

Annual Report 2020



Editorial Board

Publisher

Korean Intellectual Property Office Government Complex Daejeon Builiding 4, 189, Che Seo-gu, Daejeon, 35208, Republic of Korea Tel +82 (42) 481-5126 Fax +82 (42) 472-9314 Website: http://www.kipo.go.kr/en/ E-mail: kipomla@korea.kr



5





CONTENTS

Introduction

- 04 Message from the Commissioner
- 06 Prologue
- 12 2020 Highlights

Overview

14 2020 IP Trends

Key Achievements

20 Providing IP Services

Response to COVID-19: Adjustment of Examination & Trial Services
New Examination Guides for New Digital Industry Inventions
Cutting-edge Technology Used for e-Filing and the First Mobile Application for Trademarks
Improvement of Trademark & Design Examination

30 Promoting IP Creation and Utilization

Opening of the Korean Patent Big Data Center
 IP Finance Surpasses KRW 2 Trillion
 Release of Mutual Aid Loans

- 34 Strengthening IP Protection
 - · "Reasonably Expected" Damage Compensation in Effect
 - · 10th Anniversary of The Special Judicial Police
 - · Response to IP Infringement and Dispute
- 40 Establishing Global IP Cooperation

· Strengthening Cooperation with WIPO

- · RCEP Signing Among Nations of the Asia-Pacific Region
- \cdot Major IP Offices to Enhance the Role of IP in Tackling Global Challenges
- · 10-Year Vision for Trilateral IP Cooperation

Appendix

- 51 KIPO Vision & Strategy
- 52 KIPO Organization Chart
- 54 IP Statistics

ANNUAL REPORT 2020

Message from the Commissioner

"

As one of the world's leading IP offices, we will spare no effort to engage in international cooperation and contribute to the advancement of the global IP system.



In the progress of the Fourth Industrial Revolution (4IR), new digital and technology fields such as AI, big data, and blockchain are considered crucial for national competitiveness. Many countries are concentrating all of their energies on gaining a competitive edge in these fields. It is, therefore, becoming increasingly important to secure intellectual property rights (IPRs) and implement an effective protection system of IPRs which encompasses data, a core asset in the era of digital transformation. To this end, the Korean Intellectual Property Office (KIPO) endeavored to establish a foundation for an IPR system that befits a digital economy in the year 2020.

In this regard, KIPO established separate criteria on patentability for new digital industry inventions such as AI, IoT, Biotechnology, etc. in order to provide high-quality IP services to applicants regarding emerging technologies. Concerning industrial designs in the digital area, the National Assembly has passed an amendment to the Design Protection Act which comes into effect in 2021. This amendment protects a graphic design implemented in virtual reality (VR) and augmented reality (AR) as a design image in itself. We also began offering the first mobile filing services for trademark applications to increase users' convenience in the digital environment. Meanwhile, in response to the new challenges of COVID-19, we reduced patent fees for applicants living in designated special disaster zones, made an ex-officio extension for IPR document submission, and newly introduced telephonic hearings in IP trial and appeal procedures.

For IP creation and utilization, KIPO launched the "National Patent Big Data Center" with the objective of analyzing IP information in a more systematic and multi-dimensional approach. Analysis results based

on the database of about 450 million IP information will be utilized to guide the direction of research and development (R&D) investment. In the financial sector. Korea's IP finance market surpassed KRW 2 trillion (about USD 1.8 billion) in terms of new loan and investment in 2020 through collaboration with financial institutions to provide innovative enterprises with opportunities for financing. In addition, KIPO officially implemented services of the "Mutual Aid Program related to IPRs" after an enrollment process which establishes a stable management base to alleviate IP risk and support the entry into overseas markets for Small and Medium Enterprises (SMEs). By the end of 2020, over 5,000 companies enrolled in this program since its introduction in August 2019.

With a view to building respect for IP, KIPO also stepped up its effort to construct an environment of strong IP protection for right holders both within Korea and abroad. An amendment to the Patent Act came into effect in December 2020 to stipulate a more substantial calculation of damage compensation, following the implementation of a legal system in 2019 for courts to award treble damages in cases of willful infringement. Additionally, KIPO set up an "Intellectual Property Right Dispute Response Center" to provide relevant information and practical consultation to companies involved in IPR disputes overseas. In April 2020, a new IP-DESK opened in Manila, Philippines to help companies successfully enter into the local market and protect their IPRs, which follows after Vietnam, Thailand and Indonesia in the ASEAN region.

On a global scale, even with the restrictions caused by COVID-19, KIPO closely cooperated bilaterally and multilaterally for the development of the IP system. We actively participated in virtual video conferences with major IP offices and the World Intellectual Property Organization (WIPO)

to make collective endeavors in reducing burdens on IPR applicants and overcoming obstacles in such exceptional circumstances. Moreover. Korea, along with China and Japan celebrated their 20th anniversary of trilateral IP cooperation and set a vision for the next 10 years to jointly address new challenges, such as digital transformation and the spread of an epidemic. In November 2020, Korea, ASEAN member states and other participating countries witnessed the signing of the Regional Comprehensive Economic Partnership (RECP) which will build a foundation for a stronger IPR protection system in the Asia-Pacific reaion.

In retrospect, the year 2020 was filled with many unexpected and unprecedented events that impacted the whole international community. Despite these unfavorable conditions, Korea made consistent effort to foster innovation and encourage creativity. As a result, the number of patent filings by Korean applicants increased, which led Korea to rank 4th in the world in terms of both the number of domestic patent filings and PCT filings. For the first time, Korea advanced to the 10th rank in WIPO's Global Innovation Index.

These achievements would not have been possible without the support from inventors, applicants, and IP stakeholders both domestic and abroad. As one of the world's leading IP offices, we will spare no effort to engage in international cooperation and contribute to the advancement of the global IP system.

It is my great pleasure to present to you KIPO's 2020 Annual Report.

I hope it serves to provide you with a better understanding of our recent activities and vision for the future.

Kim Yong Rae | Commissioner

Kim, Kongrae

Innovation

KIPO fosters IP Innovation through fast services with reliable quality.

Creative ideas have the power to change the world. KIPO continues to provide timely, accurat innovative IP examination services to ensure that ideas are adequately protected as IPR.

Premium Examination Services

KIPO aims to provide fast, high-quality to improve examination systems, rai pendency.

The average first office action pendency in 2020 was 11.1 months for patents and utility models, 8.9 months for trademarks, and 4.6 months for industrial designs.

Moreover, we offer appropriate examination services to accommodate the IP strategies of our users and timely registration of rights. Patent and utility model examinations have three tracks: regular examination, accelerated examination, and customer-deferred examination. Trademark and industrial design examinations have two tracks: regular examination and accelerated examination.



 Automatic Driving
 Self-driving cars do not require a human to drive. This is a rev core technology that will lead the future industry.

Bridal Palanquin

A palanquin to take the bride to the groom's home after the Ko of transport, the palanquin takes the form of a small litter on h on their shoulders. , and customer-oriented examination services by continuing se the quality of IP administration, and reduce first action

months

First office action pendency for patents and utility models

on that changes our daily lives. And it is a

an traditional wedding ceremony. A mode ontal poles, carried by a group of bearers

Innovation

KIPO fosters IP Innovation through fast services with reliable quality.

Creative ideas have the power to change the world. KIPO continues to provide timely, accurat innovative IP examination services to ensure that ideas are adequately protected as IPR.

Premium Examination Services

KIPO aims to provide fast, high-quality, and customer-oriented examination services by continuing to improve examination systems, raise the quality of IP administration, and reduce first action pendency.

The average first office action pendency in 2020 was 11.1 months for patents and utility models, 8.9 months for trademarks, and 4.6 months for industrial designs.

Moreover, we offer appropriate examination services to accommodate the IP strategies of our users and timely registration of rights. Patent and utility model examinations have three tracks: regular examination, accelerated examination, and customer-deferred examination. Trademark and industrial design examinations have two tracks: regular examination and accelerated examination.

 Automatic Driving Self-driving cars do not require a human to drive. This is a revolution that changes our daily lives. And it is a core technology that will lead the future industry.

 Bridal Palanguin A palanquin to take the bride to the groom's home after the Korean traditional wedding ceremony. A mode

on their shoulders



of transport, the palanquin takes the form of a small litter on horizontal poles, carried by a group of bearers

Competitiveness

KIPO increases its IP competitiveness by maintaining the highest number of resident patent applications per both GDP and population.

In this era of creative economies, IPRs are the core of competent business strategies. KIPO is dedicated to establishing a competitive and rewarding IP system by transforming novel ideas into strong IPRs.

PCT Applications The number of PCT applications from Korea has conditional growther erg (1.5, We have 44th, largest amount of PCT applications by country of origin in total for 2020 which is a 5.2% increase from 19, in the erg (20, 1) PCT applications Review).

The Korean language is also the 5th most commonly used language as an offile Rapplications

20,600 **PCT applications**

Competitiveness

KIPO increases its IP competitiveness by maintaining the highest number of resident patent applications per both GDP and population.

In this era of creative economies, IPRs are the core of competent business strategies. KIPO is dedicated to establishing a competitive and rewarding IP system by transforming novel ideas into strong IPRs.

IP Competitiveness

IPR Applications

In 2020, we received a preliminary total of 557,256 applications filing for patents, utility models, trademarks, and industrial designs. Out of that number, 79,054 applications were filed by nonresidents.

PCT Applications

Review).

The Korean language is also the 5th most commonly used language as an official PCT publication language (source: WIPO IP Statistics Data Center).

◄Gat Craft A gat (Korean traditional hat) is made from horsehair with a bamboo frame and is partly transparent. As gat making requires artisanship throughout a complex series of techniques involving an array of materials, it has been designated as Intangible Cultural Property No. 4 on December 24, 1964.

► Gat

A gat is a type of Korean traditional hat worn by men along with hanbok (Korean traditional clothing) during the Joseon period. As Korean historical dramas became popular around the world, a gat also drew attention from people around the world

The number of PCT applications from Korea has continually grown every year. We have the 4th largest amount of PCT applications by country of origin. There were 20,600 PCT applications in total for 2020 which is a 5.2% increase from 19,085 applications in 2019 (Source: PCT Yearly





Harmonization

KIPO collaborates with key national allies to create a global community that appropriately values and rewards inventions.

Cooperation is fundamental to creating an environment where IPRs are promptly acquired and firmly protected for stakeholders. KIPO engages in activities that advance the global IP systems as it works to increase the value of IF





Countries/ Regions Patent Prosecution Highway (PPH)

JJ IP sharing projects

Appropriate technology and brand development



Harmonization

KIPO collaborates with key national allies to create a global community that appropriately values and rewards inventions.

Cooperation is fundamental to creating an environment where IPRs are promptly acquired and firmly protected for stakeholders. KIPO engages in activities that advance the global IP systems as it works to increase the value of IP.

Worldwide IP Collaboration

Global Cooperation Forums

Taking on the role as one of the world's leading IP office, we engage in cooperation forums with other leading IP offices that contribute to harmonizing global IP systems such as the IP5 for patents, the TM5 for trademarks, and the ID5 for industrial designs.

Patent Prosecution Highway (PPH) with 34 Countries and Regions

We work with countries around the world under the PPH for reducing the time and costs required to obtain patent rights overseas. As of 2020, the PPH has been implemented with 34 countries/regions.

• PPH participants: Australia, Austria, Brazil, Canada, Chile, China, Colombia, Denmark, Eurasia, European Patent Office, Estonia, Finland, Germany, Hungary, Iceland, Israel, Japan, Malaysia, Mexico, New Zealand, Norway, Peru, Philippines, Poland, Portugal, Russia, Saudi Arabia, Singapore, Spain, Sweden, Taiwan(Province of China), UK, USA, and Vietnam.

55 IP-Sharing Projects

Based on the experience of achieving remarkable development within a short period of time, KIPO carries out IP-Sharing projects to share our gained knowledge and help bridge the IP divide. In particular, we endeavor to assist local communities improve their quality of life and income with projects that facilitate cost efficient and sustainable appropriate technology and brand development.

WIPO Korea Funds-In-Trust (FIT)

Since 2004, Korea has contributed about 13.3 million Swiss francs in total for the continued operation of the WIPO Korea FIT. Jointly undertaken in collaboration with KIPO and WIPO, the funds are applied towards projects that support developing countries and strengthen the global IP system through economic, social, and cultural development.

 Wedding Presents One of the Korean wedding traditions. When the bridegroom's family sends silk to the bride's family, the bride's family makes silk quilts and clothes and sends them to their parents-in-law, and the parents-in-law send the money to the bride's house.

