

In an effort to promote IPRs that will lead future markets, we are continuously striving to build the capacity of researchers and businesses to create and utilize IP more effectively. Accordingly, we support government R&D projects by providing patent analyses at the critical research planning stage and assistance for IP creation by SMEs at 31 regional IP centers nationwide, while also carrying out various policies to foster IP manpower.

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Passionate

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Promoting the Use and Creation of IP

Linking R&D and IPRs

Analyzing patented technology trends of governmental R&D

We have devised methods to link the use of patent information with governmental R&D for new technologies to ensure IPR acquisition is involved from the planning stages and to enhance the technologies' competitiveness in the market.

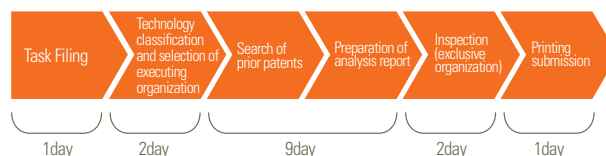
The goal of analyzing the patented technology trends of governmental R&D is to help create strong and useful patents for success in future markets. For large, mid- to long-term R&D projects of government agencies such as the Ministry of Trade, Industry, and Energy, and the Ministry of Science, ICT and Future Planning, we perform patent analyses at the research planning stage or research execution stage. To achieve this, we strive to include execution plans for analyzing patent technology trends within national R&D projects and their regulations, including management tips and guidelines.

We have carried out this project on a consistent basis, after running pilot projects on analyzing patented technology trends, since 2005. We supported the analyses of patent trends and prior patents for 4,424 governmental R&D projects in 2011 and 3,649 in 2012.

Furthermore, the analysis results gained from this project are being made public through the Patent Trend Analysis Report, posted on our e-patent country website (www.patentmap.or.kr), for use by general researchers in research and technological development.

To prevent the duplication of R&D results, a bottom-up approach for short-term R&D projects is taken and patent analyses are carried out in advance to check for prior patents in specific fields. We provide a Prior Patent Results Report to each government agency, as detailed in the procedure below, and they reflect this in their research selection evaluation when deciding which tasks to undertake.

< Procedure of prior patent analysis >



Creating and Promoting Use of Excellent IPs

Although research results from universities and public research institutes are outstanding in terms of productivity when compared to those of general research centers, companies, and other research carrying entities, their ability to create and utilize IP is relatively lacking.

First, we dispatch patent experts with abundant experience in IP management to universities and public research institutes to build IP management systems and support capacity enhancement. Since 2006, we have annually dispatched experts for three-year secondments to about 20 institutions. By the end of 2012, we had dispatched experts to a total of 47 institutions.

Second, we select excellent technologies, which could potentially be used in industry, from the portfolio of unused patented technologies held by universities and public research institutes. We also support universities and public research institutes with commercialization assistance including technology marketing and discovering companies requiring technologies from the available portfolios. Last year, we discovered 183 promising patented technologies in IT, BT, NT, and ET, held by 28 universities and public research institutes, and selected 115 from among these to support the transfer of the unused patents to industries. The support included the preparation of patent strategies (reinforcement, defense, and portfolio), an evaluation of the patents technological value, and preparation of Sales Material Kits (SMKs) and technology marketing.

Third, we support the fostering of cooperative networks by linking the resources and capabilities of public research institutes, industries and financial institutions in order to efficiently transfer and commercialize the created technologies.

Academic institutions formed a R&D-IP Consultative Group composed of 91 universities and public research institutes. Financial institutions formed an IP Investment Consultative Group, which involves companies and individual investors holding briefings to bring in investment capital. In addition, there is a demand-driven needs matching consultative group formed by industry for the transfer of technology and commercialization of patents to those in need. In November, we held the 2012 Forum for University and Public Research Institute Global Leaders to Spread IP Achievements, which integrated the activities of universities and public research institutes for the first time and helped spread information on the positive assistance given through the various projects.



Regional IP Capacity Building

01 Regional IP centers

We are managing 31 regional IP centers nationwide as strategic hubs for the creation and use of regional IPs as of the end of 2012. The centers provide patent information services, comprehensive IPR consultations to citizens, IPR management support, and IPR field training. The centers are also responsible for executing various projects in conjunction with related regional organizations.

