International cooperation has been at the forefront of our endeavors to create a more efficient IP system. We have been actively participating in IP5 meetings since 2007. Also, we have made bilateral arrangements with other offices on the PPH to expedite patent examinations. Moreover, we are deeply committed to sharing our successful experience in economic development with developing countries by supporting them through IP-based programs.

54 • Examination Cooperation

56 • International IT Cooperation

58 • Sharing IF

59 • International Seminars and Training Courses

Global

4 IP Cooperation

Examination Cooperation

Bilateral cooperation

We have been actively involved in bilateral cooperation and held over 20 bilateral meetings with foreign IPR agencies in 2012.

Primarily, we expanded the number of countries involved with the Patent Prosecution Highway (PPH) and the PCT-PPH (Patent Cooperation Treaty- Patent Prosecution Highway). The PPH was expanded to China and Mexico in 2012, increasing the number of countries with the PPH to a total of eleven by the end of 2012. In addition, we agreed to implement the PPH with Hungary, Singapore, and Austria from 2013. With China and Japan, we implemented the PCT-PPH in March and July 2012, respectively, increasing the number of countries with which we utilize the PCT-PPH to three in addition to the United States.

Starting with the implementation of the America Invents Act (AIA), we agreed to hold mutual IPR system briefings with the United States to enhance understanding on each other's IPR system. As such, we held briefings on the U.S. IPR system in three major Korean cities, Seoul, Busan, and Daejeon, in June 2012, jointly with the United States Patent and Trademark Office (USPTO). In addition, we agreed to enhance cooperation in examination and IPR training between KIPO and the USPTO and to exchange staff to support the cooperation. With the European Patent Office (EPO), we signed a "Memorandum of Understanding (MOU) on the exchange of data between the two offices" and an "MOU on exemptions from the mandatory filing of a copy of search results according to the amendment to Rule 141 of the European Patent Convention," thus expanding the foundations for greater utilization of patent information between the two offices and improving convenience for applicants.



KIPO, the State Intellectual Property Office of China (SIPO) and the Japan Patent Office (JPO) shared views on the need to promote understanding on each office's reexamination and appeal system and thereby agreed to enhance cooperation among the Patent Reexamination Board (SIPO), the Appeals Department (JPO) and the Korean Intellectual Property Tribunal (KIPO). In addition, the three offices agreed to improve communication with IPR user groups at the ROK-PRC-Japan patent office policy dialogue meeting held in Wuxi, China, in November 2012 and to have the groups participate in the trilateral heads meeting from 2013.

We also strive to enhance IPR cooperation with other Asian and Latin American countries. At the patent office heads meeting with Vietnam, KIPO agreed to provide training courses for Vietnamese examiners and also mutually cooperate on enhancing IPR protection in Vietnam. With the United Arab Emirates, we held many in-depth discussions on ways to vitalize IPR cooperation in a number of areas. We also held patent office heads meetings with Singapore, Australia, Brazil, and Mexico, whose economic cooperation with Korea is becoming all the more important, to discuss various measures for IPR cooperation.

The IP5 framework of cooperation

With examination backlog, a result of the rapid growth in the number of patent applications, becoming a global issue, the patent offices of Europe (EPO), Japan (JPO), China (SIPO), the United States (USPTO), and Korea (KIPO) agreed to jointly pursue 10 foundation projects for work-sharing through the IP5, an international patent cooperation framework of the five leading patent offices, at the IP5 heads meeting held in Jeju, Korea, in 2008.

The IP5 projects are successfully being pursued. Of the 10 foundation projects, we successfully completed the Common Application Format (CAF) project to produce one common application format for the five offices in October 2012. At the IP5 heads meeting held in Corsica, France, in 2012, we discussed the need for a new IP5 realignment as five years had passed since the launch of the IP5 cooperative system in 2007. As a result, we formed the Patent Harmonization Expert Panel for discussions

on harmonizing patent systems and also the Global Dossier Task Force, which aims to develop the Global Dossier, a global IT system to provide patent information to the IP offices through a single channel. There is expected to be much progress on the global examination program under the leadership of the IP5 since they have agreed to cover global work-sharing issues, including the PCT and PPH, as discussion topics during the IP5 working group meetings.

The IP5 patent offices are actively cooperating through three working groups on common hybrid classification, IT-supported business processes, and examination practice-related projects. In 2013, we plan to hold a deputy heads meeting in March and a deputy heads and heads meeting in June as well as working-level group meetings for continued active IP5 cooperation.



TM5 framework of cooperation

The first TM5 meeting was held in Barcelona, Spain, in October 2012. The TM5 is an international trademark cooperation framework of the five leading trademark offices (KIPO, USTPO, OHIM, JPO, and SAIC) officially launched in May 2012 to discuss the direction of cooperation for harmonizing trademark systems. At the first meeting, the five offices discussed the direction for improving convenience for applicants and harmonizing trademark systems through nine cooperative projects. Our office plans to actively participate in the TM5. In particular, we were appointed as chair country of the TM5 for 2013 and we plan to hold the second annual TM5 meeting in Seoul in December 2013.