 Hwarot (Traditional Korean Wedding Dress) A robe worn by princesses or upper-class women of the Joseon Dynasty when they got married. Various animal and plant patterns were embroidered on red silk to pray for health and happiness



2020 Highli	ghts			Jun.	24 29	The 54th Invention Day Celebratic KIPO-DIP (Laos) Signing on PRP N
202	20 I	Highlights				
				Jul.	01 21	KIPO-IMPI (Mexico) PPH MOU Re IP5 Heads of IP Office Virtual Me
Jan.	14	The 2020 New Year's Gala for Inventors and Patent Users	2020 발광특히인 신년인사회	Aug.	06 12 27	The 33rd Korea Student Invention KIPO-MISTI (Cambodia) MOU Sig WIPO Virtual Meeting
Feb.	09~13	KIPO-WIPO Heads Meeting		Sep.	21~25 21 22	The 61st (Hybrid) Session of WIP Patent Big Data-based Industry Ir KIPO-SAIP (Saudi Arabia) Heads o
Mar.	02~06 10	The 77th Session of WIPO Coordination Committee for Director General Nomination KIPO-INPI (Brazil) Signing on PPH MOU		Oct.	05 16 26 30	KIPO-BruIPO (Brunei) Signing on F KIPO-USPTO (USA) Heads of IP O IP Global Challenge Forum (IP2O+ KIPO-EPO (Europe) Heads of IP Of
Apr.	01 09 22	KIPO-USPTO (USA) Heads of IP Office Virtual Meeting KIPO-CNIPA (China) Heads of IP Office Virtual Meeting KIPO-SAIP (Saudi Arabia) Heads of IP Office Virtual Meeting		Nov.	09 12 25 27	The 16th Patent Information Expo KIPO-MyIPO (Malaysia) Signing or The 3rd Korea-ASEAN Heads of IF IPR Dispute Response Center Ope
May.	06 07~08 14	KIPO-EUIPO (EU) Heads of IP Office Virtual Meeting The 60th Extraordinary (Virtual) Session of WIPO General Assemblies KIPO-IPOS (Singapore) Signing on PCT-ISA MOU		Dec.	01 01	The 20th TRIPO Head's Meeting (F Korean Intellectual Property Exhib

14 KIPO-IPOS (Singapore) Signing on PCT-ISA MOU



ration P MOU

제55회 발명의 날 기념식



Renewal Veeting



tion Exhibition Signing on FRID



VIPO General Assemblies y Innovation Strategy Presentation ds of IP Office Virtual Meeting



on PRP MOU 9 Office Virtual Meeting 20+)

Office Virtual Meeting



xpo g on PPH MOU of IP Office Virtual Meeting Opening Ceremony



chibition

The 79th (Hybrid) Session of WIPO Coordination Committee

KIPO-WIPO Heads Virtual Meeting

03 09

10

The 2020 Global IP Strategy Conference





2020 IP Trends

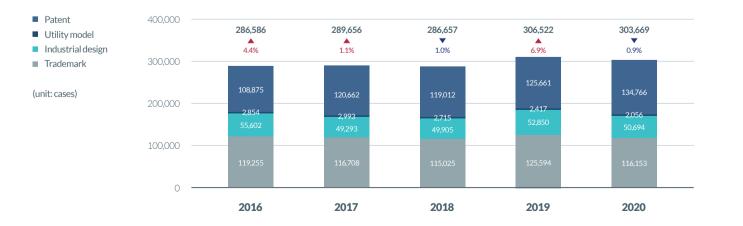
IPR Applications and Registrations by Year

IPR Applications

*Including PCT, Madrid, Hague international applications

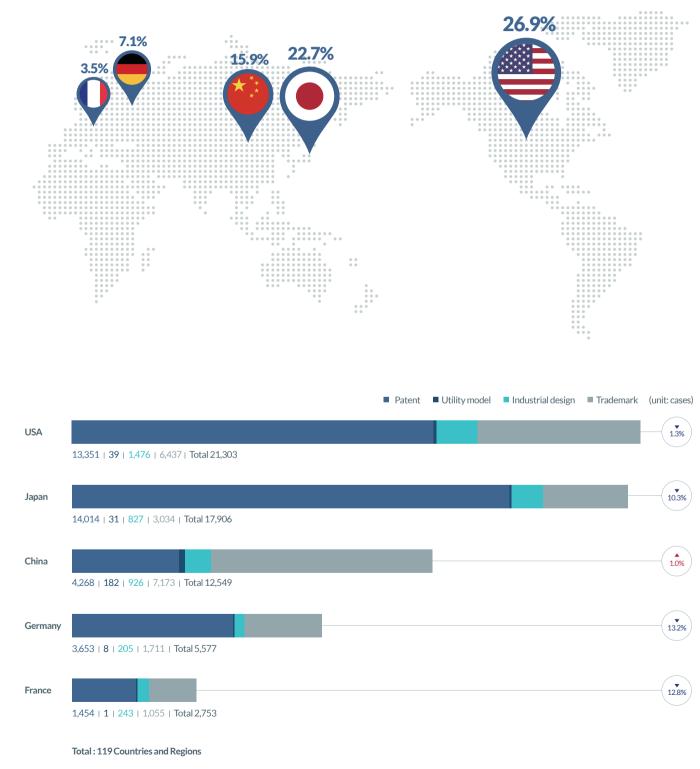


IPR Registrations



Non-resident IPR Applications Filed at KIPO

Top 5 Countries



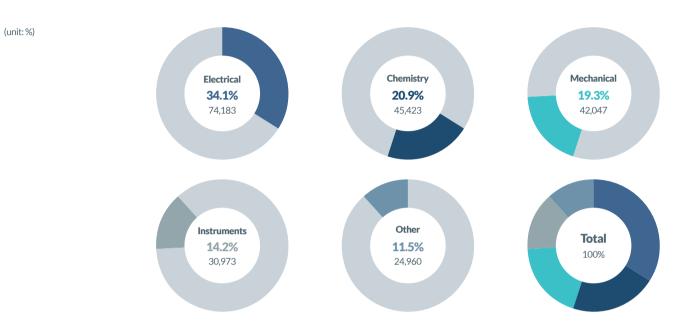
Top IPR Filing Domestic & Foreign Companies



■ 2020 ■ 2019 | ▲ ¥ Year-over-year comparison (unit: cases)

Patent Applications by Technology

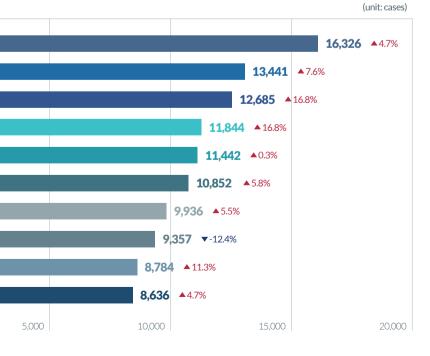
Top 5 WIPO Technology Fields



Top 10 Technology Classifications

* WIPO IPC-Technology concordance table (35 technology fields)

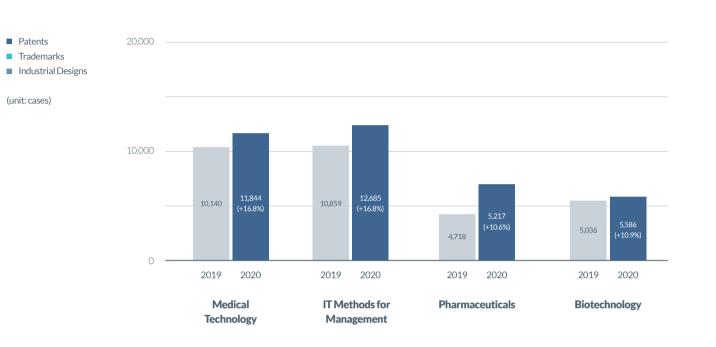
Electrical machinery, apparatus, energyComputer technologyIT methods for managementMedical technologySemiconductorsTransportCivil engineeringDigital communicationMeasurementOther special machines

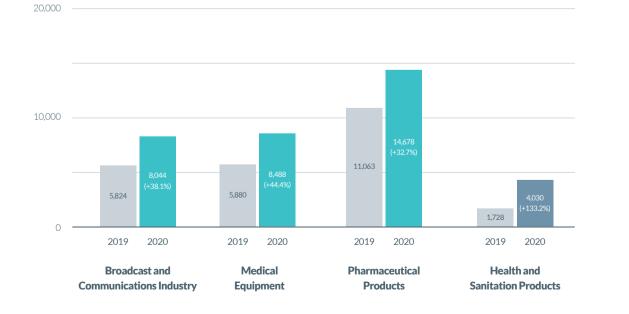


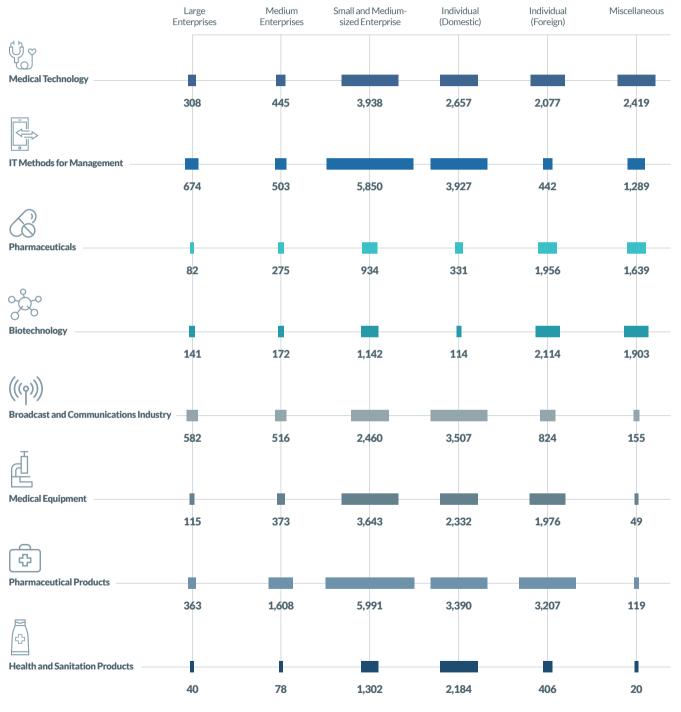
IP Application Trends Related to COVID-19 and Digital Economy

Change in Applications by Fields

Applications of 8 Fields by Applicant Type







(unit: cases)

Providing IP Services



22 Response to COVID-19: Adjustment of Examination & Trial Services New Examination Guides for New Digital Industry Inventions 26 Cutting-edge Technology Used for e-Filing and the First Mobile Application for Trademarks 27 Improvement of Trademark & Design Examination

25

TYTY

Anna make

Response to COVID-19: Adjustment of Examination & Trial Services

Patent Fee Reduction for Special Disaster Zones

The sudden and rapid proliferation of the novel coronavirus (COVID-19) brought about consequential changes to many standard practices and economic order across the world. In the Republic of Korea (ROK), early cluster outbreaks of COVID-19 severely affected specific regions, such as Daegu City and Gyeongsangbuk-do Province. As the Korean government designated these regions as special disaster zones on March 15, 2020, the Korean Intellectual Property Office (KIPO) declared a one-year patent fee reduction for the residents of these regions until March 14, 2021.

More specifically, individuals and businesses with their resident address in

these special disaster zones were eligible for a reduction of their patent fees. A 30% fee reduction was provided for trial requests, registration for establishment of rights, annual registrations and applications for patents, utility models, and designs. Also, a 75% fee reduction was provided for international search requests by small and medium-sized enterprises (SMEs) filing international patent applications under the Patent Cooperation Treaty (PCT).

During this time of crisis, a patent attorney survey result revealed a demand for more government support, such as reduced official fees for special disaster zones. Also, despite the overall trend of increased domestic patent applications for the first

Ex Officio Extension for Patent Document Submission

Considering the global impact of COVID-19, it was anticipated that domestic and overseas applicants would have difficulty meeting the submission deadline of patent applications designated by KIPO. Under the Korean Patent Act, KIPO was able to ex officio extended document submission deadlines for 82,795 cases in total.

Initially, any deadline for document submission falling within March 31 to April 29, 2020 was ex officio extended to April 30, 2020. Afterwards, any deadline falling within April 30 to May 30, 2020 was extended to May 31, 2020 for a second time. These particular extensions did not require applicants or agents to file



Fee Reduction for Special Disaster Zones

Category	Reduction Amount			
Fee for application				
Fee for requesting a trial	200/			
Fee for registering establishment of right	30% ↓			
Fee for annual registration				
Fee for PCT international search	75%↓			
 Target regions : Daegu, Gyeongsan-si, Cheongdo-gun, Bonghwa-gun Exemption period: March 15, 2020 - March 14, 2021 				

Category

1st extension

2nd extension

quarter of 2020, Daegu and Gyeongbuk, in particular, showed a decrease in patent applications. Therefore, these measures

were implemented in order to lessen burden on users and help encourage patent applications.

for an extension nor to pay the fees arising therefrom. By alleviating this burden, applicants were able to proceed with the acquisition of their intellectual property right (IPR). The same arrangement was extended to patent applications from overseas where the spread of COVID-19 was severe.

Meanwhile, KIPO also approved requests for additional extensions to deadlines as long as the indicated reason was due to COVID-19. Even for situations where a deadline was missed and a patent application became invalid or the right was terminated, it would be possible to apply for redress of rights and to have the fee waived for reasons due to COVID-19.

Deadline Extension for Document Submission

Original Deadline	Extended Deadline	Number of Cases
March 31, 2020~April 29, 2020	April 30, 2020	30,155
April 30, 2020~May 30, 2020	May 31, 2020	52,640
		Total 82,795 Cases

Additional measures for IP Trial and Appeal **Proceedings in response** to COVID-19

In response to the new challenges of the pandemic, KIPO adopted additional measures so that cases could continue to be heard in a safe environment. Previously, the Intellectual Property Trial and Appeal Board (IPTAB) of KIPO only allowed videoconference oral hearings in which parties needed to be physically present in the hearing rooms in Seoul or Daejeon. However, KIPO implemented telephonic hearings to prevent parties and representatives from having to physically attend oral proceedings and instead participate by telephone, as measure of social distancing in the effort to contain the pandemic. Also, telephonic

hearings could potentially provide benefits in situations where Internet access is not secure.

