WORLD INTELLECTUAL PROPERTY ORGANIZATION

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ANNUAL TECHNICAL REPORT

2001

ON INDUSTRIAL DESIGN INFORMATION ACTIVITIES[*]

submitted by the

REPUBLIC OF KOREA

An annual series of reports on the industrial design information activities
of members of the Standing Committee on Information Technologies

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[*]
  – The expression "industrial design" covers designs and models.
  – Information related to design patent activities reported by industrial property offices issuing design patents is included in this series of documents.

**ANNUAL TECHNICAL REPORT ON
INDUSTRIAL DESIGN INFORMATION ACTIVITIES**

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I. Evolution of registration activities:

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

Industrial design applications slightly increased by 9%, from 33,802 in 2000 to 36,867 in 2001; while the number of registered industrial designs decreased by 1%, from 18,836 in 2000 to 18,650 in 2001.
    There might be a marginal error in statistics due to unprocessed written applications.

- **Trends or areas that experienced rapid changes with respect to the previous year;**

II. Matters concerning the generation, reproduction, 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
    Hard copy: Until April 1998 hard copies of the Industrial Design Gazettes were published two or three times a month, two or three months after the publication date, and were disseminated to the general public by mail.

    CD-ROM: From May 1998 to June 2001, the Industrial Design Gazettes were published on CD-ROM with a mixed-mode data format and a comfortable, user-friendly interface utilizing Mimosa from the EPO. They were also distributed inside and outside the country. The new CD-ROM gazette has also been issued with SGML data PDF documents, including the additional Korean language font for foreign users; it also supports English installation for users with an English OS. The Korean language version of Adobe Acrobat Reader should be installed for the gazette inquiry.

    Internet: In July 2001, KIPO began posting PDF-formatted gazettes daily on its website. This has replaced the CD-ROM version, although a master CD-ROM of each publication archived for permanent preservation. With this IT breakthrough, KIPO can

expeditiously provide information to its customers while cutting down publication expenses and allowing users to gain easily access to information via the Internet.

- **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 notices:
    Subsequent notices of applications filed with KIPO, when not delivered
    to an applicant due to a change of address
     Pre-notice of extinction of an IPR, due to non-payment of official fees
    Other notices such as changes in laws or fees

Korean gazette search service
In 2001 KIPO launched an Internet gazette search service at http://www.kipo.go.kr. Applicants can freely refer to PDF-formatted trademark data via the Internet, at any time during the opposition request period from the publication date. After the opposition request period they can find the information at http://www.kipris.or.kr, the website of the Korea Institute of Patent Information (KIPI), which is a specialized IPR information service founded by KIPO in 1995. The search service allows applicants to be notified about their interests through a push-mail service.

- **Mass storage media and microforms used;**

- **Databases and office automation;**

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 unique Korean Industrial Design Classification System, which is composed of 73 main classes. The Locarno Classification has not yet been applied within KIPO, but it is indicated on official gazettes that have a search index such as classification, applicant, application number/date, publication number/date, registration number/date and so on.

Data consolidation and improvement of the Industrial Design Classification System
In 2001, KIPO consolidated a database of 37,000 national pre-filed drawings, 350,000 foreign design gazettes and catalogues. Due to the improved function of the Industrial Design Classification System, constructed in September 2000, the ratio of automatic classifications was increased with the introduction of goods classification by keyword.

- **Bibliographic data and processing for search purposes.**

With regard to prior application and prior registration, bibliographic data and images dating back to 1999 were loaded into the Industrial Design Search System in 2001. Bibliographic data and full images extracted from Japan and WIPO gazettes on CD-ROM, as well as national designs, were also loaded into the system.

IV. Search file establishment and upkeep:

- **File building and Updating;**

Design database
In 2001, the following design-related databases were constructed:
- Design gazettes: 240,000 published from 1996 to 1998
- Prior application drawings: 187,000 published from 1966 to 1998
- Catalogues: 1200,000 published from 1966 to 2001

The data was classified according to the goods divisions, loaded into the Design Search System, and periodically updated into a batch format.

