

# Providing IP Services

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King Sejong the Great  
King Sejong (1397-1450) was the 4th king of Joseon Dynasty and created Hangeul, the commonly used character of the Republic of Korea and North Korea.





# Examining Fourth Industrial Revolution Technologies

## Convergence Technology Examination Bureau

In order to adapt to developments in the IP environment and provide sufficient IP services, KIPO implemented appropriate measures to improve its patent examination. An organizational restructuring was initiated within KIPO in 2019 which led to the establishment of a new “Convergence Technology Examination Bureau” dedicated to the examination of technologies related to the Fourth Industrial Revolution (4IR), such as artificial intelligence (AI), big data, and bio-health.

Before the reorganization, KIPO’s patent examination was carried out by four bureaus: the Patent Examination Policy Bureau and Patent Examination Bureau 1, 2, and 3. A more efficient system was established according to technology

fields and the relocation of examiners with specific expertise. As of 2019, there are five bureaus managing patent examinations: the Patent Examination Policy Bureau; the Convergence Technology Examination Bureau; the Electricity & Telecommunications Examination Bureau; the Chemical & Biotechnology Examination Bureau; and the Machinery & Metals Examination Bureau.

Considering the specificity of 4IR-related technologies, the Convergence Technology Examination Bureau consists of six divisions and teams: the Artificial Intelligence & Big Data Examination Division; the Internet of Things Examination Division; the Biotechnology & Healthcare Examination Division; the

Intelligent Robot Examination Division; the Smart Manufacturing Examination Division; and the Autonomous Driving Technology Examination Team. Furthermore, new examination criteria were established

through consultation with industries which will play a pivotal role to promote the development and growth of 4IR-related technologies and industries.

## Consensus-based Consultative Examination Among Examiners

Patent examination is generally carried out by one examiner for each invention and processed under the main examiner even with consultation from other examiners. In 2019, KIPO began implementation of examinations based on the consultation and consensus of a group of examiners specializing in 4IR technologies. Under the new system, three examiners from the Convergence Technology Examination Bureau consult together from the onset of the examination and

come to a consensus, similar to that of the Intellectual Property Trial and Appeal Board.

Due to many 4IR-related inventions often incorporating two or more different technical fields, a group of examiners makes it possible to provide relatively higher-quality examination services and increase examination consistency by sharing opinions on patentability requirements and reducing discrepancies.

Organizational Restructure of Patent Examination

Organization(Previous)	Patent Examination Policy Bureau	Patent Examination Bureau 1	Patent Examination Bureau 2	Patent Examination Bureau 3
Function	Examination of patents and patent policy	Examination of basic industry patents	Examination of flagship industry patents	Examination of growing industry patents

Organization(Current)	Patent Examination Policy Bureau	(New) Convergence Technology Examination Bureau	Electricity & Communications Examination Bureau	Chemistry & Biotechnology Examination Bureau	Machinery & Metals Examination Bureau
Function	Examination of public safety patents and patent policy	Examination of 4IR technology patents	Examination of electricity and communications patents	Examination of chemistry and biotechnology patents	Examination of machinery and metal patents



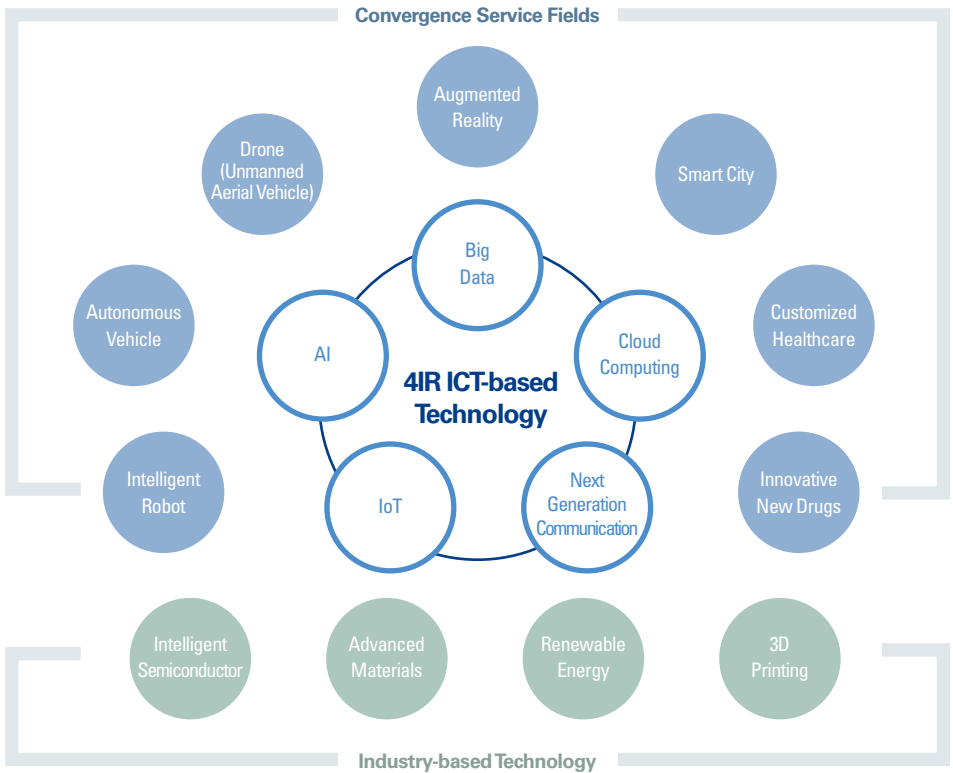
Consultative Examination among Three Examiners

**New Patent Classification  
Applications Related to  
Emerging Technologies of  
the 4IR**

Accelerated examination allows a way to preferentially review necessary applications while responding to continual changes in industrial structure and advancement of the technological environment. Since being first adopted in 1981 and through gradual expansion, applications filed in various kinds of high-tech industries have been made eligible for the accelerated examination program.