With the consent of the adverse party, parties may request for online interviews or telephonic hearings either online or by phone. However, if the case requires examination of witnesses or taking of evidence, oral proceedings will be held in the IPTAB oral hearing rooms. Furthermore, online interviews were introduced in order to enable parties to participate remotely from their home or offices via Internet (vc.on-nara.go.kr).

KIPO newly established the "Examination Guides by Art Field" which contains "Criteria on Patentability for Inventions in the Digital Industry Fields." In order to provide proper protection for inventions of Fourth Industrial Revolution (4IR) technologies, a few major countries have made amendments to their existing examination guidelines by adding example cases of related technologies.

KIPO, on the other hand, created separate criteria on patentability according to each new digital industry. The guides outline patentability requirements and written description requirements and include various example cases with a focus on convergence technologies, such as artificial intelligence (AI), Internet of things (IoT), biotechnology, etc.

For instance, the guide on AI provides patentability requirements and specific examination cases together with guidelines on drafting specifications to help applicants obtain high quality patents, a feature which many companies previously found too difficult due to the characteristics of new industries.

New Examination Guides for **New Digital Industry Inventions**

When it comes to was IoT, the criteria on patentability was modified to have sufficient consideration on the characteristics and effects according to each service field. This is in order to prevent unreasonable application of manufacturing-based patentability requirements to ICT convergence technologies and to encourage new market entrants.

As for the bio-field, the previously ambiguous patentability criteria for Albased new drugs development was supplemented, thus providing support for pharmaceutical businesses to establish optimal patent application strategies for each development stage of Al-based drug repositioning technology.

KIPO will further identify new digital industries with ample growth potential, such as autonomous driving systems, intelligent robots and cosmetics, so as to provide more suitable criteria on patentability.

Cutting-edge Technology Used for e-Filing and the First Mobile Application for Trademarks

In 2020, KIPO's e-filing website "Patentro" (www.patent.go.kr), was upgraded with focus on enhancing user access and functionality. New features have been included to help streamline the process of filing IPR applications for users. The upgrades were made by incorporating cutting-edge IT technology to vastly improve features for user convenience and to offer a user interface (UI) compatible with PCs and mobile devices, such as tablets, smartphones, etc.

Most importantly, KIPO is the first ever to offer mobile e-filing services for trademark applications, which was released to the public on March 2020. It is now possible to carry out a wide range of services through a mobile device from filing trademark applications to receiving notifications, paying fees, viewing examination progress, obtaining registration certificates, etc. Users are also able to customize their homescreen for quick access to their most used features.

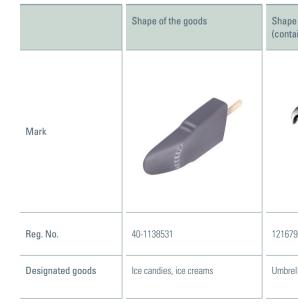
Additionally, the website allows a simple authentication process through browserembedded authorization certifications or "Digital Onepass," a system that gives access to a wide range of Korean government services through a single username and verification tool. Furthermore, by utilizing a blockchainbased proxy service to distribute and share filing data, users can benefit from 24/7 uninterrupted submission services for their IPR application.

Improvement of Trademark & Design Examination

Amendment of Trademark Examination Guidelines Regarding Trade Dress More and more businesses are applying to protect their trade dress under trademark rights. The term "trade dress" is a broader concept which refers to a product's total image or overall appearance that distinguishes the product from competitors and encompasses the product's size, 2D or 3D shape, color, texture, etc.

Reflecting this increasing trend, several amendments were made to the "Trademark Examination Guidelines" to improve examination quality and accuracy related to various types of visually perceivable and non-perceivable marks, including 3D shape, sound, color and color marks which will be in effect starting January 1, 2021.

Examples of Registered 3D Marks by Type



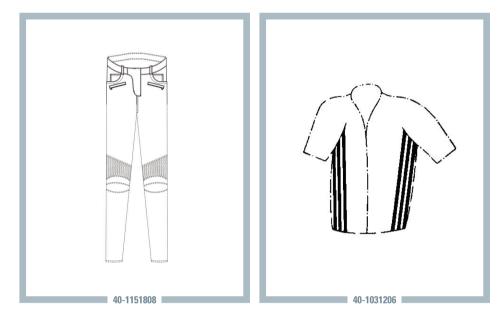




First of all, a distinctive appearance of a business can be recognized as the trademark of a specified individual. For example, the interior/ exterior of a building in which goods are sold and services are provided can be classified as a type of 3D mark. In order to provide better protection as a registered trademark, specific guidelines for examination were established. In particular, applicants are able to illustrate the interior and exterior appearance of their place of business in their application with solid lines to indicate elements to be protected and dotted lines to indicate elements not to be protected, which may change depending on actual use.

e of the packaging ainers) for the goods	Shape of the packaging (containers) for the goods	Shape unrelated to the goods or their packaging
793	40-1302518	41-0364501
ella sticks, canes	Perfume, cosmetics	Data search in computer files for others

Examples of Position Marks in Korea



Secondly, according to established Supreme Court case law, a "position mark" is recognized when "a shape (3D) or figure (2D) has acquired distinctiveness when used in a particular position on a product." This scope was expanded to also include "colors (a single color or combination of colors) which have acquired distinctiveness when used in a particular position." The supplemented system allows the use of a specific color or combination of colors in a specific position to be protected as a "position mark" as long as it acts as a source identifier in the final product. Further, improvements were made by expanding the range for expressing specific shades of color (i.e. Pantone, HEX, RGB, CMYK, etc.) and by amending the

guidelines on acquiring distinctiveness regarding sound trademarks.

Lastly, examination standards were strengthened by supplementing examination guidelines for non-traditional marks in terms of functionality so that some 3D shapes which should be protected as patents are not erroneously registered as trademarks. For instance, it is now required to comprehensively consider the existence of relevant patents/utility models, the promotion via advertisements on the functionality of the product, as well as the existence of alternative shapes of the product for the same function, and the ease and economic feasibility of producing such alternative forms.

Restructure of the Partial-Substantive Design Examination System (PSES)

Partial-substantive design examination system (PSES) allows early acquisition of rights through rapid examination of formality and eligibility of design applications of which have a short design life cycle and are easy to copy (clothes, fabric, etc.).

The Partial-Substantive Design Examination System track (in effect December 1, 2020)

Locarno classification	Class 1	Class 2	Class 3	Class 5	Class 9	Class 11	Class 19
Articles	Foodstuffs	Clothing & haberdashery	Travel goods	textile piece goods	Packages & containers	Articles of adornment	Stationery & office equipment

Oftentimes, if a design is not registered under the Design Protection Act, it is difficult to receive proper protection. Even with protection under other laws, companies often give up taking actions against third parties who illegally use their

The first office action of PSES would take about 60 days from the date of the filing. However, it could not accommodate the fast-changing reality of the design industry where fast fashion trends change in just 2~3 weeks. Therefore, from January 2020, KIPO significantly reduced the processing time of the first office action of PSES

from 60 days to 10 days by improving the efficiency of internal procedures and recruiting experienced examiners.

Additionally, KIPO expanded the PSES track to cover more classes. Previously, PSES was applied only to designs from three classifications: Clothing and haberdashery (Class 2), Textile piece goods (Class 5), and Stationary and office equipment (Class 19). Since December 2020, four more classifications were added: Foodstuffs (Class 1), Travel goods (Class 3), Packages and containers (Class 9), and Articles of adornment (Class 11).

design without permission due to the time and cost. With these new measures, it is expected to allow companies to secure their design with the launch of their business.

Promoting IP Creation and Utilization

- 32 Opening of the Korean Patent Big Data Center
- 32 IP Finance Surpasses KRW 2 Trillion
- 33 Release of Mutual Aid Loans

Smart City

Smart technology is changing the future of cities. Many cities around the world are evolving into smart cities to solve problems such as environmental pollution, lack of energy, traffic congestion, and increased crime.

Opening of the Korean Patent Big Data Center

KIPO and the Ministry of Trade, Industry and Energy launched the "National Patent Big Data Center" in June 2020 under the Korea Intellectual Property Strategy Agency (KISTA). The Center will analyze a database of about 450 million IP information across the world to help establish strategies to identify and foster promising future technologies.



For instance, multi-dimensional analysis of patent big data will allow examination of patent competitiveness by company and by country as well as identify future technologies to guide direction of research and development (R&D). Furthermore, it is expected that the utilization of patent big data in the IP market will extend even to the private sector, such as through patent consultations for companies.

Through the National Patent Big Data Center, KIPO plans to produce and provide patent-based information of major industries and technologies, such as patent trend monitoring and analysis as well as promising future technology discovery regarding national core industries (i.e. Al, Bio-health, autonomous vehicles, etc.) and matters of public safety.

IP Finance Surpasses KRW 2 Trillion

For the first time, Korea's IP finance market surpassed a scale of KRW 2 trillion in new transactions of loans and investments in 2020. "IP Financing" refers to financing activities backed by the value of intangible IP assets of companies. At times, SMEs may possess high quality IP but have insufficient tangible collateral and low credit ratings. Therefore, they are unable to apply for loans through conventional methods. In this setting, financial institutions provide opportunities for financing to companies in the form of loans collateralized by IP, loans guaranteed by IP and IP-based investments

based on the IP valuation of the company's IP assets.

Soon after reaching a total amount of KRW 1 trillion in 2019, the amount of IPbacked financing transactions in Korea rapidly increased by 52.8% to total KRW 2.064 trillion in 2020. More specifically, loans collateralized by IP accounted for KRW 1.093 trillion and loans guaranteed by IP accounted for KRW 708.9 billion. Investment in companies that own outstanding IP rights or a direct investment for IP rights, or IP-based investment,

accounted for KRW 262.1 billion.

Operated through the Korea Technology Finance Corporation (KIBO), KIPO implemented the Mutual Aid Program related to IPRs as a policy program to provide a financial base to SMEs for alleviating the burden of costly expenses related to IP through mutual aid. Subsequently, the program's loan services began to be released for subscribing members in 2020.

The mutual aid program operates based on the revenue of installment deposits of its members. Due to this nature, the first year was spent gathering companies to subscribe to the program and enrolled members are eligible to receive loans after accumulating more than 12 payments (monthly installments). Therefore, companies were issued loans beginning in



Especially in 2020, the expansion of IP financing has helped support Korean SMEs by providing opportunities of financial funds to innovative enterprises who have been economically affected by COVID-19. KIPO plans to work to increase the number of financial institutions that provide loans collateralized by IP and to enhance the quality of IP valuation services in order to stimulate financial support for SMEs and venture enterprises with innovative technology.

Release of Mutual Aid Loans

July 2020 after its launch in 2019. Additionally, in consideration of the economic hardships caused by COVID-19, a temporary interest rate reduction on loans was implemented from September 2020 until August 2021. The interest rate of loans for IP expenses was reduced from 1.75% to 1.25% and the interest rate for loans for operating funds was reduced from 3.25% to 2.25%.

Since the launch of its services, the mutual aid program has gained 5,206 members in just 16 months of companies which desire to protect their patents, trademarks, designs, etc. and the number continues to increase to that scale. Such mutual aid loans will continue to help SMEs that are faced with unexpected challenges such as IP disputes both domestic and international incidents.

as of Dec. 2020

Strengthening IP Protection



- 36 "Reasonably Expected" Damage Compensation in Effect
- 10th Anniversary of The Special Judicial Police
- 38 Response to IP Infringement and Dispute

COVID-19 Prevention System

Korea's excellent COVID-19 prevention system has received great attention from around the world. The Korean government has promised continuous cooperation with the international community to respond to COVID-19.

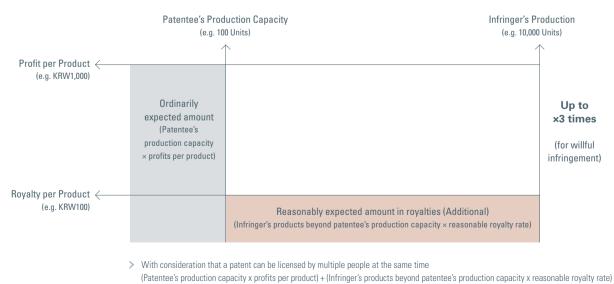
"Reasonably Expected" **Damage Compensation in Effect**

A partial amendment of the Patent Act went into effect on December 10, 2020 which entitles a more reasonable compensation for damages from infringement. The amendment stipulates that a patent holder can claim damages for the infringer's product sales that surpass beyond the patent holder's own production capacity (Article 128, Patent Act).

Previously, the amount of compensation was subject to an amount "ordinarily expected" in royalties which was limited to the production capacity of the patent holder. For example, even when an infringer sells 10.000 units of a product. if the production capacity of the original patent holder is 100 units, damages could not be claimed for the 9,900 units that is beyond his/her own production capacity.

However, instead of having a deterrent effect, larger corporations with larger production sales could profit by taking advantage of the limited production capacity of smaller businesses. They would only need to pay a relatively small amount for infringement damages rather than going through the process of making proper license agreements.

With the amendment in force, right holders are able to claim damages that is calculated as a "reasonably expected" amount in royalties which can go beyond the original production capacity (e.g. remaining 9.900 units of the infringer's sales). This calculation method has been widely recognized in major developed countries such as France, Japan. UK, and the U.S.