- **Storage, including mass storage media;**

In a disc for the Design Search System, the data from 1,240,000 national designs has been stored in Tiff or SGML format.

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

The official gazettes of GB, CA, CN, TW, RU and TH are available in KIPO's IP Library so that the public can have easy access to them in microform, roll film or tape cartridge. The searchable data in the Design Search System includes 890,000 pieces of data from the Japanese Design Official Gazettes, 600,000 pieces of data from other countries and 1.09 million catalogues.

V.   Activities in the field of computerized search systems for Industrial Designs:

- **In-house systems (online/offline);**

Industrial Design Search System
With the Industrial Design Search System, KIPO's examiners can do text and image searches, realizing an automated environment for design examinations. The system was developed in 2000, after consideration of the possibility of adopting the Locarno Classification System. It was enhanced in 2001 with more domestic and foreign data.

- **External databases;**

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

With the establishment of the KIPOnet system, all the IPR administrative procedures were automated. To manage the data produced in each phase of the procedure, to deal with matters originated during their transfer to the next phase, and to speed up the search administration, KIPO has used KIPOnet's representative subsidiary systems that follow.

General Information Management System
The General Information Management System outputs a variety of statistical and policy data relating to industrial properties such as patents, utility models, trademarks and industrial designs through using a variety of information retained by KIPO in database form. The system operates tools to efficiently manage large-volume data, and it provides various features for end-users.

Data Management System
The Data Management System simplifies the procedure to correct input errors by users and to change data in the old systems. It maintains a history of data changes, and guarantees correct data change to immediately meet requests by applicants and organizations.

Applied Process Monitoring System
The Applied Process Monitoring System aims to prevent the occurrence of problems caused by delays in work processing, and to provide information on the problem-managing status by application type and by application form. If a problem occurs, this system analyzes the cause of the problem and establishes measures to handle it.

Quality Management System
Strengthening the function of the KIPOnet Quality Management System, which was constructed in December 2000, has provided a basis for: enhancing work productivity,

through the establishment of standardized processes; for efficiently operating resources, through systematic process management; and for maintaining the balance between an individual's workload and the developer's workload, through a coordinated distribution of the workload among departments. The system allows for efficient quality management, as well as process improvement, through continual inspection and customer satisfaction improvement.

In November 2001, KIPO was granted an ISO9001 Certificate by the Korean Foundation for Quality for its development, management and servicing of the KIPOnet system. This certification assures that KIPO will maintain the excellent reliability and credibility of the system.

Knowledge Management System

The Knowledge Management System facilitates the sharing of information among members through integrated management of a variety of information and intellectual properties held by KIPO, and it provides such information optionally through personalized portals. The system is dedicated to the efficient management of knowledge and information retained by KIPO. It helps in activating the knowledge management in the field of IP administration by improving the productivity of IP administration processes through the already-established evaluation and reward system for knowledge activities. In September 2001, 5,448 individual pieces of information were posted on the relevant site, which showed the possibility of constructing an infrastructure for knowledge management.

The Applicant/Agent Information Management System

The Applicant/Agent Information Management System manages information relating to the registration and management of applicants and agents. It helps applicants or agents identify themselves by using a registration number and code given on the date of completing registration with KIPO. This enables applicants to overcome the physical impossibility of identifying themselves at the time of e-filing.

The Immediate Notification System

The Immediate Notification System notifies applicants of the KIPO's decision to accept or reject their applications on the same date the applications are received online by KIPO.

The Online Payment System

The Online Payment System reduces the overall time taken for KIPO to process fee payments by applicants using Internet banking, and it allows applicants to have access to information relating to fee payment.

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

By improving the IT infrastructure of the KIPOnet system, such as the server, discs and common software, KIPO's business processing has been accelerated.

Hardware

Together with the development of the e-Patent Portal System, it was necessary to

increase the processing capability of reception and dissemination servers. To ensure a reasonable response, these servers were upgraded to the Enterprise Server (HP V2600). Additionally, Online Proxy Servers (HP A500) were configured to provide prompt reaction.