Fitting into emerging technologies, a new patent classification system was established for seven technological fields<sup>1)</sup> in 2018, and nine technology fields<sup>2)</sup> were newly added in 2019, which can benefit from accelerated examination. Currently, eligible patent applications filed under the accelerated examination are registered up to 10 months earlier than general examinations, an average of 5.5 months in total.

Technology of the 4th Industrial Revolution



1) Artificial Intelligence, Internet of Things, 3D printing, autonomous vehicle, big data, cloud computing, intelligent robot  
2) Innovative new drug, customized healthcare, smart city, AR/VR, renewable energy, drone, new generation communication, intelligent semiconductor and advanced material

# Introducing the “Venture Team” Project at KIPO

Government organizations are often busy engaging in the vast range of entrusted duties. Therefore, a “venture team” can be assembled to support the implementation of challenging but innovative ideas which could greatly improve convenience for their users. The teams are formed dedicated to actualizing ideas of policies and services within a government organization.

On June 12, 2019, the Ministry of Interior

and Safety of Korea hosted a “Venture Team Idea Competition.” Two of KIPO’s proposals were selected as winning ideas and two venture teams were established thereafter. The newly formed “Director for IP Startup Assistance” and “Director for Idea Transaction Management” will operate for two years under the direct supervision of the KIPO Commissioner with possible continuation that is conditional to their performance.



Winners of 2019 Venture Team Idea Competition (June 12, 2019)



Director for IP Startup Assistance

The Director for IP Startup Assistance was established for the task of discovering “Innovative Patent Startups” that possess superior technology and business potential. Through close cooperation with patent examiners and market experts, startups are identified in convergence technology fields such as AI and IoT as well as materials, parts, and equipment sectors. They are then provided with assistance for IP-based commercialization.

Additionally, the Director for IP Startup Assistance can create policies that support investment and patent commercialization while also providing training and consultation on IPRs. For example, an “Intellectual Property Startup Road Day” has been planned as an informative briefing to help create a culture of investment for IP-based startups. The event will be held in local regions with insufficient investment infrastructure and social networks.

Director for Idea Transaction Management

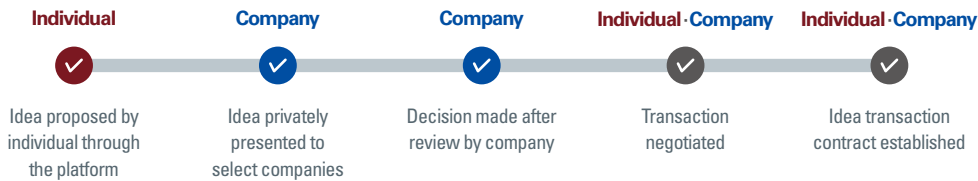
The process of IP filing and commercialization can often be difficult for the general public when trying to actualize their creative and innovative ideas. Therefore, the Director for Idea Transaction was established to develop a platform which would support the transaction of individual creative ideas from the general public to companies.

An idea transaction platform provides a channel where ideas which cannot be individually actualized are sold to companies for commercialization. To begin, an individual proposes an idea to a company, then the company will consider the feasibility of commercialization and patent

registration before following through with the transaction. Idea transaction allows the general public to produce economic value with their creative ideas and companies to grow through product innovation.

In 2019, the Director for Idea Transaction hosted a nationwide design competition for an IPR registration mark that incorporates a QR code. Details of the IPR associated to a product were often difficult to access. A QR code acts as a multi-functional and convenient link to information about the IPR and other relevant details. Therefore, greater accessibility of IP information can be used to create more innovative ideas.

Process within the Idea Transaction Platform



The winning design of the competition is being supplemented and registered as a business emblem. The Director for Idea

Transaction will start promoting the IPR registration mark in QR form in 2020.



Winner of the IPR Registration Mark Design Competition (Dec. 28, 2019)

Improving Examination Services

Collaborative Examination of Trademarks and Industrial Designs

In order to improve examination quality for trademarks and designs, "collaborative examinations" were introduced. More than 400 cases were conducted during 2019 under the new examination system. A team for collaborative examination generally consists of a main examiner, volunteers, and examiners with relevance to the application. For example, an examiner may request other examiners to gather to discuss the examination

direction for applications of convergence products or for applications that are difficult to examine distinctiveness or judge similarity.

Conducting the collaborative examination has led to not only more consistency, but also an increase in the competency of the examiners through cooperation. KIPO plans to examine more cases within the new system.