*Up to 3 times in compensation for willful infringement

>>> Important to calculate damage compensation based on a reasonable royalty rate

10th Anniversary of The Special Judicial Police

In 2020, the KIPO Special Judicial Police (SJP) on Industrial Property celebrated its 10th anniversary. In September 2010, KIPO established the SJP as Korea's firstever investigative authority dedicated to enforcement against counterfeit products from trademark infringements. By March 2019, amendments were made to expand the scope of authority and allow investigations on all IP, such as patents, trade secrets, and design infringement along with trademarks.

True to its role as enforcers of IP protection, the SJP has been able to handle about 45,000 case since beginning 10 years ago. In the process of investigations, about 3,500 trademark infringers have been charged with criminal activity and about 12 million items of counterfeit products (valued at KRW 500 billion in genuine goods) have been confiscated.

Moreover, in the case that there is willful infringement of the patent right, the courts can award compensation up to three times the recognized amount of damages as well as on all profits made on infringement infringements.

products sales. Enforcement of this amendment will help establish stronger protection of patent rights against large-scale, deliberate and malicious

Moreover, online consumption has rapidly increased due to the growth of the "untact" or "contact-free" industry. Subsequently, more and more counterfeit products are being traded on online markets and platforms. Accordingly, the SJP focused its investigation capabilities on online transactions of counterfeits and even made an arrest that involved a whole family who sold KRW 62.5 billion worth of counterfeit luxury items through live broadcasts on social media.

The SJP not only focuses investigations on products related to public health and safety but has been expanding its attention to the growing popularity of Korean pop culture (K-pop) and related merchandise. Last year in particular, the SJP cracked down on counterfeit products related to BTS, a world-famous Korean boy band, which helped spread the importance of IP

protection for the K-pop industry.

In total, there are 35 investigators across the three branch offices of Daejeon, Seoul, and Busan who are actively responding to IP infringement cases across the nation. Members with specific technical specialties are recruited in order to provide prompt and accurate assessment regarding infringements, thereby helping to lead the way to eliminate IP infringements and enhance IPR protection.

Response to IP Infringement and Dispute

Opening the IPR Dispute Response Center

In November 2020, KIPO opened the "Intellectual Property Right Dispute Response Center" with the Korea Intellectual Property Protection Agency (KOIPA) to expand support for Korean companies exporting to overseas markets. The center will be dedicated to providing companies with relevant information and consultations on IPR disputes.

In particular, there has been rising concern regarding disputes where overseas companies are the original patent holder



and Korean companies are the latecomers. Also, the overseas trade environment may become increasingly unstable and international IPR disputes may increase due to recent global trade disputes and the COVID-19 crisis. To address these issues, the IPR Dispute Response Center will provide information and consultation regarding IP disputes and appropriate response measures to SMEs who lack IP dispute response capabilities.

Furthermore, IPR infringements related to Korean brands (K-brands) have been rising due to the increased popularity and export of Korean culture and entertainment products. In an effort to fight against overseas K-brand infringement, the IPR Dispute Response Center will also monitor counterfeit products circulating online and bad faith registration of trademarks of K-brands by trademark brokers and provide follow-up measures.

IPR support in the New Southern Market

KIPO has been working together with the Korea Trade-Investment Promotion Agency (KOTRA) to provide diverse support for protecting the IPRs of Korean SMEs entering local markets especially in the South and Southeast Asian Region. In 2017, the Korean government launched a diplomatic initiative aimed at realizing mutual prosperity and peace by seeking to elevate Korea's relations with ASEAN member states and India in the political, economic, social and cultural spheres.

To help Korean companies enter markets in this region, also called "New Southern Markets," companies are offered services at no costs through KOTRA-led exhibitions, buyer consultations, and delegation parties to search for similar trademarks in the respective local market. As long as there



 * Association of Southea Thailand, and Vietnam. are no preexisting similar trademarks, they will receive the support to file a trademark application through the IP-DESK located in the respective country.

These IP-DESKS have been established in various parts of the world in order to provide support to Korean companies in international markets by helping secure trademark rights and respond to infringement disputes and by hosting informational sessions on dealing with trademark brokers. The most recent IP-DESK was established in Manila, Philippines in March 2020. Korean companies in the Philippines will be able to receive the various services provided by the local IP-DESK, such as consultation with local IPR experts and financial support to secure rights and to respond against disputes.

* Association of Southeast Asian Nations (ASEAN): Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore,

Establishing Global IP Cooperation

Hahoe-Byeolsingut Tallori (Mask Dance Drama of Hahoe) Hahoe Byeolsingut Tallori is held in Andong Hahoe Village. The mask used for this performance is the oldest surviving mask in Korea and is designated as a national treasure. After this performance, young and old, Koreans and foreigners, have an exciting dance party.

- 42 Strengthening Cooperation with WIPO
- 43 RCEP Signing Among Nations of the Asia-Pacific Region
- 44 Major IP Offices to Enhance the Role of IP in Tackling Global Challenges
- 46 10-Year Vision for Trilateral IP Cooperation

Strengthening Cooperation with **WIPO**

The Republic of Korea (ROK) first became a member of the World Intellectual Property Office (WIPO) in 1979 which is the global forum for IP services, policy, information, and cooperation. Particularly in 2020, effort was focused on strengthening the long-standing relationship with WIPO as well as actively participating in global discussions during the COVID-19 epidemic.

On March 4th, 2020, the KIPO Commissioner, as head of the ROK delegation, participated in the Extraordinary Session of the WIPO Coordination Committee held in Geneva. The Coordination Committee nominated Mr. Daren Tang as the candidate for the post of the next Director General. Subsequently, due to the unprecedented global health crisis, the appointment of Mr. Daren Tang as the 5th WIPO DirectorGeneral was confirmed through written procedure at the 28th Extraordinary Session of the WIPO General Assembly held from May 7th to 8th.

Further, the Assemblies of the Member States of WIPO (Sixty-First Series of Meetings) was held from September 21st to 25th through a hybrid format to allow member states to participate physically or online in compliance to health and safety measures. The KIPO Commissioner delivered a General Statement which emphasized the necessity of R&D and IPR creation to overcome the COVID-19 crisis and highlighted the importance of promoting WIPO and IP Offices' digital transformation for users' accessibility and convenience.

In December, a bilateral video conference was held where the newly appointed WIPO



Director-General shared his vision for identifying new collaborations between the two institutions. The KIPO Commissioner in turn discussed cooperation projects using the WIPO-Korea Funds-In-Trust to promote sustainable economic development and help reduce the IP gap between developing and developed countries.

On November 15, 2020, the representatives of 15 countries including the ROK, Australia, China, Japan, and New Zealand and the ten countries of the ASEAN region gathered virtually to witness the signing of the Regional Comprehensive Economic Partnership (RCEP) during the 4th RCEP Summit. The RCEP signing is significant as a trade agreement among Asia-Pacific nations to strengthen economic linkages and enhance trade and investment activities, thereby, creating the world's largest trading bloc to date.

The RCEP will create a foundation for IPR

Meanwhile, KIPO, WIPO, and the Korea

Patent Attorneys Association (KPAA) collaborated to host a "WIPO Roving Webinar" in November 2020 for WIPO's IP global service users in the ROK. Korean staff currently at WIPO were invited online to introduce the standard practices and procedures of the global IP systems, such as the PCT System (patent), the Madrid System (trademark), the Hague System (design), as well as WIPO's global database of IP information.

RCEP Signing Among Nations of the Asia-Pacific Region

protection with a considerable market that accounts for 2.26 billion people or 30% of the world's population, USD 26.3 trillion or 30% of the world's GDP, and USD 5.4 trillion or 28.7% of global trade. The Agreement contains 20 Chapters, 17 annexes and 54 schedules of commitments of which specifically defines a total of 83 provisions with respect to patents, designs, trademarks, etc.

While the Korea-ASEAN FTA which has been in effect since 2007 has only one declaratory clause regarding cooperation on IP rights, the RCEP has a total of

Major IP Offices to Enhance the Role of IP in Tackling Global Challenges



83 clauses which regulate trademark, patent, design in detail. The RCEP is therefore expected to help supplement and strengthen IPR protection in the Asia-Pacific region.

The provisions of the RCEP are expected to be in effect from 2022 after 60% of the member parties have completed the

ratification processes in their respective country. Member parties will be required to process trademark applications and registrations in accordance with the international classification of WIPO (Nice classification). Thus, as the RCEP comes into effect, there will be sufficient protection of IPRs for companies doing business in the local markets of the region.

The forum of the world's five largest IP offices (IP5), namely KIPO, the China National Intellectual Property Administration (CNIPA), European Patent Office (EPO), Japan Patent Office (JPO), and United States Patent and Trademark Office (USPTO), convened for the 13th Heads of IP5 Office Meeting on July 21, 2020. Since the launch of the consultative body in 2007, meetings have been hosted on a yearly rotation among the IP5 offices. However, this year, the meeting was held via video conference for the first time on account of the outbreak of COVID-19 and the WIPO Director-General attended in an observer capacity.



In addition to discussing ongoing collaborative activities, the five heads of office shared about the measures taken by the individual IP offices to mitigate the effects of the pandemic on applicants

and innovators as well as discuss IP5 cooperation for the post-pandemic times. Members agreed to enhance public and mutual access to patent information and technological knowledge related to COVID-19 detection, prevention and treatment and to share best practices in dealing with global challenges.

Moreover, IP was emphasized for its potential key role in boosting economic recovery and innovation especially in times of crisis. The IP5 agreed to continue supporting the international IP community in addition to advancing IP cooperation related to new emerging technologies, harmonizing examination practices and procedures, improving quality and efficiency in patent examination, and actively engaging with IP5 industry associations. These commitments have been reflected and highlighted in the Joint



Statement published on the official IP5 website (www.fiveipoffices.org)

The KIPO Commissioner emphasized that in the quest for combating the COVID-19 pandemic, the world's five largest IP offices would have to play a more active and flexible role on the global stage to find a good balance between securing free access to medicines for public health and safety and ensuring patent protection for pharmaceutical products. The IP5 offices plan to continue its endeavors to improve the IP system to make it more responsive to future challenges and serve as a "catalyst" for technical advancement and safe future for society.

In the field of trademark and design, the five offices (CNIPA, EUIPO, JPO, USPTO, KIPO) of the TM5 and ID5 also announced a 2020 Joint Statement emphasizing the necessity of enhancing cooperation in new technological areas, improving examination services for user convenience, and collaborating internationally through online channels in order to foster post-pandemic development of the trademark and design systems.

10-Year Vision for Trilateral IP Cooperation

For two decades, KIPO, CNIPA and JPO have come together to establish a trilateral cooperation on IP, called the TRIPO cooperation, with the goal of facilitating exchange and utilization of patent examination information, harmonizing patent examination practices, and establishing international norms. The three offices have actively carried out cooperative activities and cooperation in six areas, including IP automation, patents, designs, trademarks, trials and appeals, and human resources development. In December 2020, the annual TRIPO Heads of Office meeting was hosted by KIPO via video conference where the three offices discussed accomplishments thus far and future needs. Notably, the collective volume of international patent applications handled by the three offices has increased from about 40% in 2001 to about 60% over the twenty years, and the volume of trademark filing increased from about 20% to about 60% in the same period, making the ROK, China, and Japan the three largest IP economies in the world.



In celebration of the 20th anniversary of the TRIPO cooperation, a 10-year vision for trilateral IP cooperation was established with a view to adopting it at a next trilateral Summit Meeting. Under the new vision, TRIPO will make concerted efforts for joint responses to address new challenges, such as digital transformation and the spread of a pandemic, by improving relevant laws, examination practices and systems for facilitating the creation and protection of innovative technologies. Also, they will cooperate to improve public access and encourage utilization of patent information by the private sector and to expand cooperation to include other countries or regions, thereby supporting the endeavor to achieve technological development and innovation-driven growth.



Furthermore, the meeting was especially meaningful in that each country shared information on their respective cooperative programs implemented with ASEAN countries. With all three countries participating in the RCEP, discussions were made on the possibilities of a joint approach for the first time after signing the agreement. Accordingly, the TRIPO cooperation will continue to advance the range and depth of cooperation based on mutual trust.