Network

To prevent e-filing service disruption, critical network devices were redundantly installed, and redundant Internet service providers (ISPs) such as Korea Telecom and Dacom were implemented. Duplicate network connecting devices (e.g. routers, switches and firewalls) and duplicate ISPs could create high availability and provide redundancy if one device were to fail. This duplication also provides load balancing in routing traffic. For storage sharing among servers, a storage area network (SAN) was introduced to the KIPOnet system. The SAN improved the efficiency of the data storage and reduced the workload related to disk management.

Software

In 2001 KIPO also set up Customer Request Management software for the e-Patent Portal System and Gdomino for handling the connection with other governmental offices related to the electronic approval system.

VI. Administration of the Industrial Design 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;**

- **Collection management, preservation;**

IP Library

The IP Library contains patent documents, such as bibliographic data, abstracts and full texts, in paper, microform or on CD-ROM, on the basis of mutual exchange from 21 countries and four international organizations. The total amount of patent documents preserved includes 16,112 CDs, 19,833 films, 261,613 microfiches, and 3,201 cartridge tapes. The library also possesses non-patent documents that have been donated or purchased from other sources, including approximately 22,787 volumes and 507 periodicals related to science and technology, and CD-ROMs of annual reports and statistics.

In addition, KIPO has provided its examiners with a variety of popular catalogues such as Elegance, including InterDesign Bulletin published by WIPO, for prior art searches of industrial designs.

The above-mentioned materials are arranged by class or numerical order. All of these materials are available for search by KIPO's examiners or by the public as well. An

electronic database is also provided at the Internet corner in the IP Library.

- **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).**

e-Patent Portal System
KIPO established the e-Patent Portal System that was designed for reforming KIPO's Internet homepage into online service site for the cyber community; it provides, through a unified portal, diverse IP services including web-based online applications, specification preparation using a commercial word processor, simplification of preliminary procedures, Internet gazettes and customer relationship management. This has enabled more forms to be submitted online, as well as mutual online communication between KIPO and its customers by e-mail or mobile phone. By securing this channel for a variety of users, the limitation of one-sided notification has been overcome. As a result, KIPO can accumulate the applicants' feedback for making better policies and establishing IT strategy in the future.

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;**

- **Exchange of machine-readable information, e.g., data contained on CD-ROM or magnetic tape;**

In the interest of mutual exchange, KIPO provides the *Official Gazette of Designs and Trademarks* on CD-ROM for 23 other countries and two international organizations, including AU, CA, DE, ES, FR, GR, IR, IT, JP, PH, RU, SE, SG, TR, US, EP. KIPO has received official gazettes in paper or on CD-ROM from DE, CN and AU.

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

- **Promotional activities (seminars, exhibitions, visits, advertising, etc.);**

Guide to the KIPOnet system
To help foreigners understand the KIPOnet system, we published a guidebook in English, entitled as "Introduction of KIPOnet System". The hard copy and CD-ROM

versions have been disseminated to visitors at KIPO and to staff going abroad on a business trip.

Seminar on intellectual property rights for IP-enforcement staff members
   1) Objective: To promote IPR protection measures such as preventing the counterfeiting of products, reviewing the current situation and establishing the enforcement system on intellectual property rights in the Asian region.
   2) Dates: June 26, 2001 - June 29, 2001.
   3) Participants: 20 participants from China and Vietnam, respectively, and twenty participants from Korea and Japan, mostly government officials engaged in IP enforcement.
   4) Organizers: KIPO/IIPTI and the JPO.

The APEC International Symposium on IP & IT
The APEC International Symposium on IP & IT was held under the co-sponsorship of WIPO and KIPO from 19 to 23 November 2001, with the participation of 33 governmental officials from 14 APEC member economies. Dr. Kamil Idris, Director General of WIPO, delivered a keynote speech under the title "Closing the Digital Gap in the Global Knowledge-based Economic Era." The symposium provided a forum for IT experts from the USPTO, the JPO and APEC's IP-related public officials to discuss possible cooperation for IPR administration and information technology. The discussion also covered the expansion of technology transfer to developing countries and the formation of a strategic partnership in the international community.

