SCIT.ATR.PI.2005.KR

Annual Technical Report 2005 on Patent Information Activities submitted by Republic of Korea (SCIT/ATR/PI/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.

The term "patent" covers utility models and Supplementary Protection Certificates (SPCs). Offices which issue design patents should report their design patent information activities in their Annual Technical Reports on Industrial Design Information Activities.

I. Evolution of patent activities

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

In 2005, the number of patent applications was 160,921, a 14.8% increase over 2004, while the number of patent registrations reached 73,512, a 49.8% increase over 2004.

For utility models, the number of applications reached 37,175, a 1.5% decrease over 2004, while the number of registrations was 32,716; a 4.3% decrease over 2004.

II. Matters concerning the generation, reproduction, distribution and use of primary and secondary sources of patent information

Publishing, printing, copying (main types of publications of the office in the field of patent information, etc.)

Gazette publication

Beginning July 2001, KIPO began posting daily PDF gazettes including granted and laid open applications of patents and utility models 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, KIPO changed the format of the CD-ROM version to XML from SGMI

For the year 2005, KIPO published gazettes on patents as follows:

- · 123,492 patent applications
- · 2 utility model applications
- · 73,874 granted Patents
- · 33,505 Registered Utility models

Data Conversion Center

In January 2001, KIPO began operating the Data Conversion Center for digitizing paper-based applications for patents, utility models, trademarks, 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 Seoul office receives 70 percent of all applications.

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

In 2005, the Center digitalized 297,881 total documents, which used a combination of 615 different kinds of paper-based documents, including 5506 patent applications and 6229 utility model applications. This means that the Center took 2.74 days digitalizing each document with an average of 1045 documents per day.

Main types of announcements of the Office in the field of patent 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, online PCT e-filing, and real-time notification service.

(New) techniques used for the generation of patent information (printing, recording, photocomposing, etc.)

In 2005, KIPO started using a two-dimensional barcode for receiving paper-based documents and digitalizing such documents.

III. Matters concerning abstracting, classifying, reclassifying and indexing of technical information contained in patent documents

Abstracting, reviewing, translating

Data Management Center

Since May 2002, KIPO managed the Data Management Center to compile high-quality data through systematic analysis of patent and utility model data stored in KIPOnet by digitalizing those data and fixing some errors. In 2005, data analysis was conducted on the following:

- 1) Digitalization of paper-based data in the legacy system before KIPOnet launch
- · Rejections: 7664 patents; 1228 utility models
- · Registrations: 10,724 patents; 378 utility models
- Trials: 17 patents
- Drawings from unexamined utility model applications: 365,147 to be used for reference while examining design applications

2) Data analysis

To understand the causes of data errors and prevent delays or errors, KIPO analyzed 1,452,000 patents and utility model data in KIPOnet by error type using SQL and adjusted those data, as well as fixed 185 errors requested for correction from our internal customers' demands.

3) Data Transfer

In order to improve public data availability and accuracy, KIPO regularly provided KIPI with raw data (2,034,880 patents and 711,108 utility models in 2005). KIPI serves the public by packaging raw data and making such available through a free patent information search service on the Internet called KIPRIS.

4) 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 29,972 media each and entered relevant information into the system.

Korean Patent Abstracts

To exchange patent information with other IPOs and to protect its nationals in foreign countries, KIPO publishes Korean Patent Abstracts (KPA) of domestic patent applications and granted patents in English on CD-ROMs since 1997. Such CD-ROMs are distributed to 40 IPOs including the U. S.A, Japan, and the United Kingdom (UK) and seven organizations including WIPO and the EPO. By the end of 2005, KIPO published 201,000 granted patents and 437,000 patent applications.

Classification and reclassification activities; Classification system used, e.g., International Patent Classification (IPC), other classification (please indicate whether or not patent documents are classified by your Office and, if so, which classification is used)

International Patent Classification

KIPO uses the International Patent Classification (IPC) as its official classification system. Pre-classification is outsourced to KIPI and each examiner checks which subgroup an application should be classified under. Beginning October 2005, KIPO has carried out reclassifying patent documents according to advanced level of the 8th edition of IPC which enters into January 1, 2006. In 2005, 178,000 applications for patents and utility models were classified in accordance with the IPC.

Hybrid system indexing

For classifying patents and utility models according to IPC, KIPO uses hybrid systems which consist of a classification scheme (classification codes) and a complementary indexing scheme (indexing codes).

Bibliographic data and full-text processing for search purposes

KIPO has used the searchable SGML and XML format for its search system. Currently, KIPO's examiners search the full text of Korean and utility model applications published as far back as 1983 and examine Korean patents and utility models issued since 1947. They can also search bibliographic data and image data from the EPO, JPO, and USPTO, as well as Australia, Canada, China, Taiwan, and the UK.