International IT Cooperation

1 IT-related bilateral cooperation

The Korean Intellectual Property Office (KIPO) and the Japan Patent Office (JPO) discussed the direction of the One Portal Dossier (OPD), currently being pursued by the IP5 Offices, and agreed to continue joint cooperation for its smooth implementation at the bilateral 15th IT Experts' Meeting held in Korea in May 2012. Our office mentioned the need to prepare a detailed test schedule for the OPD to successfully link the IP5 offices and launch the project, which was supported by Japan. In addition, the two patent offices agreed to exchange lists on published design URLs, currently held by both offices, which are to be used solely for examination with the aim to enhance the efficiency of design examination.

KIPO and SIPO agreed on the future provision of data from China on the Extensible Markup Language (XML) format and to exchange data bilaterally through File Transfer Protocol (FTP) at the bilateral IT Experts' Meeting held in Korea in June 2012. In addition, we confirmed the offices' support for improvements to the electronic exchange system for priority documents (DAS: Digital Access Service) to enhance security and improve convenience for applicants. We also agreed on plans to share information on future cooperation and any potential changes to the DAS system.

KIPO and the European Patent Office (EPO) agreed to provide opportunities for benchmarking all IT systems, including machine translation and data processing, by dispatching accomplished and experienced IT experts as part of the IT cooperation project. Through this project, our office dispatched two IT experts to the EPO branch in The Hague, Netherlands, in November 2012. The two offices signed an MOU on mutual data exchange in December 2012, providing the foundation to vitalize the Korean patent information service industry market and enabling access to the EPO's rich data for Korean citizens.



Trelated cooperation between the IP5 offices

Of the 10 foundation projects of the IP5, 6 are dedicated to informatization. As lead office for the machine translation project, we successfully completed the error checking project for IP5 machine translations in 2011. In 2012, we implemented a Korean to English (K2E) machine translation improvement project to reflect the results of the error checking. We also evaluated the machine translation quality of three Asian patent offices with the participation of European and U.S. examiners in the second half of 2012. Through our evaluations, we confirmed that all three Asian patent offices reached the "quality for possible utilization in prior art search" set as a target for the mutual machine translation project in 2008.

In addition, our office successfully completed the development of the OPD in December 2012, providing examiners with immediate access to all information on examination progression at the IP5 offices. We plan to open the dossier during the second half of 2013 after running tests among the offices from April to June 2013.

Cooperation with WIPO

With the incorporation of Korean as an official PCT language in January 2009, the number of international applications filed in Korean has continuously increased. In response to this growth, we have provided a K2E machine translation service for PCT communications, jointly with WIPO, since November 2011. Since the joint development of the PCT-ROAD (Receiving Office Administration) with WIPO in 2005, we have continuously upgraded features and released a new version in April 2011. This system is now being utilized by 31 countries worldwide with the addition of Ireland and the Ukraine in 2011 and Brazil in 2012. We expect this number to increase as many countries are still requesting its provision.

Official development assistance (ODA) projects

In an effort to expand relations with developing countries, we use Official Development Assistance (ODA) funds to support the development of IP office automation systems.

In June 2011, we expanded our assistance to Mongolia, with whom we signed an MOU to pursue an IP office automation system project. Under this ODA project of the Korea International Cooperation Agency (KOICA), estimated to be worth USD 3.35 million, we provided training and consultations to enhance the capacity of managers and working-level officers of the Intellectual Property Office of Mongolia (IPOM). As a result, the office's automation system, called IPOMnet, was launched in December 2011.

At a working-level meeting on IT issues in Ulan Bator, Mongolia in May 2012, our office confirmed the stability of IPOMnet and agreed to enhance future cooperation to pursue Mongolia's adherence to the Madrid and Hague systems. The introduction of a new e-filing system was also agreed upon at the meeting.

In addition, we began cooperation with the African Regional Intellectual Property Organization (ARIPO), a regional IP office of 18 English-speaking African countries, to bring forward the "Basic strategy for the advancement of KIPOnet into Africa" drawn up in November 2010. We also signed an MOU on comprehensive cooperation in IPRs with ARIPO in December 2010. During the KIPO-ARIPO-WIPO informatization working-level meeting held in Harare, Zimbabwe, where ARIPO's headquarters is located, in May 2011, we put forward a proposal to sign an MOU on trilateral technical cooperation and hold its signing ceremony at the WIPO General Assembly in September of the same year. In October 2012, the ARIPO patent informatization project was confirmed as a Korea International Cooperation Agency (KOICA) ODA-supported project involving funding of USD 5.8 million for three years, from 2013 to 2015.

