

Promoting the Use and Creation of IP

KIPO ANNUAL REPORT 2011

#### Linking R&D and IPRs

## Analyzing patented technology trends of governmental R&D

The goal of analyzing the patented technology trends of governmental R&D is to help create strong and useful patents. For large, mid to long-term R&D projects of governmental agencies such as the Ministry of Knowledge Economy and the Ministry of Education, Science and Technology, we perform patent analyses at the research planning stage and confirm the projects and tasks. We provide the results of the analyses to the relevant ministries early on so they may reflect the results when planning and alter the direction of their research if necessary to create the most effective and competitive research projects. We expanded our analyses from 558 tasks of 9 ministries in 2010 to 694 tasks of 11 ministries in 2011.

#### Patent consulting for governmental R&D

To enhance the efficiency of governmental R&D projects, it is important to enhance the IP capacity of researchers participating in the projects. Therefore, we support the development of cus tomized IP R&D strategies of research institutes carrying out IP-related projects. In 2011, we selected 40 research institutes with excellent IPRs and devised strategies for responding to problematic patents, acquiring new patents, and devising R&D strategies linked with IPRs.

In addition, we dispatched patent strategy experts to a total of 10 governmental R&D teams to help formulate IP-focused R&D strategies. We also held training sessions and seminars on IP-related issues to enhance the IP capacity of researchers.

# Regional IP Capacity Building

### Providing IP development strategies to local governments

The Framework Act on Intellectual Property

enacted in 2011 encourages local governments to devise and pursue IP policies. Accordingly, we held IP for with the participation of the KIPO commissioner, municipality heads, lawmakers, presidents of regional universities, and regional businessmen in Gyeonggi Province (September), Gwangju Metropolitan City (October), Jeju City (October), Daegu Metropolitan City (November), and North Chungcheong Province (November). Through the fora, local governments thoroughly analyzed the state of IPRs per industry in their respective regions and drew up an IP vision and strategies to fit the situation of each region. Thanks to these efforts, Busan and Incheon are pursuing the establishment of departments exclusively responsible for IPRs. Moreover, Busan, Gwangju, Gangwon, and Gyeonggi are pursuing the enactment of ordinances to promote IP and Busan, Daegu, and Incheon are pursuing a provision of support for common brands and design of traditional industries, vitalizing the IP infrastructure and policies of each local government.

# Providing Comprehensive IP Support to SMEs

#### **Creating IP cities**

#### to raise awareness of IPRs

In an effort to encourage local governments to voluntarily pursue IP policies and build local IP infrastructure, we financially support IP-related projects of five cities selected through contests each year. Buk-gu of Busan, Gwangyang of Jeollanam-do, Jeju City, Jinju of Gyeongsangnam-do, and Gwangsan-gu of Gwangju were selected as IP cities in 2011. The selected cities are undertaking various projects to build the local IP infrastructure such as enacting ordinances to promote regional IP; consolidating manpower exclusively in charge of IP; drafting mid to long-term development plans; supporting the patents, brands, and designs of local residents and companies; and raising awareness on IP among the local residents.

To provide support for IP creation by SMEs, we have set up 31 regional IP centers nationwide where patent, brand, and design experts provide consultations on various IP issues. In addition, we provided 176 sessions of IPR training for 3,740 people over the past year to foster IP manpower at SMEs. We plan to continue these efforts throughout 2012.



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# **Fostering IP Manpower**



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## Fostering next generation IP experts

#### 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 capability in delivering courses on IP.

## Promoting invention activities at universities and industryuniversity 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 2,360 works were submitted from a total of 122 universities in 2011.

### Special IP degree programs

We have been running 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.



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#### Promoting companyuniversity cooperation projects

#### **Campus Patent Strategy Universiade**

Together with the National Academy
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 46 companies and 99 universities in 2011.

#### 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 been holding design fairs since 2006. About 1,400 works were submitted in 2011, of which 190 were filled as IPR applications (1 patent, 3 utility models and 186 designs) and 5 achieved contracts for licensing.



