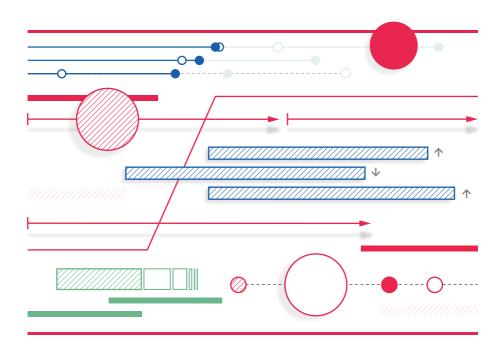
# WIPO IP Facts and Figures 2017





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### Introduction

*IP Facts and Figures 2017* from the World Intellectual Property Organization (WIPO) provides an overview of intellectual property (IP) activity using the latest available year of complete statistics. The figures presented here are drawn from WIPO's more comprehensive *World Intellectual Property Indicators 2017.* 

*IP Facts and Figures* serves as a quick reference guide covering four types of industrial property: patents, utility models, trademarks and industrial designs. It focuses primarily on application data, which is the most often used measure of IP activity. Trademark application data refer to class counts – the number of classes specified in applications; this allows better comparison of international trademark filing activity across IP offices, as applications in some jurisdictions may specify multiple classes of goods and services while others require a separate application for each class. Similarly, industrial design data refer to design counts – the number of designs contained in applications.

Unless otherwise stated, all data refer to activity in calendar year 2016 and growth means annual growth, that is, the change from 2015 to 2016.

Please note that due to the continual updating of statistics, data provided in this publication may differ from previously published figures and from data available on WIPO's web pages. For more in-depth analysis of WIPO and/or national office IP statistics, please visit the following Internet pages:

IP statistics: www.wipo.int/ipstats

World Intellectual Property Indicators: www.wipo.int/ipstats/en/wipi

#### Contact information:

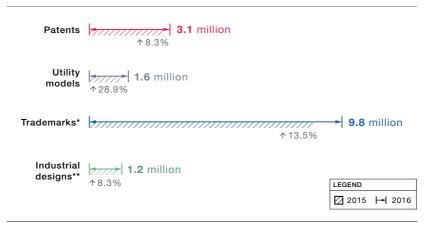
Economics and Statistics Division e-mail: ipstats.mail@wipo.int



# Global intellectual property applications and active IP rights

## Patent and trademark applications have increased for seven years running

1. Total applications and growth in applications



refers to class count – the total number of goods and services classes specified in trademark applications.

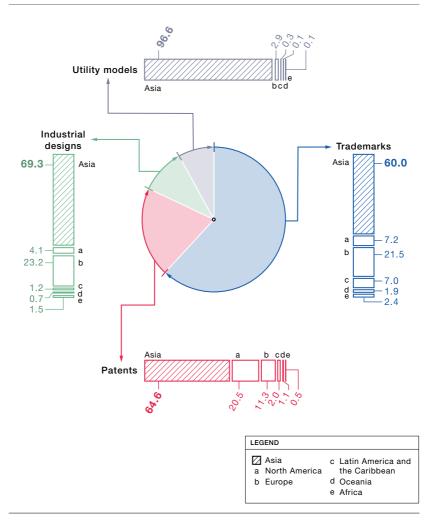
Source: WIPO Statistics Database, September 2017.

Global filing activity for patents, utility models, trademarks and industrial designs increased in 2016. For patents and trademarks, it was the seventh year in a row that applications have grown. Applications for utility models and industrial designs enjoyed a second year of strong growth.

<sup>\*\*</sup> refers to design count - the total number of designs contained in industrial design applications.

### Asia led the world in global IP filing activity

2. Percentage shares of IP filing activity by region



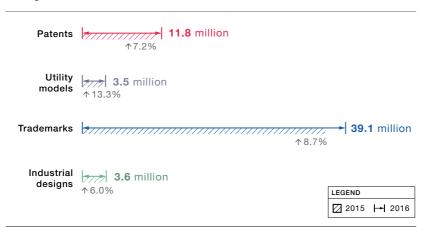
Source: WIPO Statistics Database, September 2017.