Securing IP competitiveness to lead digital transformation

Establishing a virtuous cycle of creation, protection, and utilization of IP



2021 KIPO Vision & Strategy

Vision

Goal

Policy Strategies

3

Reinforcement of IP protection to drive innovative growth

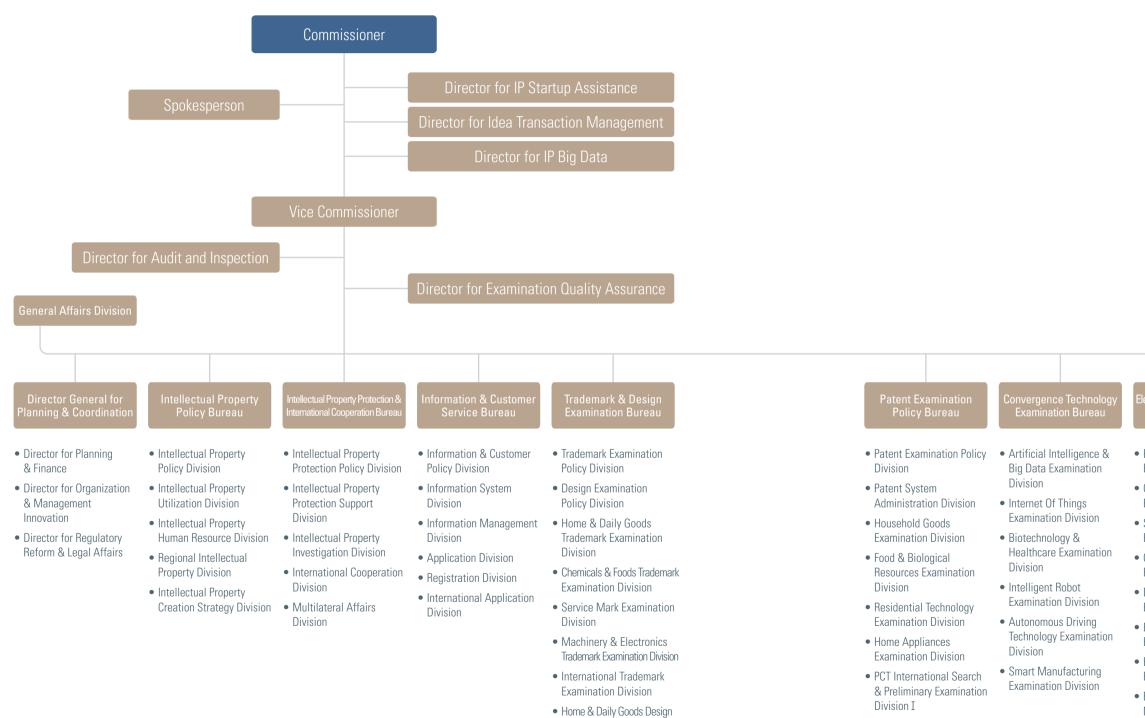
- 1. Enhancing pragmatic protection of domestic IP
- 2. Providing support for overseas IP disputes
- 3. Expanding international cooperation for IP protection

4

Establishment of IP infrastructure to nurture innovative companies

- 1. Promoting IP finance and transactions
- 2. Expanding support for innovative IP-based companies
- 3. Establishing infrastructure for IP data utilization

KIPO Organization Chart



Examination Division

Examination Division

• Industrial Supplies Design

 PCT International Search & Preliminary Examination Division II

Intellectual Property Trial and Appeal Board

- Board 1-11
- Trial Policy Division
- Litigation Division

International Intellectual Property Training Institute

- Education Planning Division
- IP Education Division
- International Education Division

Seoul Branch Office

- Administrative Division
- Application and Registration Division
- Electronic Documentation Division

ectricity & Communications Examination Bureau

- Electrical Systems Examination Division
- Computer Systems Examination Division
- Semiconductor Examination Division
- Communications Systems Examination Division
- Display Device Examination Division
- Electronic Commerce Examination Division
- Electronic Components Examination Division
- Broadcasting & Multimedia Examination Division

Chemistry & Biotechnology Examination Bureau

- Organic Chemistry Examination Division
- Pharmaceuticals Examination Division
- Materials Chemistry Examination Division
- Advanced Energy Technology Examination Division
- Polymer & Textile Examination Division
- Medical Technology Examination Division
- Environmental Technology Examination Division

Machinery & Metals Examination Bureau

- General Machinery
 Examination Division
- Mechatronics
 Examination Division
- Construction Technology Examination Division
- Automobile Examination
 Division
- Mechanical Power Systems Examination Division
- Transportation Machinery Examination Division
- Measurement Technology Examination Division
- Materials and Metals Examination Division

Applications

Application by IPR type

					(unit: cases)
Category	2016	2017	2018	2019	2020
Patents	208,830	204,775	209,992	218,975	226,759
Utility models	7,767	6,811	6,232	5,447	4,981
Subtotal	216,597	211,586	216,224	224,422	231,740
Designs	64,678 (66,728)	62,528 (64,986)	62,823 (65,434)	64,111 (66,637)	66,354 (68,695)
Trademarks	170,347 (204,012)	168,556 (202,539)	185,968 (232,109)	204,998 (252,309)	243,935 (290,207)
Total	451,622 (696,167)	442,670 (485,922)	465,015 (513,767)	493,531 (543,368)	542,029 (590,642)

Note: Figures in parentheses include multiple applications.

PCT applications (KIPO as the Receiving Office)

	с ,				(unit: cases)
Category	2016	2017	2018	2019	2020
Number of applications	15,595	15,790	16,991	18,885	19,675
Growth rate	6.8%	1.2%	7.6%	11.1%	4.2%

International trademark applications under the Madrid System

					(unit: cases)
Category	2016	2017	2018	2019	2020
Korea as office of origin	942	1,053	1,322	1,419	1,599
Korea as designated office	11,259	14,362	14,373	16,509	13,998

International design applications under the Hague System

Category	2016	2017	2018	2019	2020
Korea as office of origin	104	133	116	178	250
Korea as designated office	981	925	857	928	1,229

(unit: cases)

Comparison of domestic and foreign applications

202	2019	2018	2017	2016			Category
180,48	171,606	162,576	159,095	163,424	Cases	Demostia	
79.6 %	78.4%	77.40%	77.7%	78.3%	Ratio	Domestic —	
46,27	47,396	47,416	45,680	45,406	Cases	Faurian	Patents
20.4%	21.6%	22.60%	22.3%	21.7%	Ratio	Foreign —	
226,75	218,975	209,992	204,775	208,830	Total		
4,59	4,975	5,768	6,448	7,395	Cases	Demostia	
92.3%	91.3%	92.60%	94.7%	95.2%	Ratio	Domestic —	
38	472	464	363	372	Cases	Faraian	Utility models
7.7%	8.7%	7.40%	5.3%	4.8%	Ratio	Foreign -	
4,98	5,447	6,232	6,811	7,767	Total		
62,698 (63,939	59,877 (61,204)	58,699 (60,021)	59,085 (60,379)	61,491 (62,618)	Cases	Dementia	Domes
94.5% (93.1%	93.3% (91.8%)	93.4% (91.7%)	94.5% (92.9%)	95.1% (93.8%)	Ratio	Domestic	
3,656 (4,756	4,234 (5,433)	4,124 (5,413)	3,443 (4,607)	3,187 (4,110)	Cases	F .	Designs
5.5% (6.9%	6.7% (8.2%)	6.6% (8.3%)	5.5% (7.1%)	4.9% (6.2%)	Ratio	Foreign	
66,354 (68,695	64,111 (66,637)	62,823 (65,434)	62.528 (64.986)	64,678 (66,728)	Total		
230,318 (269,332	190,204 (228,530)	170,545 (207,958)	155,674 (181,229)	157,107 (183,612)	Cases	Damaatia	
94.4% (92.8%	92.8% (90.6%)	91.7% (89.6%)	92.4% (89.5%)	92.2% (90.0%)	Ratio	Domestic	
13,617 (20,875	14,794 (23,779)	15,423 (24,151)	12,882 (21,310)	13,240 (20,400)	Cases		Trademarks
5.6% (7.2%	7.2% (9.4%)	8.3% (10.4%)	7.6% (10.5%)	7.8% (10.0%)	Ratio	Foreign	
243,935 (290,207	204,998 (252,309)	185,968 (232,109)	168,556 (202,539)	170,347 (204,012)	Total		
478,095 (518,350	426,662 (466,315)	397,588 (436,323)	380,302 (407,151)	389,417 (417,049)	Cases		
88.2% (87.8%	86.5% (85.8%)	85.5% (84.9%)	85.9% (85.0%)	86.2% (85.6%)	Ratio	Domestic	
63,934 (72,292	66,869 (77,053)	67,427 (77,444)	62,368 (71,960)	62,205 (70,288)	Cases	Fauria	Total
11.8% (12.2%	13.5% (14.2%)	14.5% (15.1%)	14.1% (15.0%)	13.8% (14.4%)	Ratio	Foreign —	
542,029 (590,642	493,531 (543,368)	465,015 (513,767)	442,670 (479,111)	451,622 (487,337)	Total		

Note: Figures in parentheses include multiple applications.

Patent and utility model applications by technological field in 2020

(unit: cases)

Classification —			Patents	Utility models			
	Domestic	Foreign	Subtotal	Domestic	Foreign	Subtotal	
Electrical machinery, apparatus, energy	13,304	3,056	16,360	231	42	273	
Audio-visual technology	5,406	1,454	6,860	92	10	102	
Telecommunications	2,618	654	3,272	38	10	48	
Digital communication	6,571	2,804	9,375	7	-	7	
Basic communication processes	517	323	840	-	-		
Computer technology	10,672	2,796	13,468	51	11	62	
T methods for management	12,251	449	12,700	31		31	
Semiconductors	7,615	3,847	11,462	3	11	14	
Optics	2,864	2,075	4,939	41	9	50	
Measurement	7,159	1,644	8,803	84	6	90	
Analysis of biological materials	602	208	810	3	-	:	
Control	4,193	424	4,617	65	2	67	
Medical technology	9,776	2,093	11,869	223	55	278	
Organic fine chemistry	3,757	2,271	6,028	4	2	(
Biotechnology	3,475	2,147	5,622	9	-	9	
Pharmaceuticals	3,264	1,975	5,239	3	1	4	
Macromolecular chemistry, polymers	2,111	1,866	3,977	-	-		
Food chemistry	4,132	246	4,378	14	2	1(
Basic materials chemistry	3,007	1,586	4,593	11	2	1:	
Materials, metallurgy	2,743	1,293	4,036	4		Ĺ	
Surface technology, coating	2,046	1,460	3,506	15	4	19	
Micro-structural and nano-technology	42	21	63	-	-		
Chemical engineering	3,785	937	4,722	83	4	87	
Environmental technology	3,082	355	3,437	65	4	69	
Handling	4,278	719	4,997	288	29	317	
Machine tools	3,525	1,042	4,567	133	9	142	
Engines, pumps, turbines	2,538	795	3,333	50	7	57	
Textile and paper machines	1,686	547	2,233	25	1	20	
Other special machines	7,238	1,421	8,659	346	7	353	
Thermal processes and apparatus	3,324	331	3,655	105	13	11	
Mechanical elements	2,854	960	3,814	132	12	14	
Transport	9,675	1,197	10,872	265	11	270	

Classification			Patents	Utility mo		
Classification	Domestic	mestic Foreign Subtotal Domestic Foreig			Foreign	Subtotal
Furniture, games	6,128	528	6,656	630	61	691
Other consumer goods	7,355	1,060	8,415	857	46	903
Civil engineering	9,500	461	9,961	361	4	365
Others	7,391	1,230	8,621	326	11	337
Total	180,484	46,275	226,759	4,595	386	4,981

Note: Figures for 2020 are preliminary.

Patent applications in biotechnology

Category	2016		2017		2018		2019		2020	
	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio
Domestic	6,700	75.1%	7,328	74.9%	7,239	72.2%	7,269	71.0%	7,878	71.0%
Foreign	2,222	24.9%	2,462	25.1%	2,794	27.8%	2,973	29.0%	3,218	29.0%
Total	8,922	100%	9,790	100%	10,033	100%	10,242	100%	11,096	100%

Note1: Figures for 2020 are preliminary.

C12C~M; C12N; C12P; C12Q; C12S; G01N 33/50~33/98.

Patent applications in business methods

Category	2016		2017		2018		2019		2020	
	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio
Domestic	9,381	94.7%	8,852	95.2%	9,754	94.8%	10,321	95.1%	12,251	96.5%
Foreign	522	5.3%	446	4.8%	536	5.2%	534	4.9%	449	3.5%
Total	9,903	100%	9,298	100%	10,290	100%	10,855	100%	12,700	100%

Note1: Figures for 2020 are preliminary. Note2: Based on the Ninth Edition of the International Patent Classification.