The centers responded to 10,304 requests for patent information and, among other things, provided 2,891 patent commercialization consultations, 3,203 brand consultations, and 2,529 design consultations. They also held 23 promotional events for inventors in order to raise the number of regional inventions. In detail, support was provided at 201 IP field training events, with 4,157 people taking part in 2012, to foster IP manpower in regional SMEs.

As such, the centers put in place complete IPR support systems to provide one-stop services and promote regional IPR creation and utilization, contributing to regional economic vitalization. In future, the centers plan to customize support to specific regions through closer cooperation with local governments.

< The status of brand development support >

No.	Foreign market	Developed Brand
01	China	
02	China	
03	Germany	
04	Arab	
05	China	
06	Arab	
07	Arab	
08	China	
09	China	
10	Italy	
11	China	
12	China	
13	China	
14	China	
15	Japan	
16	Russia	
17	China	
18	China	
19	Arab	
20	China	

Fostering IP Manpower

02 Raising regional IPR awareness

Holding regional IP forums

According to the Framework Act on IP enacted in 2011, it is now mandatory for cities and provinces to draw up IP execution plans. We held IPR forums together with 8 metropolitan cities and provinces in Gangwon-do (August 30), Chungcheongbuk-do (September 5), Ulsan (September 20), Jeollabuk-do (October 18), Gyeonggi-do (October 26), Daegu (October 30), Jeollanam-do (November 22) and Busan (November 23) in 2012.

Regional leaders, including CEOs from local business, regional university presidents, chairs of municipal and provincial councils, legislators, and heads of local governments, participated in the various forums and discussed strategies for developing local economies using IP.

In addition, they analyzed and shared statistics on the status of regional IP and debated and considered the future direction of IP strategies in the regions.

Expanding IP base through customized training

We manage an IP training project through the regional IP centers to raise awareness of the importance of IP and provide training to people from various backgrounds, including the staff of SMEs, civil servants from local government, prospective entrepreneurs, and students.

In 2012 alone, we held 47 (2,477 people) training events for civil servants and 369 (1,419 people) general training events for the public and university students focused on business startups and raising awareness of IP. We also held a total of 359 (3.2 hours on average) focused training events to create interest in IP for primary, middle, and high school students.

In addition, we expanded training for military personnel, which has been provided to the army since 2006, to the entire military from 2011. We provided a total of 174 training events for 47 branches of the military in 2012, discovering 1,111 ideas for use.

01 Fostering future IPR manpower

IP courses at universities

Since 2006, we have continuously supported the administration of IP courses at universities and graduate schools to foster excellent IP manpower. In response to the diversification of majors in demand of IP education, we added courses at medical, pharmaceutical, business, economics and design schools along with the previous science and engineering schools. In addition, we ran training programs for university professors to increase their capabilities in delivering courses on IP.

Special IP degree programs

We have run a special degree program (Master of IP Course) on IP at the Korea Advanced Institute of Science and Technology (KAIST) and Hongik University since 2010 to systematically foster IP experts. The program provides practical education focused on merging the components of engineering, law, and business management related to IP. Furthermore, we have introduced a scholarship program for SMEs, which generally lack manpower exclusively responsible for IP compared to conglomerates.

02 Promoting company-university cooperation projects

Campus Patent Strategy Universiade

Together with the National Academy of Engineering of Korea, we have held an annual Campus Patent Strategies Universiade since 2008. At this KIPO-run contest, companies prepare questions, conduct screening, and provide prize money while undergraduate and graduate students, with the help of academic advisors, offer the solutions. As a result, companies are provided with practical and creative ideas and students are able to grasp real world applications of the theories they have learned so far. The Universiade has been drawing much attention as a new type of industry-university-government cooperation program. The

number of participants also increased from 21 companies and 68 universities in 2008, to 47 companies and 101 universities in 2012.

Promoting invention activities at universities and industry-university cooperation programs

In the university setting, we aim to boost invention by university and graduate students by supporting university invention clubs and sponsoring university invention contests. The contests are composed of three parts: an invention-research part where ideas are made into inventions; an invention-patent part where completed inventions are submitted as patent applications; and an invention-contest part where students undertake the technological tasks of companies. A total of 3,030 works were submitted from a total of 115 universities in 2012.



Design to Business (D2B) Fair

In an effort to supply creative designs to outstanding SMEs and help prospective designers grow into excellent IP manpower, we have held design fairs since 2006. About 2,318 works were submitted in 2012, of which 115 were filed as IPR applications (2 patent, 2 utility models and 111 designs) and 4 achieved contracts for licensing.