The charts opposite show the share of IP filing activity for each IP right across the world's six geographical regions. IP offices in Asia received the highest numbers of applications for patents, utility models, trademarks and industrial designs, including 64.6% of all patent applications worldwide.

Note that North American offices do not offer utility model registration and so are not included in the figure for that IP right.

### There were around 58 million IP rights in force in 2016

3. IP rights in force



Source: WIPO Statistics Database, September 2017.

In 2016, the largest number of patents in force was in the United States of America (U.S.; 2.8 million), followed by Japan (2 million), China (1.8 million) and the Republic of Korea (1 million). Combined, these four jurisdictions accounted for around 63% of the world total.

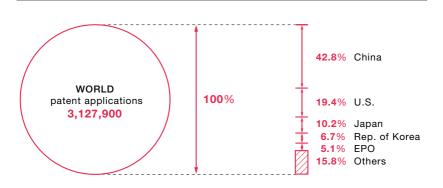
There are more trademarks in force (12.4 million) in China than in any other country. Similarly, China accounts for 38% of all industrial design registrations in force worldwide and 91% of all utility models in force.



## Patents and utility models

# Just five IP offices received more than four-fifths of all patent filings

4. Total patent applications

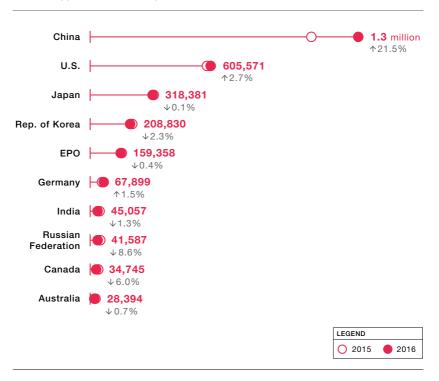


Source: WIPO Statistics Database, September 2017.

Not only did the top five IP offices receive 84% of the 3.1 million patent applications filed worldwide in 2016, a considerable share (42.8%) of them was filed in China alone, primarily by Chinese residents. The next largest shares went to the offices of the U.S., Japan, the Republic of Korea and the European Patent Office (EPO).

## China received more patent applications than the next four ranked offices combined

5. Patent applications for the top 10 offices

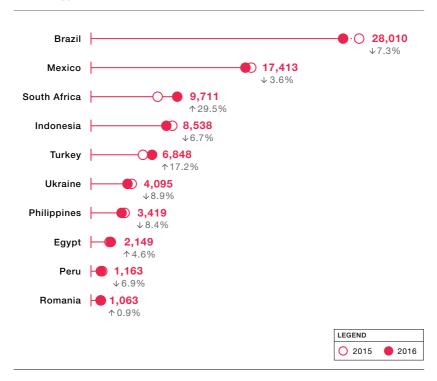


Source: WIPO Statistics Database, September 2017.

China's office received a record total of 1.3 million patent applications in 2016. This is more than the combined total for the offices of the U.S. (605,571), Japan (318,381), the Republic of Korea (208,830) and the EPO (159,358). Among the top 10 offices, only China (+21.5%), the U.S. (+2.7%) and Germany (+1.5%) saw more filings in 2016 than in 2015.

# Offices of larger middle-income countries showed mixed results in growth of patent filings

6. Patent applications for offices of selected middle-income countries

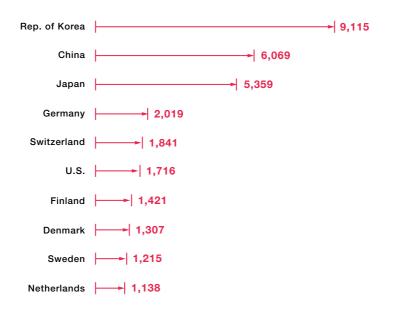


Source: WIPO Statistics Database, September 2017.

Among the offices of selected larger middle-income countries, South Africa (+29.5%) and Turkey (+17.2%) both saw strong growth in 2016. In contrast, Brazil, Indonesia, Peru, the Philippines and Ukraine each received between 6% and 9% fewer applications in 2016 than in 2015. For numbers of patent applications received by all other IP offices (where available), see the statistical table starting on page 37.