IV. Search file establishment and upkeep

File building

Along with its gazettes, KIPO continues to construct a database of information from the following sources: the EPO's FPD and IFD, the JPO's Patent Gazettes, Search Master and PAJ, and the USPTO's Patent Specifications, including patent specifications from those countries mentioned in the above category.

By the end of 2005, the amount of patent technology data in the KIPOnet search system reached over 110 million patents, which comprise 8.5 million domestic patent data and 102 million foreign patent data...

KIPO also improves the data quality based on its comprehensive policy covering standardized business processes, continues to analyze CSRs collected from its internal customers, and evaluates the performance of the Data Conversion Center and the Data Management Center.

Storage, including mass storage media

Storage configuration

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.

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

Please refer to the attached file below.

DatabaseofPatentsandUtilitymodels - Database of Patents and Utility Models

V. Activities in the field of computerized and other mechanized search systems

In-house systems (online/offline)

Intelligent Search System

In 2003, KIPO started introducing the idea of intelligent automated searches to our internal search system. In practice, examiners would only need to input natural languages to search prior art documents. While formulating this concept from 2003 to 2005, we implemented the following systems and structured additional functions:

- · An integrated meta-search function: It enables searching of non-patent literature categorized by technology such as theses, reports, and periodicals,
- Elaboration of the existing integrated viewer for patents and utility models and a personal database client called PMS: The viewer enables our examiners to confirm a great number of search results that have been collectively stored on their own computer.
- · A matrix for IPC, F-term, USPC, E-CLA: Examiners can view all relevant applications for prior art through with a maximum of 30 representative drawings simultaneously.
- · An automatic comparison system for prior art.

Elaboration of Search function

In 2005, KIPO extended the kinds of notifications searchable and shorten service cycle. It also extended search period and supplemented SGML search function for EP documents. For more detailed searches, it introduced a search engine exploring the similarity between documents and developed online and batch program including a detailed manual and help function.

Online Work-at-Home System

In March of 2005, KIPO did a remote online examination test using about 76 examiners, who comprised ten percent of total examiners. They could access the KIPOnet sytem through a VPN while staying at home. For security, we employed a fingerprint identification system and government public key infrastructure (GPKI). As a result, their performance was ten percent higher when compared with those examiners working in the office

We also strengthened the security by adopting up to date technologies including digital rights management to prevent printing documents so examiners could access unpublished patent applications through a VPN.

External databases

Through the Non-Patent Literature Search System, our examiners efficiently search the databases of STN, CA (Chemical Abstract) and IEEE abstracts. Every year, the scope of databases is extended along with provisions for an integrated user-interface. We also provide access to science literature such as Delphion, LexisNexis, ScienceDirect, and KP-Journal via the Internet.

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.

In December 2005, KIPO extended information sharing to three external R&D institutes including the Electronics and Telecommunications Research Institute (ETRI). This enabled interactive online communication for exchanging knowledge on patent and technologies with such institutes using Q&A corner and so on.

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 the industrial property office library and services available to the public (relating to facilities, e.g., for lodging applications, for assisting clients on searching procedures, for obtaining official publications and registry extracts)

Planning, administration, automation, security, buildings

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.

Collecting, acquisitions, preparation

IP Digital Library

The IP Digital Library archives patent documents worldwide such as bibliographic data, abstracts and full texts in a variety of media such as paper, microform, and CD-ROM. The documents are obtained through an exchange agreement with 20 countries, five international organizations such as the USPTO, WIPO, and EPO.

The library also possesses non-patent literature donated by or purchased from other sources. This material, which comprises over 26000 volumes and 511 periodicals related to science and technology, along with CD-ROMs of annual reports and statistics. The collection is arranged in class or numerical order. KIPO's examiners or the public can search all of these materials. The electronic database is provided at the Internet corner of the IP Digital Library. The library also provides a service for offering copies of original electronic material such as electronic journals and e-books

Interlibrary lending, resource sharing, networks of patent libraries in the country

Cooperation Between Libraries

KIPO became a member of the Korea Institute of Science and Technology Information in 1978, which provides an interlibrary loan service and document delivery service for a variety of IP-related publications.

KIPO's examiners have used on-line searches to search over 3.4 million volumes of theses, government publications, seminar materials, and books based on the agreement with the National Assembly Library to exchange information since 2002.

National Digital Science Library

KIPO also joined the National Digital Science Library. The Korea Advanced Institute of Science and Technology provides access to academic theses and scientific journals of 395 domestic libraries and information centers.

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

e-Patent Portal System

KIPO established the e-Patent Portal System to transform KIPO's we site into an on-line service for the cyber community.