(unit: cases)

(unit: cases)

Note2: Based on the following biotechnological categories of the Eighth Edition of the International Patent Classification: A01H; A01K 67/00~67/04; A01N 63/00~65/00; A61K 8/97~8/99; A61K 8/64~8/68; A61K 35/12~35/76; 36/00~36/9068; A61K 38/00~38/58, 39/00~39/44, 48/00, 51/00~51/10; C02F; C07H 19/00~21/04; C07K;

uni	unit: ca

Applications by residents of foreign countries/regions in 2020

(unit: cases)

untrine/Pagione	Patent & U	tility models		Designs		Trademarks	Total
untries/Regions	Domestic	PCT	Domestic	Hague	Domestic	Madrid	Total
ted States of America	1,679	11,703	1,359 (1,913)	117 (550)	3,525 (6,111)	2,905 (5,258)	21,288 (27,214)
an	4,077	9,969	691 (830)	136 (287)	1,616 (2,849)	1,418 (3,183)	17,907 (21,195)
na	770	3,685	782 (842)	144 (236)	4,981(5,877)	2,190 (3,715)	12,552 (15,125)
many	615	3,045	68 (90)	136 (469)	182 (348)	1,526 (4,298)	5,572 (8,865)
nce	152	1,303	88 (98)	156 (257)	276 (481)	780 (1,907)	2,755 (4,198)
ted Kingdom	67	1,045	72 (110)	22 (39)	461(1,017)	604 (1,764)	2,271 (4,042)
itzerland	152	1,159	64 (206)	107 (242)	228 (366)	732 (1,728)	2,442 (3,853)
ý	58	371	39 (65)	89 (152)	155 (261)	725 (1,494)	1,437 (2,401)
herlands	142	781	174 (181)	60 (239)	66 (90)	233 (546)	1,456 (1,979)
wan, Province of China	1,273	113	53 (56)	-	385 (580)	-	1,824 (2,022)
eden	80	643	37 (63)	21 (106)	71 (129)	234 (630)	1,086 (1,651)
stralia	19	208	18 (18)	1 (1)	150 (204)	343 (852)	739 (1,302)
ada	26	377	17 (25)	4 (18)	242 (410)	125 (305)	791 (1,161)
gapore	57	165	11 (37)	8 (26)	223 (374)	181 (425)	645 (1,084)
nmark	16	207	46 (67)	18 (51)	44 (80)	165 (388)	496 (809)
iin	6	139	5 (6)	2 (2)	75 (92)	252 (423)	479 (668)
and	33	226	8 (8)	3 (15)	27 (98)	126 (384)	423 (764)
stria	41	283	4 (5)	3 (8)	16 (52)	123 (334)	470 (723)
gium	11	251	4 (10)	32 (37)	21 (33)	116 (237)	435 (579)
el	48	315	10 (10)	10 (11)	33 (56)	89 (158)	505 (598)
sian Federation	7	88	4 (4)	12 (12)	19 (23)	131 (314)	261 (448)
and	35	137	9 (13)	2 (4)	28 (60)	78 (136)	289 (385)
embourg	11	113	22 (23)	5 (8)	29 (43)	81 (159)	261 (357)
rman Islands	4	72	1 (4)	-	73 (229)	13 (60)	163 (369)
кеу	1	33	4 (4)	6 (7)	11 (15)	101 (192)	156 (252)
way	2	110	-	7 (17)	17 (39)	46 (131)	182 (299)
w Zealand	5	27	25 (25)	-	35 (52)	65 (116)	157 (225)
iland	13	39	3 (3)	-	63 (81)	37 (45)	155 (181)
and	4	31	-	2 (5)	13 (21)	49 (156)	99 (217)
а	10	106	1 (1)	1 (1)	33 (39)	26 (60)	177 (217)
t Nam	1	1	-	-	60 (74)	48 (87)	110 (163)
rus	1	9	1 (1)	-	14 (19)	47 (133)	72 (163)
ıdi Arabia	1	131	-	-	17 (28)	-	149 (160)
tugal	3	17	1 (1)	2 (2)	9 (9)	43 (76)	75 (108)

	Patent & l	Jtility models		Designs		Trademarks	
Countries/Regions -	Domestic	PCT	Domestic	Hague	Domestic	Madrid	Total
Czech Republic	4	18	6 (6)	5 (5)	2 (6)	31 (70)	66 (109)
United Arab Emirates	-	5	-	-	52 (69)	3 (9)	60 (83)
Mexico	2	11	2 (2)	1 (1)	29 (56)	14 (16)	59 (88)
The Hong Kong Special Administrative Region of the People's Republic of China	-	-	2 (2)	-	39 (89)	-	41 (91)
Malaysia	11	15	-	-	34 (42)	11 (17)	71 (85)
Liechtenstein	8	27	1 (2)	2 (10)	1 (3)	21 (51)	60 (101)
Indonesia	1	-	3 (3)	-	12 (13)	31 (62)	47 (79)
Virgin Islands (British)	-	-	2 (2)	-	26 (43)	12 (19)	40 (64)
Monaco	-	2	-	-	8 (16)	15 (55)	25 (73)
Malta	4	11	1 (1)	-	5 (5)	15 (51)	36 (72)
Brazil	-	20	3 (3)	-	13 (14)	14 (25)	50 (62)
Chile	-	6	-	-	34 (37)	-	40 (43)
Barbados	10	7	9 (10)	-	2 (5)	11(22)	39 (54)
South Africa	1	14	2 (2)	-	22 (34)	-	39 (51)
Hungary	1	16	-	1 (1)	1 (1)	13 (34)	32 (53)
Lithuania	-	2	-	2 (3)	5 (9)	14 (28)	23 (42)
Estonia	-	3	-	1 (1)	-	14 (37)	18 (41)
Greece	3	22	-	1 (1)	1 (6)	7 (14)	34 (46)
Ukraine	-	2	-	2 (2)	1 (1)	12 (32)	17 (37)
Latvia	-	1	-	2 (3)		13 (32)	16 (36)
Philippines	-	2	-	-	11 (16)	8 (14)	21 (32)
Antigua and Barbuda	-	43	-	-	-	-	43 (43)
Croatia	-	2	-	4 (16)	-	10 (10)	16 (28)
Slovenia	-	8	-	2 (4)	-	7 (19)	17 (31)
Qatar	-	-	-	-	6 (18)	2 (8)	8 (26)
Bulgaria	-	6	-	-	-	9 (17)	15 (23)
Argentina	-	1	-	-	11 (18)	-	12 (19)
Slovakia	-	5	-	1 (1)	-	6 (16)	12 (22)
Belarus	-	3	-	-	-	7 (16)	10 (19)
Iceland	-	2	-	-	-	6 (17)	8 (19)
Romania	-	1	-	-	9 (9)	1 (3)	11 (13)
Iran (Islamic Republic of)	1	2	-	-	5 (6)	2 (4)	10 (13)
Mauritius	-	1	-	-	9 (9)	-	10 (10)

(unit: cases)

							(unit: cases)
Countries/Regions	Patent &	Utility models		Designs		Trademarks	Total
Countries/ negions	Domestic	PCT	Domestic	Hague	Domestic	Madrid	Totai
Pakistan	1	-	-	-	7 (9)	-	8 (10)
Uzbekistan	2	-	-	-	3 (3)	3 (5)	8 (10)
Mongolia	2	-	3 (3)	-	1 (1)	1 (4)	7 (10)
Serbia	-	-	-	1 (5)	-	3 (5)	4 (10)
Kazakhstan	-	-	-	-	1 (1)	5 (6)	6 (7)
San Marino	-	-	-	-	2 (2)	3 (5)	5 (7)
Bermuda	-	1	-	-	3 (3)	2 (3)	6 (7)
Bahamas	-	-	-	-	5 (5)	1 (1)	6 (6)
Lebanon	-	-	-	-	4 (8)	-	4 (8)
Seychelles	4	-	-	-	2 (5)	-	6 (9)
Kuwait	1	-	-	-	5 (5)	-	6 (6)
Tajikistan	-	-	-	-	5 (6)	-	5 (6)
Panama	-	-	-	-	3 (7)	-	3 (7)
Egypt	-	2	-	-	3 (5)	-	5 (7)
Andorra	1	-	-	-	1 (3)	2 (3)	4 (7)
Curacao	-	-	-	-	1 (2)	3 (3)	4 (5)
Cuba	-	5	-	-	1 (1)	1 (1)	7 (7)
EUIPO	-	-	-	-	4 (4)	-	4 (4)
Peru	-	2	-	-	3 (3)	-	5 (5)
Samoa	-	-	-	-	3 (5)	-	3 (5)
Colombia	-	1	-	-	2 (4)	-	3 (5)
Sri Lanka	-	1	-	-	3 (3)	-	4 (4)
Isle of Man	-	-	-	-	-	1 (6)	1 (6)
Puerto Rico	-	-	-	-	2 (2)	1 (2)	3 (4)
Armenia	-	-	-	-	2 (2)	1 (1)	3 (3)
Republic of Moldova	-	-	-	-		2 (4)	2 (4)
Tunisia	-	-	-	-	1 (1)	2 (2)	3 (3)
Costa Rica	-	1	-	-	2 (3)	-	3 (4)
Saint Vincent and the Grenadines	-	-	-	-	-	1 (4)	1 (4)
The former Yugoslav Republic of Macedonia	-	-	-	1 (1)	-	1 (2)	2 (3)
Georgia	-	-	-	-	-	2 (2)	2 (2)
Saint Kitts and Nevis	-	4	-	-	-	-	4 (4)
Gibraltar	-	-	_	_	-	1 (3)	1 (3)

Countries (Dociona	Patent & l	Jtility models		Designs		Trademarks	Tread
Countries/Regions	Domestic	PCT	Domestic	Hague	Domestic	Madrid	Total
Guernsey	-	1	-	-	-	1 (1)	2 (2)
Marshall Islands	-	-	-	-	1 (1)	-	1 (1)
Cambodia	-	-	-	-	1 (1)	-	1 (1)
Ecuador	-	-	-	-	1 (1)	-	1 (1)
Kyrgyzstan	-	-	-	-	1 (1)	-	1 (1)
Jordan	-	-	-	-	1 (1)	-	1 (1)
Uruguay	-	-	-	-	-	1 (1)	1 (1)
Iraq	-	-	-	-	1 (1)	-	1 (1)
Brunei Darussalam	-	-	-	-	-	1 (1)	1 (1)
Zimbabwe	-	-	-	-	1 (1)	-	1 (1)
Sudan	-	-	1 (1)	-	-	-	1 (1)
Nepal	1	-	-	-	-	-	1 (1)
Albania	1	-	-	-	-	-	1 (1)
Dominican Republic	-	1	-	-	-	-	1 (1)
Bangladesh	1	-	-	-	-	-	1 (1)
Belize	-	1	-	-	-	-	1 (1)
Syrian Arab Republic	-	1	-	-	-	-	1 (1)
Others	-	-	-	-	5 (10)	-	5 (10)
Total	9,480	37,181	3,656 (4,756)	1,132 (2,856)	13,617 (20,875)	13,980 (30,457)	79,046 (105,605)

Note: Figures in parentheses include multiple applications.

Examinations

Patents and utility models

Category			2016	2017	2018	2019	2020
		Approval of registration	7,872	9,891	9,126	9,637	11,483
		Notice of preliminary rejection or amendment	163,347	158,013	148,772	158,527	170,299
	First Action	Other notices	991	1,012	1,202	1,613	1,990
	Withdrawal or abandonment	2,582	2,196	2,190	2,594	2,723	
Patents		Total	174,792	171,112	161,290	172,371	186,495
		Approval of registration	101,678	110,408	106,129	115,302	126,228
Final Decisions	Rejection or cancellation	66,055	62,869	55,613	50,944	47,331	
	Final Decisions	Withdrawal abandonment, annulment, or rejection	4,320	3,841	3,636	3,914	3,997
	Total	172,053	177,118	165,378	170,160	177,556	
		Approval of registration	317	337	235	225	216
		Notice of preliminary rejection or amendment	6,848	6,161	5,258	4,739	4,007
	First Action	Other notices	25	13	12	21	14
		Withdrawal or abandonment	131	122	113	109	99
Utility models		Total	7,321	6,633	5,618	5,094	4,336
		Approval of registration	2,935	3,040	2,619	2,329	1,994
Final Decision		Rejection or cancellation	4,214	3,729	3,282	2,815	2,254
	Final Decisions	Withdrawal abandonment, annulment, or rejection	268	234	196	217	174
		Total	7,417	7,003	6,097	5,361	4,422

Designs and trademarks

Category			2015	2016	2017	2019	2020
		Publication/approval of registration	31,398 (32,755)	29,453 (30,598)	27,559 (28,708)	31,029 (32,218)	31,232 (32,640)
First Action	Notice of preliminary rejection	31,540 (33,951)	30,275 (32,647)	29,654 (31,962)	29,303 (31,778)	27,068 (29,055)	
		Other notices	-	-	-	-	-
Designs		Total	62,938 (66,706)	59,728 (63,245)	57,213 (60,670)	60,332 (63,996)	58,300 (61,695)
		Approval of registration	55,783 (58,302)	51,166 (53,480)	50,161 (52,750)	53,987 (56,989)	51,407 (54,101)
	Final Decisions	Rejection	8,396 (9,496)	7,190 (7,978)	7,356 (8,089)	7,343 (8,055)	7,095 (7,776)
		Total	64,179 (67,798)	58,356 (61,458)	57,517 (60,839)	61,330 (65,044)	58,502 (61,877)
		Publication/approval of registration	98,921 (112,521)	94,490 (107,033)	96,236 (109,983)	98,557 (112,244)	94,942 (108,405)
	First Action	Notice of preliminary rejection	73,377 (106,332)	69,393 (97,656)	73,376 (106,978)	77,623 (116,298)	67,433 (99,287)
		Other notices	-	-	-	-	-
Trademarks		Total	172,298(218,853)	163,883 (204,689)	169,612 (216,961)	176,180 (228,542)	162,375 (207,692)
		Approval of registration	136,948(173,024)	133,378 (166,963)	133,359 (168,237)	145,794 (187,392)	133,882 (173,499)
	Final Decisions	Rejection	33,015 (41,813)	31,773 (39,414)	29,873 (36,697)	32,014 (41,658)	28,219 (37,267)
		Total	169,963(214,837)	165,151 (206,377)	163,232 (204,934)	177,808 (229,050)	162,101 (210,766)

Note: Figures in parentheses include multiple applications.

Registrations

Average first office action pendency

Category	2016	2017	2018	2019	2020
Patents / Utility models	10.6	10.4	10.3	10.8	11.1
Trademarks	4.8	5.0	5.5	6.8	8.9
Designs	4.7	4.9	4.9	5.4	4.6

Registrations by IPR type

Category	2016	2017	2018	2019	2020
Patents	108,875	120,662	119,014	125,661	134,766
Utility models	2,854	2,993	2,715	2,417	2,056
Subtotal	111,729	123,655	121,729	128,078	136,822
Designs	55,602	49,293	49,905	52,850	50,694
Trademarks	119,255	116,704	115,025	125,594	116,153
Total	286,586	289,652	286,659	306,522	303,669

Note: Trademark registration renewals are excluded.