## Innovators in the Republic of Korea filed most applications per unit of GDP (USD 100 billion)

7. Resident patent applications relative to GDP for the top origins



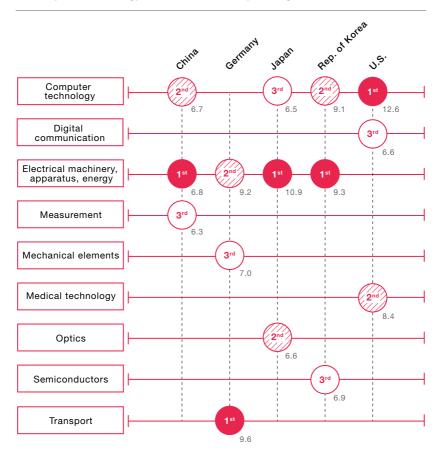
Sources: WIPO Statistics Database and World Bank, October 2017.

Differences in patent activity reflect both the size of each economy and its level of development. Looking at the number of applications per country relative to its GDP gives us an alternative perspective, helping to compare filing activity among countries with economies of very different sizes.

While China leads the world in sheer numbers of patent applications filed by its residents, on this alternative measure the Republic of Korea outperforms all other countries – its ratio of filing to unit of GDP is considerably higher than those of the two next highest ranked, China and Japan. China, however, moved ahead of Japan in 2016 to rank second.

#### Which countries specialize in which technologies?

8. The top three technology fields for each of the top five origins, 2013-15



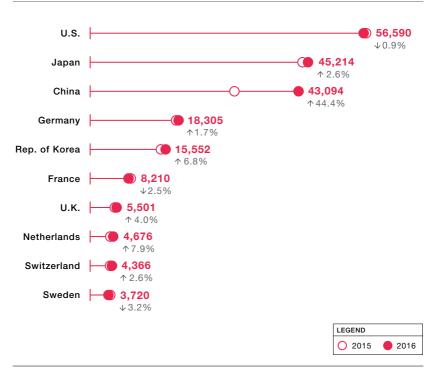
Numbers in grey show percentage share.

Sources: WIPO Statistics Database and EPO PATSTAT database, October 2017.

Analyzing patents by technology shows each country's areas of strength or specialization. For example, applicants from China, Japan and the Republic of Korea filed most intensively for patents related to electrical machinery, whereas the top technology field was transport for those from Germany and computer technology for U.S. applicants.

## The U.S., Japan and China were the biggest users of the PCT System

9. PCT international applications for the top 10 origins



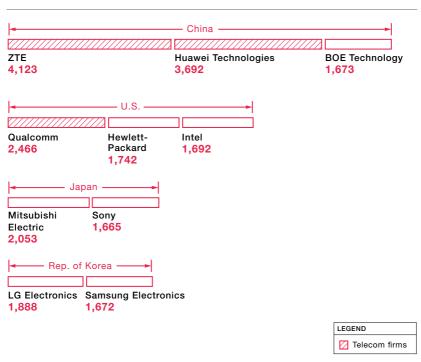
Source: WIPO Statistics Database, September 2017.

The Patent Cooperation Treaty (PCT) System simplifies the process of multiple national patent filings by reducing the requirement to file a separate application in each jurisdiction where protection is sought.

Around 233,000 PCT applications were filed in 2016, up 7.2% on 2015, representing the seventh consecutive year of growth. Applicants based in the U.S. (56,590) filed the most, followed by those in Japan (45,214) and China (43,094).

### ZTE filed a record number of PCT applications

10. Top 10 PCT applicants



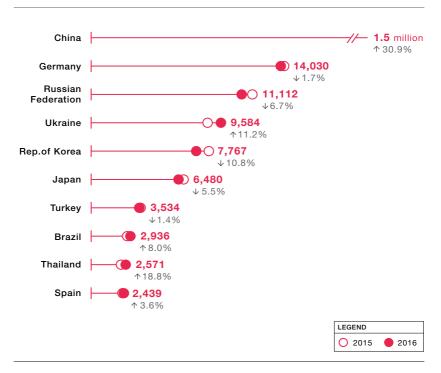
Source: WIPO Statistics Database, September 2017.