For online registration and e-filing, applicants can make requests by applicant codes and the use of electronic documents at once in order to get digital signatures and codes via the Internet. At this time, KIPO encourages the widespread use of digital signatures by authorized organizations. With the applicant code and digital signature, they can file all kinds of intellectual property online with the ease of sending e-mail. Also, they can change their own personal information on KIPO's web site.

Applicants can pay their fees through Internet banking, and they are informed of the legal status of their applications by e-mail and SMS (Short Message Service).

At KIPO's web site, 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. Moreover, "by one call or by one click" customers can get answers to most questions concerning intellectual property rights. This interactive process has overcome the limitations of the one-way notification system.

Korea Industrial Property Rights Information Service

Since January 2001, we have offered domestic IPR information including KPA data free of charge through the Korea Industrial Property Rights Information Service (KIPRIS), which is a specialized IPR information service provided by KIPI. From 2003, the service started to include foreign patents from US, JP, and Europe and business method patents. In 2004, it was extended to cover up-to-date information on the legal status of applications, as well as full text of Korean applications and granted patents.

In December 2005, we also established full text database of foreign patents that offer non-compliant image viewers such as thumbnail, JPG, PDF. Additionally, this service is available at other websites linked reaching to 4.4 million users.

IP Mart

In April 2000, KIPO launched the Internet Patent Mart, or IP-Mart, to create opportunities for transferring patented technologies on-line and to overcome the limitation of short-lived traditional technology fairs. The mart also gives a variety of IP information to individual inventors and small and medium-sized enterprises (SMEs) for promoting innovation. In 2005, the IP-Mart's database was enlarged to 64,000 technologies with 24,000 users. By the end of 2005, 110 technology transfers were conducted.

VII. Matters concerning mutual exchange of patent documentation and information

International or regional cooperation in the exchange of machine-readable information, e.g., bibliographic data, abstract and/or full text information

As of the end of 2005, KIPO exchanges patent documents with 20 countries, five regional offices, such as EPO and ARIPO. In particular, we regularly acquire bibliographic data, image data, or full text data from Australia, Canada, China, the United Kingdom, Taiwan as well as the Trilateral Offices. Those data are loaded into our search system for our examiners' reference.

IT experts meetings with the JPO, the EPO and SIPO, KIPO has continued discussion on the use and dissemination of patent information and the electronic exchange of search databases including priority documents.

Dissemination of Korean patent information by K-PION

For the ultimate purpose of sharing examination results with other national offices, we have provided foreign users with the legal status of Korean applications and KPA data free of charge through KIPRIS on the Internet since May 2004. Together with this, we developed a Korean-English translation engine for the electric and electronic fields and established a technical terminology dictionary in December 2004.

In November 2005, KIPO also began English service of Korean applications for foreign IPO examiners by an automatic translation engine called K-PION over the Internet.

Medium used for exchange of priority documents

Since August 2002, KIPO has exchanged priority documents online, through TriNet with the JPO, which had once only been available on CD-ROM from July 2001. In 2005, we exchanged approximately 17,024 priority documents with the JPO.

KIPO has also exchanged priority documents online with WIPO since September 2004 and plans to extend electronic exchange to translations and applications under the PCT.

We have already agreed to proceed with the electronic exchange of priority documents with Australia, New Zealand and the USA and on technical matters for the exchange with China and the EPO.

Medium allowed for filing applications

KIPO permits applicants to file applications on-line, on paper, or on floppy disk. All paper-based applications are converted into electronic format. Specifications and drawings are submitted to KIPO, as well as bibliographical data on a floppy disk, are uploaded to the KIPOnet system.

After implementing an online filing system in January 1999, KIPO was able to cut its operating expenses and begin to provide various online services including information referral and requests of certificate issuance. In 2005, the e-filing rate for patent applications climbed to an average of 96.8 percent amounting 155,721 applications and for utility model applications up to 83.3 reaching 30,977 applications.

E-filing software (KEAPS)

For e-filing, applicants can easily prepare electronic documents in XML format using software called Korean Electronic Application Preparation Software (KEAPS), and file their application via the Internet.

The requirements for e filing such as the assignment of an application code and the declaration of the first e-filing are available on-line. The e-filing software enables applicants to make electronic documents with a commercial word processor such as MS Word or Hangul . Applicants can directly attach to their specifications sequence listings that had once been written on the specifications..

The software also conducts the following functions:

- · Formality check before submitting an application to KIPO
- · Receiving a diverse range of formatted documents attached to an application
- · Supporting transmission of notifications from KIPO to an applicant

Implementation of the Statement of Principles Concerning the Changeover to Electronic Data Carriers for the Exchange of Patent Documents (please provide a status report on the extent to which your Office has changed over to electronic data carriers for the exchange of patent documents)

For the exchange of IP information, including gazettes and priority documents, we generally prefer on-line exchange rather than CD-ROMs or DVDs.

