into three groups and are mostly related to database and middleware. The groups are:

• 143 sorts of perpetual license software including DBMS and web servers
• four sorts of subscription license software including V3
• Seven sorts of package software for KOASIS, web mail, messenger, performance management, electronic approval, six sigma, and etc.

VI. Administration of industrial design information products and services available to the public (relating to facilities, e.g., for lodging applications, registering designs, 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-Patent Portal System, while other departments support customers according to their duties and responsibilities.

e-Patent Portal System
Since 2001, for the convenience of applicants, KIPO has served the public through the e-Patent Portal System implemented at KIPO's website.

This portal helps applicants to file all kinds of intellectual property applications online with the applicant code and digital signature authorized by KIPO via the Internet. In addition, they can change their personal information on the website, pay their fees via Internet banking, and are informed of the legal status of their applications. In addition, they are informed in advance by email or SMS of when their applications will be examined. Furthermore, they can request and receive certificates, download electronic dossiers, such as, priority certificates etc via the Internet, and check the status of their requests.

Moreover, in November 2007, KIPO started receiving patent and utility model applications filed through the WEB-PASS—a web-based e-filing system.

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

• Counseling: procedural and technical advice on (electronic) filing; examination; registration; trial; search and use of design information; and on the evaluation of disputes, such as IPR infringement.
• Customer Relationship Management: customized information based on the record of past phone requests and opinions collected through customer satisfaction surveys for better policies and promotional events.
• Outreach service: informs applicants in advance that their applications would be denied and suggests reasonable solutions.
• Others: managing a quick response system that is available on the Internet; dispatching a troubleshooter to help applicants with e-filing, online meetings between an examiner and an applicant through the local IP information center and the Multimedia Center in KIPO.

Security
In terms of security, we accept the digital signature of electronic documents based on a public key infrastructure for encryption and decoding. To protect our customers' computers from external attack, we operate an IDS, firewall, and a VPN with ESM equipments and servers 24 hours a day, 365 days a year. We also have a key logger security and a hacking-diagnostic system for protecting PCs against other risks, such as spywares; and we have applied a single sign-on system for tighter security in accordance with the standardized Directory Access Protocol. In 2006, we upgraded our security level by attaining ISO 27001 for better security of web services for applicants, secure OS for servers, individual information protection mark, and secure site marks.

Collection management, preservation

IP Library
The IP Library archives industrial design documents such as bibliographic data, abstracts and full texts in a variety of media such as paper, microform, CD-ROM and DVD. The documents are collected from five countries and one international organization. The library also contains 8,067 volumes of industrial design-related materials and six kinds of catalogs such as Elegance and Spiegel 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 industrial design information posted by your Office on the World Wide Web)

Korea Industrial Property Rights Information Service (KIPRIS)
Since January 2001, we have offered domestic design information free-of-charge through KIPRIS, which is available at http://www.kipris.or.kr/kor /main/main.jsp. The service covers up-to-date information on the legal status of design applications, as well as full text of registered designs dating back to 1950, quick registrations since 1996, and gazette data in TIFF/PDF/SGML format since 1998.

In 2007, we launched a web service, KIPRISPlus, which enables users to modify databases retrieved from the website to suite their needs and requirements.

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

http://www.kipo.go.kr/kpo2/user.tdf?a=user.kiporo.BoardApp

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 industrial designs; opposition and appeal procedures related to industrial designs; etc.

http://www.kipo.go.kr/kpo2/user.tdf?a=user.english.html.HtmlApp&c=30104&catmenu=ek30104
http://www.kipo.go.kr/kpo2/user.tdf?a=user.english.html.HtmlApp&c=30300&catmenu=ek30300
http://www.kipo.go.kr/kpo2/user.tdf?a=user.html.HtmlApp&c=4003&catmenu=m04_02_01_03

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

http://www.kipo.go.kr/kpo2/user.tdf?a=user.html.HtmlApp&c=4012&catmenu=m03_11_01
http://www.kipo.go.kr/kpo2/user.tdf?a=user.kiporo.html.HtmlApp&c=7001&catmenu=mykipo0101

VII. Matters concerning mutual exchange of industrial design documentation and information

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

KIPO distributes its Official Gazette on Designs via CD-ROM to 18 IPOs including the AU, CA, DE, FR, IT, JP, PH, SE, SG, and US. And we receive official gazettes on CD-ROM from IPOs, such as, the JP, RO, RU, and WIPO.

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.)

2007 Trademark-Design Exhibition (August 2007)
To raise public awareness of the importance of trademarks and designs as an intellectual property right, KIPO has been holding an annual trademark and design exhibition since 2006. The event for 2007 was focused on the successful management strategies for individual trademarks and designs to strengthen the competitiveness of interested enterprises. It also featured the exhibition of diverse results from KIPO's activities from over the past 30 years and the promotion of the creation and use of related IP rights. It was done in seven exhibition booths: KIPO, New trends of trademarks and designs, Best practices of Enterprises, Original/Counterfeit Experience, Contest Awards for University Students, Trademark and Design Counselor, and the Brand and Design Seminar.

Training courses for national and foreign participants

International Intellectual Property Training Institute (IIPTI)
In 1987, the International Intellectual Property Training Institute (IIPTI) was established in Seoul as an organization affiliated with KIPO. It initially offered 11 IPR training courses and then moved in February 1991, to the Daedeok Science Valley in Daejeon with the support of WIPO and the UNDP.

As at 2007, out of a total of 71 courses, the IIPTI offered eight to foreign trainees. Notably, customized courses were offered to the officials and examiners of the Vietnamese and Malaysian governments on their government's special request.

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 industrial designs

http://www.kipo.go.kr/kpo2/user.tdf?a=user.english.html.HtmlApp&c=60201&catmenu=ek60201

contain the Annual Report of the Office

http://www.kipo.go.kr/kpo2/user.tdf?a=user.english.html.HtmlApp&c=60101&catmenu=ek60101

contain industrial design-related news regarding the Office

http://www.kipo.go.kr/kpo2/user.tdf?a=user.english.board.BoardApp&c=1001&board_id=kiponews&catmenu=ek20200

X. Other relevant matters