ZTE Corporation of China set a new record for the largest number of filings made by an applicant in a single year with 4,123 published applications in 2016. Huawei Technologies of China ranked second with 3,692 followed by Qualcomm Incorporated of the U.S. with 2,466.

The list of top 10 PCT applicants includes companies operating in digital communication, telecommunications and electronics, among other fields of technology.

#### China dominates utility model filing activity

11. Utility model applications for the top 10 offices



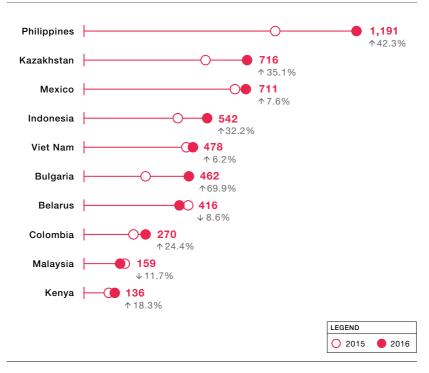
Source: WIPO Statistics Database, September 2017.

A utility model is a special form of patent right which has less stringent requirements than a patent, but gives a shorter term of protection. Utility models are not available in all jurisdictions.

Of the 1.55 million applications filed globally in 2016, the IP office of China received almost 1.48 million – 95% of the world total.

# Utility model filings grew markedly in the middle-income countries of Bulgaria, Indonesia, Kazakhstan and the Philippines

12. Utility model applications for offices of selected low- and middle-income countries



Source: WIPO Statistics Database, September 2017.

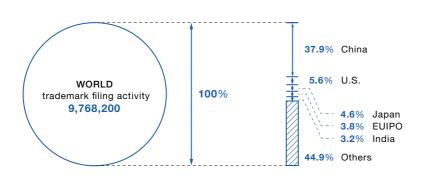
This chart shows the numbers of utility model applications received by IP offices of selected middle-income countries in 2016. For numbers of utility model applications received by all other IP offices (where available), see the statistical table starting on page 37.



## **Trademarks**

# Just five offices saw more than half of all trademark filing activity

13. Total trademark application class counts



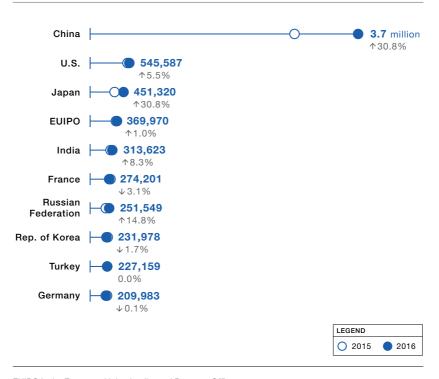
EUIPO is the European Union Intellectual Property Office.

Source: WIPO Statistics Database, September 2017.

In 2016, 55% of all trademark filing activity – measured in class counts – occurred at the top five offices. The office of China alone received over a third of total global trademark filing activity, primarily from Chinese residents. The other offices among the top five each accounted for between 3% and 6% of the total.

## China's office continues to record the highest trademark filing activity

14. Application class counts for the top 10 offices



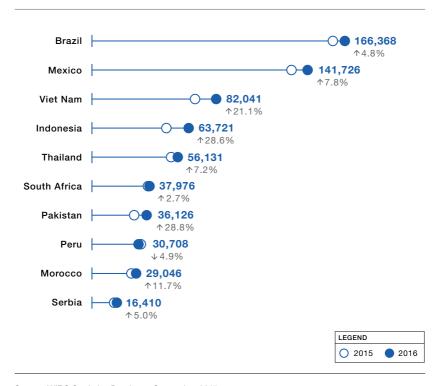
EUIPO is the European Union Intellectual Property Office.

Source: WIPO Statistics Database, September 2017.

In 2016, trademark filing activity in China – measured in class counts – was between 7 and 10 times that in the next highest ranked offices of the U.S., Japan and the European Union Intellectual Property Office (EUIPO). Both China and Japan recorded strong growth of 30.8% compared to 2015. In contrast, the offices of France, Germany and the Republic of Korea saw small declines in filing activity.