VIII. Other relevant matters concerning education and training in, and promotion of, the use of patent information, including technical assistance to developing countries

Training courses for national and foreign participants, use of audiovisual means

Cyber International Patent Academy

The Cyber International Patent Academy opened in May 2002. It trains a diverse group of people interested in IPRs and inventions in general from elementary students to senior citizens. In the courses, experts in industry, law, administration, and education present relevant IP information, including basic knowledge of IPRs.

Jointly with the WIPO Worldwide Academy, KIPO has managed courses such as DL-101 (covering the main areas of IPR in English) and KL-101 (covering science technologies in IP in Korean) for students of domestic universities affiliated with KIPO.

As of 2005, the academy manages 106 courses and hosted approximately 109,000 users. In particular, the Academy has agreements with 21 universities for promotion and use. By managing a cyber invention school, this site offers IP information to middle and high school students.

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.

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

KIPO-WIPO Technical Cooperation Project for developing IPOs

Based on the Korea-Fund-in-Trust, WIPO and KIPO jointly conducted the following to help developing member states enhance their capacity to administer IPRs in 2005:

- · Technical consultation for India's intellectual property office (formal name: Office of the Controller-General of Patents, Designs and Trademarks) in June and September,
- Deployment of PCT-ROAD (PCT Receiving Office Administration) to Israel, Egypt, Vietnam, Philippine, and India,

For the PCT-ROAD system, KIPO will complete the development of a Spanish language version in early 2006 with the fund from Spain's patent office so that it will be implemented in Cuba, Mexico, Colombia, Ecuador, and other Latin American nations.

In December 2005, KIPO also developed IPR e-learning content that has ten subjects concerning patents, trade secrets, design rights, patent information, electronic commerce and has been provided by both offices' websites over the next two years.

Development of E-learning programs for IPR

At the APEC IPEG (Intellectual Property Rights Experts' Group) meeting held in February 2005, KIPO proposed the development of IPR education programs utilizing e-learning systems. KIPO believed that e-learning would be one of the best solutions within the region for enhanced awareness of IPRs, reduce IPRs infringements, and ultimately stimulate trade and investment.

According to the approval of the proposal by the APEC IPEG in August 2005, KIPO will develop an international e-learning content for the utilization of IPRs information that would be disseminated through the KIPO's IP Academy over the next two years.

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

PATINEX

In November 2005, KIPO held an IP conference called PATINEX (PATent INformation EXpo). It was a conference and exhibition bringing together IP professionals and business from around the world. Speakers from Australia, EPO, JPO, SIPO, USPTO, Toyota and Samsung gave their presentation on patent information dissemination policy, strategic use of patent information, and trends in International patent statistics to offer insight into IP information and the latest development in new tools and services for protecting, enforcing, and exploiting a company's IP.

Approximately 600 people from company and R&D institutes participated in the conference and had an opportunity to find more reasonable ways in applying IP to their businesses.

Activities for disseminating the use of IPRs information

In September 2005, KIPO launched the IPR Help-desk online with a relevant website (www.ipr-guide.org) so that researchers could get a consultation on matters or difficulties when they conducted R&D projects.

Additionally, KIPO published The National R&D Patent Strategy Manual to suggest 20 key strategies that researchers should keep in mind whenever they initiate government-funded R&D projects in November 2005.

Studies to identify trends in new technology, e.g., by the use of patent statistics, preparation of monographs, etc.

Survey and Analysis of Patent Statistics

To encourage greater use of valuable patent information for R&D, we periodically publish an analytical report called Patent Trends of Korea. In 2005, we reported the results of analyzing trends of approximately 900,000 patent applications filed from 1990 to 2004 and 350,000 patents granted for the same period in Korea. Data was analyzed by domestic or foreign applicant, technology, academic field, region and company. Moreover, we focused on the performance by R&D bodies and efficiency depending on the investment and the number of involved researchers of universities, public R&D institutes, and private companies.

IX. Other relevant matters

- 1. Classification is allotting one or more classification symbols (e.g., IPC symbols) to a patent application, either before or during search and examination, which symbols are then published with the patent application.
- Preclassification is allotting an initial broad classification symbol (e.g., IPC class or subclass, or administrative unit) to a patent application, using human or automated means for internal administrative purposes (e.g., routing an application to the appropriate examiner). Usually preclassification is applied by the administration of an office.
- 3. Reclassification is the reconsideration and usually the replacement of one or more previously allotted classification symbols to a patent document, following a revision and the entry into force of a new version of the Classification system (e.g., the IPC). The new symbols are available on patent databases.