Average total pendency

					(unit: month)
Category	2016	2017	2018	2019	2020
Patents / Utility models	16.2	15.9	15.8	15.6	15.8
Trademarks	9.6	9.8	10.4	11.1	13.2
Designs	5.9	6.2	6.3	6.7	6.0

PCT international search reports and preliminary examinations undertaken by KIPO

Category	2016	2017	2018	2019	2020
International Search Reports	28,176	25,955	24,123	27,167	28,547
International Preliminary Examinations	209	169	131	131	100

Note: Based on KIPO data

Comparison of domestic and foreign registrations

Category			2016	2017	2018	2019	2020
	Damastia	Cases	82,400	90,847	89,229	94,852	103,881
	Domestic	Ratio	75.7%	75.3%	75.0%	75.5%	77.1%
Patents	Faurian	Cases	26,475	29,815	29,785	30,809	30,885
	Foreign	Ratio	24.3%	24.7%	25.0%	24.5%	22.9%
		Total	108,875	120,662	119,014	125,661	134,766
	D	Cases	2,694	2,810	2,521	2,238	1,842
	Domestic	Ratio	94.4%	93.9%	92.9%	92.6%	89.6%
Utility models		Cases	160	183	194	179	214
	Foreign -	Ratio	5.6%	6.1%	7.1%	7.4%	10.4%
		Total	2,854	2,993	2,715	2,417	2,056
	D	Cases	50,242	44,052	44,150	46,011	45,169
	Domestic -	Ratio	90.4%	89.4%	88.5%	87.1%	89.1 %
Designs		Cases	5,360	5,241	5,755	6,839	5,525
	Foreign -	Ratio	9.6%	10.6%	11.5%	12.9%	10.9%
		Total	55,602	49,293	49,905	52,850	50,694

(unit: cases)

(unit: month)

(unit: cases)

(unit: cases)	
---------------	--

Category			2016	2017	2018	2019	2020
	Demestia	Cases	99,934	96,993	94,532	102,333	94,892
	Domestic -	Ratio	83.8%	83.1%	82.2%	81.5%	81.7%
Trademarks	Foreign	Cases	19,321	19,711	20,493	23,261	21,261
	Foreign -	Ratio	16.2%	16.9%	17.8%	18.5%	18.3%
		Total	119,255	116,704	115,025	125,594	116,153
	Domestic -	Cases	235,270	234,702	230,432	245,434	245,784
	Domestic	Ratio	82.1%	81.0%	80.4%	80.1%	80.9%
Total	Foroign	Cases	51,316	54,950	56,227	61,088	57,885
	Foreign	Ratio	17.9%	19.0%	19.6%	19.9%	19.1%
		Total	286,586	289,652	286,659	306,522	303,669

Patent and utility model registrations by technological field in 2020

(unit [.]	cases)	
(unit.	64363	

						(unit: 60565)
Classification			Patents		Utility models	
Classification	Domestic	Foreign	Subtotal	Domestic	Foreign	Subtotal
Electrical machinery, apparatus, energy	8,294	2,317	10,611	135	17	152
Audio-visual technology	3,865	1,142	5,007	46	13	59
Telecommunications	2,106	492	2,598	13	-	13
Digital communication	3,934	1,853	5,787	1	-	1
Basic communication processes	367	279	646	-	1	1
Computer technology	6,506	2,032	8,538	14	14	28
IT methods for management	4,581	277	4,858	4	-	4
Semiconductors	4,942	3,226	8,168	6	13	19
Optics	2,677	1,431	4,108	14	5	19

Classification		_
olassification	Domestic	
Measurement	4,744	
Analysis of biological materials	459	
Control	2,409	
Medical technology	4,672	
Organic fine chemistry	2,297	
Biotechnology	2,153	
Pharmaceuticals	1,828	
Macromolecular chemistry, polymers	1,389	
Food chemistry	1,825	
Materials, metallurgy	2,232	
Surface technology, coating	1,559	
Micro-structural and nano-technology	49	
Chemical engineering	2,429	
Environmental technology	2,189	
Basic materials chemistry	2142	
Handling	2,600	
Machine tools	2,607	
Engines, pumps, turbines	1,871	
Textile and paper machines	1,181	
Other special machines	4,170	
Thermal processes and apparatus	2,223	
Mechanical elements	1,957	
Transport	5,087	
Furniture, games	2,965	
Other consumer goods	2,857	
Civil engineering	6,715	-
Total	103,881	-

Note: Figures for 2020 are preliminary.

Utility models			Patents	
Subtotal	Foreign	Domestic	Subtotal	Foreign
47	7	40	5,859	1,115
-	-	-	590	131
31	1	30	2,721	312
99	13	86	5,760	1,088
1	-	1	3,549	1,252
-	-	-	3,009	856
-	-	-	2,564	736
-	-	-	2,678	1,289
9	1	8	1,960	135
7	1	6	3,096	864
6	-	6	2,464	905
-	-	-	66	17
41	5	36	3,015	586
45	4	41	2,505	316
4	2	2	3314	1172
170	12	158	3,220	620
73	6	67	3,429	822
34	9	25	2,774	903
18	3	15	1,624	443
157	10	147	5,138	968
41	3	38	2,448	225
88	24	64	2,731	774
132	8	124	6,114	1,027
255	15	240	3,313	348
283	21	262	3,444	587
219	6	213	7,060	345
2,056	214	1,842	134,766	30,885

Patent registrations in biotechnology

(unit: cases)

(unit: cases)

Category		2016		2017		2018		2019		2020
	Cases	Ratio								
Domestic	3,507	78.6%	4,709	80.9%	4,524	79.3%	4,534	78.4%	4,969	79.0%
Foreign	955	21.4%	1,111	19.1%	1,149	20.3%	1,249	21.6%	1,321	21.0%
Total	4,462	100%	5,820	100%	5,673	100%	5,783	100%	6,290	100%

Note1: Figures for 2020 are preliminary.

Note2: Based on the following biotechnological categories of the Eighth Edition of the International Patent Classification: A01H; A01K 67/00~67/04; A01N 63/00~65/00; A61K 8/97~8/99; A61K 8/64~8/68; A61K 35/12~35/76; 36/00~36/9068; A61K 38/00~38/58, 39/00~39/44, 48/00, 51/00~51/10; C02F; C07H 19/00~21/04; C07K; C12C~M; C12N; C12P; C12Q; C12S; G01N 33/50~33/98.

Category		2016		2017		2018		2019		2020
	Cases	Ratio								
Domestic	3,145	93.9%	3,782	93.7%	3,560	93.1%	3,500	93.6%	4,581	94.3 %
Foreign	204	6.1%	253	6.3%	262	6.9%	241	6.4%	277	5.7%
Total	3,349	100%	4,035	100%	3,822	100%	3,741	100%	4,858	100%

Note1: Figures for 2020 are preliminary. Note2: Based on the Ninth Edition of the International Patent Classification.

Registrations by resident of foreign countries/regions in 2020

Registrations by resident of to	breign countries/reg	JIONS IN 2020					(unit: cases)
	Patent 8	& Utility models		Designs			
Countries/Regions	Domestic	PCT	Domestic	Hague	Domestic	Madrid	Total
United States of America	7,726	805	1,329	174	2,606 (4,725)	2,216 (3,922)	14,856 (18,681)
Japan	9,825	1006	806	201	1,476 (2,838)	1,342 (2,984)	14,656 (17,660)
China	1,904	220	688	59	3,301 (3,979)	1,629 (2,619)	7,801 (9,469)
Netherlands	603	61	246	129	53 (118)	180 (487)	1,272 (1,644)
Switzerland	617	70	144	195	170 (259)	635 (1,397)	1,831 (2,682)
Germany	2,343	260	103	278	176 (354)	1,251 (3,669)	4,411 (7,007)
France	926	113	84	181	273 (396)	709 (1,698)	2,286 (3,398)

Countries/Designs	Patenta	& Utility models		Designs		Trademarks	Total
Countries/Regions -	Domestic	omestic PCT		Hague	Domestic	Madrid	Iotal
Sweden	513	60	79	22	30 (68)	192 (500)	896 (1,242)
United Kingdom	489	67	71	33	338 (694)	561 (1,453)	1,559 (2,807)
Italy	230	28	68	207	100 (151)	559 (1,151)	1,192 (1,835)
Taiwan, Province of China	817	94	53	-	333 (476)	-	1,297 (1,440)
Denmark	87	8	26	31	24 (59)	148 (365)	324 (576)
Cayman Islands	261	19	26	-	36 (125)	6 (12)	348 (443)
Canada	186	20	25	4	204 (417)	31 (54)	470 (706)
Luxembourg	84	5	24	1	6 (10)	59 (126)	179 (250)
Australia	90	7	22	-	104 (144)	247 (553)	470 (816)
Israel	153	11	20	2	26 (39)	70 (113)	282 (338)
Singapore	82	13	18	1	126 (250)	142 (349)	382 (713)
Liechtenstein	10	1	16	22	-	26 (44)	75 (93)
Thailand	17	3	9	-	63 (91)	28 (36)	120 (156)
Belgium	130	16	7	10	12 (15)	92 (192)	267 (370)
New Zealand	25	-	6	-	32 (49)	55 (130)	118 (210)
Finland	177	24	6	13	45 (93)	93 (307)	358 (620)
Ireland	107	6	5	21	34 (61)	52 (86)	225 (286)
Hungary	6	1	3	2	-	12 (24)	24 (36)
Turkey	15	-	2	2	8 (13)	46 (81)	73 (113)
Virgin Islands (British)	11	-	2	-	43 (97)	10 (28)	66 (138)
Mongolia	-	-	2	-	-	-	2 (2)
South Africa	12	2	2	-	4 (4)	1 (1)	21 (21)
Spain	77	8	2	4	64 (76)	185 (360)	340 (527)
Barbados	38	6	2	-	13 (54)	-	59 (100)
Norway	53	5	2	5	3 (5)	63 (209)	131 (279)
The Macao Special Administrative Region of the People's Republic of China	-	-	2	-	3 (3)	-	5 (5)
Greece	8	2	1	2	6 (13)	9 (17)	28 (43)
Mexico	12	3	1	-	30 (42)	3 (7)	49 (65)
Indonesia	1	-	1	-	34 (45)	5 (7)	41 (54)
Pakistan	-	-	1	-	3 (3)	-	4 (4)
Austria	204	15	1	1	11 (84)	100 (258)	332 (563)
India	41	7	1	-	16 (16)	29 (42)	94 (107)
Brazil	12	1	1	-	8 (16)	-	22 (30)

(unit: cases)

				,			(unit: cases
Countries/Regions	Patent &	Utility models		Designs		Trademarks	Total
countres/negions	Domestic	PCT	Domestic	Hague	Domestic	Madrid	Total
Malaysia	7	-	1	-	29 (85)	5 (15)	42 (108)
Portugal	3	2	1	2	7 (7)	21 (41)	36 (56)
Bulgaria	3	-	-	-	-	10 (19)	13 (22)
Russian Federation	48	5	-	1	16 (19)	87 (250)	157 (323)
Republic of Moldova	-	-	-	-	-	3 (4)	3 (4)
Saudi Arabia	51	10	-	-	6 (8)	-	67 (69)
Belarus	-	-	-	-	7 (7)	4 (6)	11 (13)
Gibraltar	-	-	-	-	-	2 (2)	2 (2)
Cuba	3	1	-	-	-	2 (2)	6 (6)
Saint Kitts and Nevis	-	-	-	-	2 (4)	-	2 (4)
Mauritius	1	-	-	-	-	1 (1)	2 (2)
Romania	1	-	-	-	1 (1)	6 (27)	8 (29)
Lebanon	-	-	-	-	3 (5)	-	3 (5)
Myanmar	-	-	-	-	1 (1)	-	1 (1)
Cambodia	1	-	-	-	1 (1)	-	2 (2)
Ukraine	1	-	-	3	1 (1)	11 (13)	16 (18)
Bahamas	2	1	-	-	-	-	3 (3)
Lithuania	2	1	-	-	2 (2)	6 (14)	11 (19)
Tunisia	-	-	-	-	-	8 (8)	8 (8)
Andorra	1	-	-	-	1 (1)	-	2 (2)
Marshall Islands	-	-	-	-	-	2 (5)	2 (5)
Uruguay	1	-	-	-	-	-	1 (1)
Malta	7	-	-	-	3 (5)	10 (24)	20 (36)
Philippines	2	1	-	-	11 (22)	5 (10)	19 (35)
Jersey(U.K.)	11	1	-	-	-	2 (11)	14 (23)
Iceland	-	-	-	1	-	7 (17)	8 (18)
United Arab Emirates	5	-	-	-	22 (30)	3 (5)	30 (40)
Serbia	-	-	-	5	-	1 (1)	6 (6)
Lao People's Democratic Republic	-	-	-	-	-	1 (1)	1 (1)
Curacao	-	-	-	-	1 (1)	-	1 (1)
Slovakia	4	-	-	-	-	3 (5)	7 (9)
Egypt	-	-	-	-	-	3 (5)	3 (5)
Bangladesh	2	-	-	-	-	-	2 (2)
Iraq	-	-	-	-	1 (1)	-	1 (1)
Monaco	1	-	-	-	5 (5)	12 (30)	18 (36)
Latvia	-	-	-	-	1 (1)	10 (20)	11 (21)
Estonia	3	1	-	1	1 (1)	11 (27)	17 (33)