03 Operation and management of patent attorney system

We manage a patent attorney system to enhance the international competitiveness and expertise of patent attorneys. The system is also designed to help patent attorneys adapt to the changing environment of IP, such as the introduction of new IPRs. We select a minimum of 200 patent attorneys every year through tests and 7,012 patent attorneys were registered with us by the end of 2012.

< State of patent attorney registration, as of December 2012 >

Category	Total Registered	Current business	Ceased business activities
Patent attorneys	7,012	5,887	1,125

04 Fostering creative inventors

Systemizing invention education

Throughout the past year, we promoted invention education in numerous ways. We made qualitative and quantitative improvements to invention education in primary, middle and high school classes and supported special classes with invention activities. We also supported teacher workshops, research contests, and offline job training to improve the expertise of invention leading teachers. Furthermore, we ran invention classes for creativity in a total of 193 schools in 17 cities and provinces nationwide. We plan to finance these invention education programs continuously to cultivate IP awareness and interest among students and their parents.

Student invention contests

At the 25th Korea Student Invention Exhibition in 2012, a total of 8,485 inventions were submitted under the themes "Inventions to benefit the disabled, elderly and young" and "Inventions that can conserve energy." 300 inventions received awards after going

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through four stages: document screening → prior art search → product evaluation → comprehensive evaluation. For the Korean Student Creativity Championship, teams of five to seven students made structures using science and technology as well as artistic expressions, such as impromptu acting, to solve various problems and conflicts. A total of 1,273 teams participated in the contest and 100 teams received awards. At the Young Inventors Program, students presented invention ideas related to technology to support companies, who then provided IPR education to the youth on the technology and its commercialization. At this event, 8 companies and 822 teams took part with 50 teams receiving awards.



Invention scholarships and grand prize for instructors

In an effort to support student inventors, we awarded scholarships and gave opportunities to visit foreign IP offices to 101 promising student inventors to encourage invention creation. We also founded creative invention camps for students. Finally, we established a new grand prize for excellent teachers in the invention field and gave awards a total of seven teachers.



Fostering the next generation of entrepreneurs

Since 2009, we have run educational programs at the Korea Advanced Institute of Science and Technology (KAIST) and Pohang University of Science and Technology (POSTECH), the top-ranked science and engineering universities of Korea, to foster talented entrepreneurs. We have offered various educational programs to reflect core entrepreneurial skills including the skills to creatively solve problems and forecast future technology, while expanding expertise in IP. In addition, we provided the candidates with the opportunity to participate in a CEO forum at the National Academy of Engineering of Korea and meet with business leaders to enhance their motivation and passion as future entrepreneurs.



05 Events to promote inventions

Korea's Invention Day, enacted in 1957, commemorates the invention of the world's first rain gauge and its introduction to Korea on May 19, 1441. To commemorate the day and raise awareness of the importance of inventions, we hold a ceremony to award those contributing to the industrial development of Korea through inventions. Since 2011, about 80 contributors received awards along with one excellent inventor who received the Invention King of the Year award and an exhibit in the Korean Inventors Hall of Fame.



In addition, we annually hold the Korea Women's Invention Fair and the Korea International Women's Invention Exposition alongside the World Intellectual Property Organization (WIPO) and the Korea Women Inventors Association, specifically to promote and further encourage inventions by women. It was held at COEX in Seoul from May 3 to 6, 2012, with the participation of around 450 women inventors from 23 countries. The events successfully managed to attract around 70,000 visitors.

At the Korea International Women's Invention Exposition, about 160 Korean inventions and 110 foreign inventions were displayed and reflected the daily lives as well as the unique female perspective. Among the award-winning inventions selected was a "self-driven smart bicycle" that reuses the energy generated during pedaling for powering the bicycle's headlight.

At the same time, we held the Korean World Women Invention Forum with the participation of WIPO's deputy director-general and government representatives from a number of countries including

Poland, Uganda, and Jordan. Here, Korean and global experts from academia and women inventor entrepreneurs actively debated the "IP strategy for enhanced competitiveness of women inventor entrepreneurs."



In December 2012, we simultaneously held the Korea Invention Patent Exhibition, the Trademark and Design Contest, and the Seoul International Invention Fair, during which time we featured and exhibited around 700 foreign inventions from 32 countries including the United States, Russia, and Taiwan.