Development of global IP contents

In collaboration with the WIPO SMEs department, we have developed IP Panorama since 2006. IP Panorama is English e-learning content on the basic concepts of IPRs and strategies for utilization. IP Panorama has since been produced in all official United Nations languages after initial publication in English. An Arabic version was launched in 2009, with Spanish and French versions following in 2010; a Russian version of IP Panorama is expected to be launched in 2013. Our office also signed a contract with a foreign private company (Reliance Industries of India) in 2012 for the paid licensing of IP Panorama in 2012, the first such contract of its kind.

Since 2006, we have developed IP Xpedite, an e-learning content on how to search and utilize valuable patent information, using Asia-Pacific Economic Cooperation (APEC) special funds. In October 2011, we provided APEC member economies with a blended online and offline training course using the IP Xpedite. Our office continued to develop and supply case-centered online contents related to the inventive step of patents in major IP countries based on lectures from the "in-depth courses for fostering manpower using patent information with IP Xpedite" in 2012.





Sharing IP

Appropriate technology projects

Appropriate technology refers to technology tailored to the environmental, cultural, and socioeconomic factors of particular regions. Often developed to help eradicate poverty or improve the quality of life for low-income groups in developing countries, it is more economical and easier to implement and maintain than cutting-edge technologies. In other words, it is a technology that can be of great use in developing countries, although its value in developed countries tends to be lower. We have provided appropriate technology to least developed and developing countries by using the technological information accumulated in patent documents. In 2011, we developed a water purifier for home use which has a low maintenance cost, simple design and structure, and does not require electricity for power. The water purifier was supplied in Kountrei, Cambodia in 2012 to improve the quality of drinking water in the region.

We also expanded cooperation with two organizations, Good Neighbors and Korea Habitat, in order to spread the project for advancing and supplying appropriate technology in 2012.

In 2012, Good Neighbors developed a cooking stove to improve kitchen facilities in low-income houses in Guatemala. By improving heat efficiency, the stove reduces the use of wood, and, with an installed hosepipe, the amount of smoke inside houses is reduced. The price of the stove has been lowered to an affordable level for low-income households and a trial for the product was initiated in December 2012. We plan to expand its supply after further tests in the field

Korea Habitat helped alleviate the problem of temperature differences in bamboo housing in Nepal reaching 40°C between summer and winter due to poor insulation in bamboo housing. The NGO improved insulation by thickening the walls and improving roof structures in order to block external air from infiltrating the houses. Habitat also developed a construction method using earthen bricks for non-bamboo housing in Nepal. Trial houses were constructed using the newly developed technology and Habitat plans to expand the supply of houses after monitoring insulation performance.





Competitive brands for developing countries

Despite the high quality of many local products in developing countries, the majority of these products do not receive the proper benefits of marketing due to a lack of trademarks and brands. To solve this problem, we have been supporting the acquisition of brands for such products through the One Village One Brand Project in collaboration with APEC since 2011.

In 2012, we supported the acquisition of brands for farmed goods in Cambodia. After carrying out a demand survey, the Ministry of Commerce of Cambodia requested a project to support brands in order to raise the quality and added value of farmed goods in Cambodia. After considering the ministry's request, we began support for the consolidation of brands and trademark applications for red rice and longan, a tropical fruit native to Southeast Asia. In addition, we held a One Village One Brand seminar to share ideas and case studies on IPR utilization and the branding of local goods in Cambodia.

International Seminars and **Training Courses**

Marcha Funds-in-Trust projects

Since 2004, we have been jointly executing projects to support developing countries under the Korea Funds-in-Trust program at WIPO. Our appropriate technology competitions held in Ghana and the Philippines in 2012 demonstrated ways in which patent information can be used to help overcome everyday problems in each of the countries. Training on patent laws and examination was also provided through the International Intellectual Property Training Institute (IIPTI) for 19 patent examiners from developing countries in March 2012 in a bid to enhance their examination capabilities. Furthermore, to raise awareness among children on the importance of IPRs, we collaborated with WIPO and the animation production company Ocon to produce an educational animation on IPRs for children entitled Getting Creative with Pororo. The animation aims to show the fun side of inventing and the need to respect other's inventions in three episodes: "Great Ideas," "The Invention Contest," and "Pororo Makes His Mark." It was officially released at the 50th WIPO General Assembly in October 2012. Getting Creative with Pororo is currently available in English and Korean.

Throughout 2012, we collaborated with WIPO and KOICA to hold international seminars and IP training courses. We also successfully managed customized training courses for examiners from Vietnam's National Office of Intellectual Property and the Patent Office of the Cooperation Council for the Arab States of the Gulf. Over the past year, we provided training to 172 non-Koreans in 11 courses. In addition, we successfully held the 2012 WIPO Asia-Pacific Seminar and participated in the 3rd Korea-China-Japan Heads of Training Centers Meeting, strengthening our cooperation with the world's leading training centers and raising our international status as a training center.