Countries/Decience	Patent & Ut	ility models		Designs		Trademarks	T-4-1
Countries/Regions -	Domestic	PCT	Domestic	Hague	Domestic	Madrid	Total
Slovenia	4	-	-	-	-	7 (9)	11 (13)
Croatia	2	-	-	-	2 (2)	2 (4)	6 (8)
Antigua and Barbuda	-	-	-	-	1 (1)	-	1 (1)
Qatar	2	-	-	-	8 (13)	-	10 (15)
Jordan	3	-	-	-	-	-	3 (3)
Argentina	-	-	-	-	3 (3)	1 (1)	4 (4)
Brunei Darussalam	-	-	-	-	-	1 (2)	1 (2)
Costa Rica	-	-	-	-	4 (7)	-	4 (7)
Bermuda	1	-	-	-	4 (6)	4 (6)	9 (13)
Viet Nam	-	-	-	-	29 (33)	37 (65)	66 (98)
Uzbekistan	1	-	-	-	7 (7)	-	8 (8)
Iran (Islamic Republic of)	-	1	-	-	-	3 (4)	4 (5)
Armenia	-	-	-	-	1 (1)	4 (4)	5 (5)
Seychelles	2	-	-	-	3 (3)	-	5 (5)
Syrian Arab Republic	-	-	-	-	-	1 (1)	1 (1)
Poland	9	1	-	1	3 (4)	41 (84)	55 (99)
Cyprus	17	1	-	2	4 (5)	22 (46)	46 (71)
Czech Republic	7	-	-	-	5 (10)	34 (68)	46 (85)
Morocco	-	-	-	-	-	1 (3)	1 (3)
Kazakhstan	-	-	-	-	6 (6)	1 (3)	7 (9)
Belize	1	-	-	-	1 (1)	-	2 (2)
Samoa	1	-	-	-	2 (4)	-	3 (5)
Ghana	-	-	-	-	1 (1)	-	1 (1)
Bahrain	-	-	-	-	1 (1)	-	1 (1)
Georgia	-	-	-	-	-	2 (3)	2 (3)
Colombia	-	-	-	-	2 (4)	-	2 (4)
Peru	-	-	-	-	2 (4)	-	2 (4)
The Hong Kong Special Administrative Region of the People's Republic of China	-	-	-	-	12 (18)	-	12 (18)
Chile	2	1	-	-	22 (24)	-	25 (27)
Panama	-	-	-	-	5 (7)	-	5 (7)
Kuwait	1	-	-	-	2 (2)	-	3 (3)
Tajikistan	-	-	-	-	1 (1)	-	1 (1)
Others	-	-	-	-	-	11 (30)	11 (30)
Total	28,105	2,994	3,909	1,616	10,067 (16,258)	11,194 (24,177)	57,885 (77,059)

Note: Figures in parentheses include multiple applications

Trials and appeals

Trials and appeals requested

frials and appeals requ	lesteu					(unit: cases
Category		2016	2017	2018	2019	2020
	Patents	5,470	4,351	3,624	2,820	2,110
Appeal against examiner's	Utility models	200	180	162	128	59
decision to reject	Designs	109	90	102	58	50
application	Trademarks	1,626 (2,284)	1,569 (2,295)	1,437 (2,046)	1,330 (1,868)	1,021 (1,615)
	Subtotal	7,405 (8,063)	6,190 (6,916)	5,325 (5,934)	4,336 (4,874)	3,240 (3,834)
	Patents	1	1	1	-	-
Appeals against	Utility models	-	-	-	-	-
examiner's decision to dismiss amendment	Designs	5	1	-	-	-
	Trademarks	5 (11)	-	-	3	-
	Subtotal	11 (17)	2	1	3	-
	Patents	-	-		-	-
Appeals against	Utility models	-	-	-	-	-
examiner's decision of	Designs	2	-	1	3	3
cancellation	Trademarks	-	-	-	-	-
	Subtotal	2	-	1	3	3
	Patents	145	136	128	127	119
	Utility models	9	4		2	3
Trials for correction	Designs	-	-	-	-	-
	Trademarks	-	-	-	-	-
	Subtotal	154	140	128	129	122
	Patents	548	529	460	478	383
	Utility models	50	27	21	15	20
Invalidation	Designs	247	194	207	215	188
	Trademarks	492 (553)	433 (486)	472 (559)	472 (541)	372 (433)
	Subtotal	1,337(1,398)	1,183 (1,236)	1,160 (1,247)	1,180 (1,249)	963 (1,024)

Category		2016	2017	2018	2019	2020
	Patents	632	671	512	348	374
	Utility models	47	29	20	21	17
Trials to confirm scope of IP right	Designs	149	136	151	136	169
	Trademarks	101(170)	90 (102)	158 (175)	103 (123)	108 (129
	Subtotal	929 (998)	926 (938)	841 (858)	608 (628)	668 (689)
Cancellation trials on trademark registration	Patents	-	1	1	-	
	Utility models	-	-	-	-	
	Designs	-	-	17	-	
	Trademarks	2,122 (2,526)	2,124 (2,474)	2,523 (3,011)	2,574 (3,193)	2,497 (3,003
	Subtotal	2,122 (2,526)	2,125 (2,475)	2,541 (3,029)	2,574 (3,193)	2,497 (3,003
	Patents		109	150	174	14
	Utility models		1	4	1	:
Opposition of patent/ utility model	Designs		1	-	-	
utility model	Trademarks		-	-	-	
	Subtotal		111	154	175	155
	Patents	6,796	5,689	4,876	3,947	3,132
	Utility models	306	240	207	167	108
Grand total	Designs	512	421	478	412	410
	Trademarks	4,346 (5,544)	4,216 (5,357)	4,590 (5,791)	4,482 (5,728)	3,998 (5,180
	Total	11,960 (13,158)	10,566 (11,565)	10,151 (11,352)	9,008 (10,254)	7,648 (8,830

Note1: Figures in parentheses include multiple applications.

Note2: Opposition of patents / Utility model has been enforced from March, 2020

* Rejection refers to appeals against examiners' decisions of refusal and appeals against examiners' decisions to dismiss utility models. ** Invalidation refers to invalidation trials and trials for invalidation of corrections.

Successful petitions

Successful p	Jeuuons										(unit: cases
Category			2016		2017		2018		2019		2020
Calegory		Accep-tance	Ratio	Accep-tance	Ratio	Accep-tance	Ratio	Accep-tance	Ratio	Accep-tance	Ratio
	Patents	1,036	29.0%	1,078	30.3%	1,370	31.1%	1,977	36.3	1,341	39.9
Ex partes [Utility models	32	33.0%	33	26.0%	40	20.5%	48	24.2	45	24.9
	Designs	50	43.1%	43	31.9%	21	20.6%	27	32.5	20	40.8
	Trademarks	655 (1,053)	48.4% (53.1%)	605 (896)	54.8% (58.9%)	1,026 (1,648)	58.3% (63.1%)	1,017 (1,607)	55.2 (60.4)	693 (1,063)	55.9 (60.4)
	Subtotal	1,773 (2,171)	41.5% (37.6%)	1,759 (2,050)	35.7% (38.4%)	2,457 (3,079)	38.0% (42.1%)	3,069 (3,659)	40.5 (43.6)	2,099 (2,469)	43.4 (46.1)
	Patents	526	42.2%	616	46.2%	552	49.1%	653	53.4	382	42.8
	Utility models	52	50.5%	45	54.9%	19	35.2%	16	35.6	8	24.2
Inter partes	Designs	164 (166)	54.8% (55.1%)	187	47.9%	210	51.0%	142	48.3	140	53.8
	Trademarks	1,436 (1,691)	65.2% (64.0%)	2,436 (2,760)	78.1% (76.9%)	1,747 (1,962)	70.1% (70.2%)	2,753 (3,173)	74.0 (73.6)	1,877 (2,351)	70.6 (72.4)
	Subtotal	2,178 (2,435)	56.6% (56.7%)	3,284 (3,608)	66.7% (66.9%)	2,528 (2,743)	61.9 (62.6%)	3,564 (3,984)	67.5 (67.8)	2,407 (2,881)	62.6 (65.0)
	Patents	1,562	32.4%	1,694	34.6%	1,922	34.7%	2,630	39.4	1,723	40.5
	Utility models	84	42.0%	78	37.3%	59	23.7%	64	26.3	53	24.8
Grand total	Designs	214 (216)	51.6% (51.8%)	230	43.8%	231	44.9%	169	44.8	160	51.8
	Trademarks	2,091 (2,744)	58.8% (59.3%)	3,041 (3,656)	72.0% (71.5%)	2,773 (3,610)	65.2% (66.8%)	3,770 (4,780)	67.8 (68.5)	2,570 (3,414)	65.9 (68.2)
	Total	3,951 (4,606)	43.9% (45.8%)	5,043 (5,658)	51.2% (52.7%)	4,985 (5,822)	47.3% (49.8%)	6,633 (7,643)	51.6 (53.6)	4,506 (5,350)	51.9 (54.7)

Note1: Figures in parentheses include multiple applications.

Note2: The successful petitions refer to the number of petitions granted. These figures exclude cases where the registration was decided on the basis of an examiner's reconsideration before a trial and invalidation of a patent process. The figures in parentheses indicate the percentage of the petitions granted.

• Ex partes: Appeals against examiners' decisions of refusal / Appeals against examiners' decisions of cancellation / Appeals against examiners' decisions to dismiss amendments / Trials for correction

 Inter partes: Invalidation trials / Trials to confirm scope of IP rights / Trials for invalidation of correction / Trials for granting non-exclusive licenses / Trials for invalidation of registrations for extension of patent right term / Trials for invalidation of registration for renewals of trademark right term / Cancellation trials on trademark registrations / Cancellation trials on registrations of exclusive or non-exclusive licenses / Trials for invalidation on registrations for conversion of classification of goods

Comparison of domestic and foreign trial requests

Category		2016	2017	2018	2019	2020
	Domestic	3,891	3,499	3,214	2,545	2,064
Patents	Foreign	2,905	2,190	1,662	1,402	1,068
Utility models	Domestic	301	237	201	164	102
	Foreign	5	3	6	3	6
Designs	Domestic	459	373	419	381	386
Designs	Foreign	53	48	59	31	24
Tue de se adre	Domestic	3,014	2,703	3,077	2,939	2,780
Trademarks	Foreign	2,530	1,513	1,513	1,543	1,218
Total		13,158	10,566	10,151	9,008	7,648

Note: Multiple applications for trademarks and designs are treated as single applications.

Income and expenditures / KIPO staff

Income

ncome									
Category	2016	2017	2018	2019	2020				
Income from fees	397,276,404	428,025,022	446,163,758	443,443,731	484,871,681				
Income carried over from the previous year	22,901,485	28,072,668	42,855,898	17,542,755	9,997,345				
Internal income and others	90,568,774	119,661,120	148,403,121	115,788,238	109,041,593				
Total	510,746,664	575,758,810	637,422,777	576,774,723	603,910,619				

Expenditures

(unit: USD)

Category	2016	2017	2018	2019	2020
Non-personnel resources (projects)	360,459,363	393,025,808	455,687,588	413,003,996	400,492,035
Personnel resources	99,443,391	106,532,589	116,102,191	116,951,668	122,678,761
Deposit for special fund	23,621,577	35,270,004	47,461,470	37,046,713	33,516,814
Total	483,524,330	534,828,401	619,251,249	567,002,377	556,687,611

KIPO staff

KIPU Stall	(unit: number of positions)								
Category		2016	2017	2018	2019	2020			
Examiners	Patents and utility models	734	832	875	839	850			
	Designs and trademarks	162	165	162	191	193			
Administrative ju	ıdges	95	103	107	107	107			
Administrative s	taff	601	527	517	604	618			
Total		1,592	1,627	1,661	1,741	1,768			

Academic and professional credentials of KIPO examiners

(unit: number of staff)

Category		Ph. D	Master's degrees	Patent attorney certificate only		Professional engineer certificate only
Trademarks	Patents and utility models	329	102	36	5	16
	Trademarks	7	10	5	1	0
Examiners	Designs	2	9	0	0	0
	Total	338	121	41	6	16

About KIPO



The Korean Intellectual Property Office is the governmental authority in charge of affairs regarding patents, utility models, industrial designs, and trademarks. It was established in 1949 as an external bureau of the Ministry of Commerce and Industry under the name of Patent Bureau. In 1977, the Patent Bureau became an independent office of the Ministry of Commerce and Industry and took the name of Korean Industrial Property Office. In 2000, it was renamed the Korean Intellectual Property Office (KIPO).



The main functions of KIPO include: the examination and registration of intellectual property rights; the conducting of trials on intellectual property disputes; the management and dissemination of information on intellectual property rights; the promotion and enhancement of public awareness of invention activities; the advancement of international cooperation; and the training of experts on intellectual property rights.



In response to the competitive global environment where intellectual property is becoming increasingly valuable, we aim to advance Korea and its position in the world through innovative intellectual property.



We support technological innovation and industrial development by promoting the creation, protection, and utilization of intellectual property. We strive to provide world-class intellectual property services; to promote the economic and industrial use of intellectual property; and to create an environment respectful of the intellectual property system.