WIPO Asian Regional Seminar on IPRs
   1) Objective: To examine the respective role of the governments and the user sector as well as the links and interaction between them and to explore effective means to increase and facilitate the use of the IP system by users and user organization.
   2) Date: October 17-19, 2001. The duration for the seminar at the IIPTI, Daejeon, was three nights and four days.
   3) Participants: Approximately a hundred participants, including speakers and IPR decision makers or experts from 22 countries including China, Indonesia, Brunei, Bhutan and the USA.
   4) Organizers: Co-sponsored by WIPO and the IIPTI.

- Training courses for national and foreign participants;

Cyber International Patent Academy
The Cyber International Patent Academy is an online training course. Its contents and database were completed by the end of 2001, and the online service will be possible in 2002. Its trainees are very diverse, from elementary school students to aged people, who are interested in IPRs and invention. The course will be available via the Internet. Trainees can share relevant information, including basic knowledge of IPRs from experts in each area, such as industry, law, administration and education.

Remote training program between Daejeon and Seoul
Through the Multimedia Training Center established in September 2000, remote training is possible for our customers between Daejeon and Seoul. KIPO's headquarters moved to Daejeon from Seoul. With more than 25% of Korea's population living in Seoul, it has more IPR applicants than any other city in Korea. Regardless of KIPO's location, it is still very important to promote invention and to disseminate IPR-related information for its residents. At the Multimedia Training Center, KIPO can meet these needs by offering online training through means of remote lectures on diverse training programs, including a beginner's program on IPR, information searches, and a user's guide for e-filing. This program can be extended to local users within a few years.

- **Assistance to developing countries (sending consultants and experts, receiving trainees from developing countries, etc.)**

Technical assistance for developing countries
With the experiences and know-how learned from the development of the KIPOnet system, KIPO endeavored to provide technical assistance to developing countries that have started to develop their internal automation for IPR administration, or have faced some difficulties in doing the relevant business. In particular, we gave a consultation to the National Institute of Industrial Property (INPI) in Brazil through dispatching an engineering consulting team to the office according to its commissioner's formal request in 2000. As a result, both offices agreed in March 2001 with the Record of Discussion regarding KIPO's further technical cooperation with the INPI for its internal automation system related to IPR administration in March 2001. In addition, KIPO had a promotion tour to neighboring countries Singapore, Hong Kong, and Malaysia. KIPO is planning to expand its capacity to assist IPOs in developing countries that would like to initiate an automation plan.

On-the-job Training for Trainers and Instructors of Intellectual Property
   1) Objective: To provide trainers/instructors of intellectual property with an opportunity for the exchange of information on topical and emerging issues in the fields of intellectual property; to provide an opportunity for the exchange of information on policies, strategies, approaches and experiences in the fields of teaching and training in intellectual property
   2) Dates: Five working days from March 19 to 23, 2001

3) Participants: Approximately 30 participants from 12 countries including Bangladesh, China, India, Indonesia, Iran, Nepal, Philippines, Sri Lanka, Malaysia, Thailand, Vietnam, and Korea
4) Organizers (training institute): WIPO and the International Intellectual Property Training Institute (IIPTI)/KIPO

Training Course on Intellectual Property System
1) Objective: To provide experience and knowledge on the intellectual property systems and industrial development strategies both in Korea and in advanced countries; to help participants search for expertise that could maximize their countries' efforts to improve their IP system for economic and technological development; to assist them in developing the IP system in their respective countries.
2) Date: March 29 - April 11, 2001/ September 13- 26, 2001 (14 days)
3) Participants: 33 participants from 14 developing countries including Bangladesh, Bulgaria and Uzbekistan.
4) Organizers: KIPO and the IIPTI, in cooperation with the Korea International Cooperation Agency (KOICA)

IX. Other relevant matters.

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