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### Fostering creative inventors

#### Systemizing of 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 teachers workshops, research contests, and on and offline job training to improve the expertise of invention leading teachers. Furthermore, we ran invention classes for creativity in a total of 190 schools in 16 cities and provinces nationwide. We plan to continuously finance

these invention education programs to cultivate IP awareness and interest among students and their parents.

#### Student invention contests

At the 24<sup>th</sup> Korea Student Invention Exhibition in 2011, a total of 9,768 inventions were submitted under the themes of "free inventions"; "safety devices for dangerous problems in life"; and "green energy using recycled goods", and 300 were awarded. 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 1,240 teams participated in the contest and 100 teams were awarded. At the Young Inventors Program, students presented invention ideas related to the technology to support companies who then provided IPR education related to their technology and commercialization thereof. Thirty teams were awarded.

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#### Invention scholarships and grand prize for instructors

In an effort to financially support the fostering of student inventors, we awarded scholarships 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 awarded a total of seven teachers.

### Fostering next generation entrepreneurs

Since 2009, we have run educational programs at KAIST and the Pohang University of Science and Technology (POSTECH), both top-ranked science and engineering universities of Korea, to foster talented entrepreneurs. We have diversified the educational programs to reflect core entrepreneurial skills including the skills to creatively solve problems and forecast future technology, while expanding their expertise in IP.



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# International Intellectual Property Training Institute (IIPTI)

The International Intellectual Property Training Institute (IIPTI) has been running IP training programs tailored for all types of trainees such as state and local government civil servants, civilians, teachers, students, and foreigners since its establishment in 1987. The goals of the programs are to foster Korean and global manpower with expertise in IP and contribute to the foundation for IP creation through invention promotion training. The institute is continuously enhancing its support for developing countries through international IP education programs and is leading global cooperation in the area of IP education. The institute provided a total of 496 IP training

courses in 2011. Specifically, 42 courses for civil servants, 44 customized group courses for civilians, 397 invention education courses, and 13 courses for foreigners such as the WIPO Asia-Pacific Seminars, were conducted.

Since 2008, the institute has managed a national IP education portal (www. ipacademy.net) providing the latest education information, e-learning contents, and educational services through the Internet. It provided 161 online educational courses for its 520,000 members including college students, teachers, businessmen, civil servants, and practitioners throughout 2011.





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#### **Events to promote** inventions

Korea's Invention Day, enacted in 1957, commemorates the invention of the world's first pluviometer and its introduction in Korea on May 19, 1442. To commemorate the day and raise awareness of the importance of inventions, we hold a ceremony to award those who have contributed to the industrial development of Korea through inventions. About 80 contributors were awarded last year along with one excellent inventor who received the Invention King of the Year award with an exhibit in the Korean Inventors Hall of Fame.

To further promote inventions specifically among women, we collaborated with WIPO

and the Korea Women Inventors Association to hold the "2011 Korea International Women's Invention Exposition (KIWIE2011)" and the "Korea Women's Invention Fair" from May 4 to 7. Now in its fourth year, the event was held successfully with the participation of over 450 women inventors from 25 countries and over 70.000 visitors. About 140 Korean inventions and 120 foreign inventions were displayed and reflected daily life as well as the unique female perspective. Awardwinning inventions included a hygienic pad fo pets (Russia) among others. At the "Korean World Women Invention Forum", held at the same time, women inventor entrepreneurs, Korean and global experts in academia, and representatives of governments as well as the World Intellectual Property Organization (WIPO) actively debated measures to foster women-led companies.

In December 2011, the Korea Invention Patent Exhibition, the Trademark and Design Contest, and the Seoul International Invention Fair were held simultaneously in Seoul during which we awarded outstanding Korean IPRs including 94 patents, 11 trademarks, and 1 design. We also exhibited about 500 foreign inventions from 30 countries worldwide.