## Among middle-income countries, Brazil and Mexico recorded high trademark filing activity

15. Application class counts for offices of selected middle-income countries



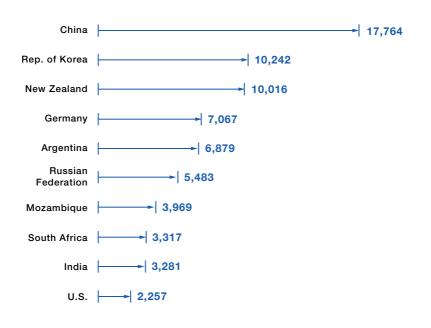
Source: WIPO Statistics Database, September 2017.

Brazil (166,368) and Mexico (141,726) had higher trademark filing activity – as measured in class counts – than many other large middle-income countries, while filing activity grew strongly in Indonesia (+28.6%), Pakistan (+28.8%) and Viet Nam (+21.1%).

The chart above shows the total number of classes specified in trademark applications received by the IP offices of a selection of middle-income countries in 2016. For trademark application class counts for all other IP offices (where available), see the statistical table starting on page 37.

#### China, the Republic of Korea and New Zealand all perform strongly on application class count per unit of GDP (USD 100 billion)

16. Resident trademark application class count relative to GDP for selected origins

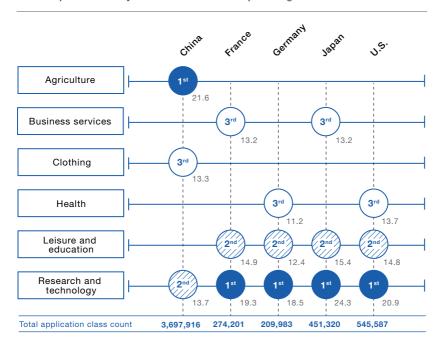


Sources: WIPO Statistics Database and World Bank, September 2017.

Calculating application class count per unit of GDP allows us to compare trademark filing activity in countries with different filing systems (single-class versus multi-class) and economies of very different sizes. On this measure, smaller countries such as New Zealand and Argentina rank higher than some large countries with higher class counts in absolute terms, for example the U.S.

# What were the top industries for trademark filing by applicants from different countries?

17. The top three industry sectors for each of the top five origins



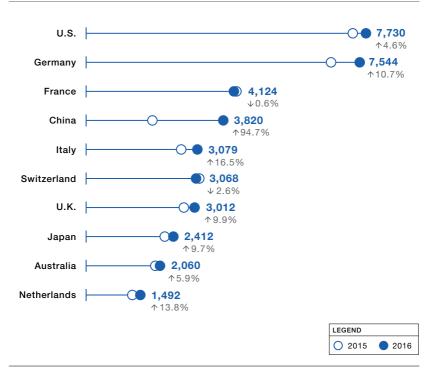
Numbers in grey show percentage share.

Source: WIPO Statistics Database, September 2017.

Using the Nice Classification, trademark applications can be attributed to 10 industry sectors. The chart above shows the top three industry sectors for each of the five origins with the highest trademark filing activity in 2016. Research and technology features among the three sectors attracting the highest volumes of trademark applications from four of these five origins. Agriculture was the top sector for applicants from China, and Health was among the top three sectors for applicants based in Germany and the U.S.

## The U.S. and Germany are the biggest users of the Madrid System

18. Madrid international applications for the top 10 origins



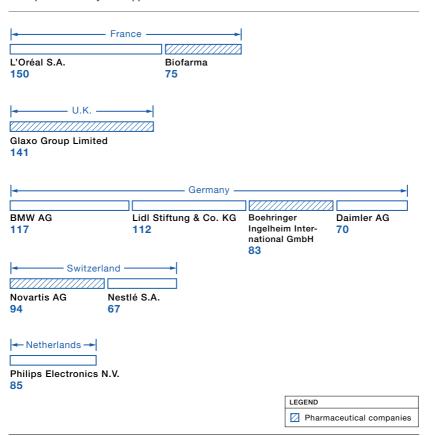
Source: WIPO Statistics Database, September 2017.

The Madrid System makes it possible for a trademark holder to apply for trademark registration in multiple countries by filing a single international application via a national or regional IP office.

Madrid international applications totaled 53,493 in 2016, the highest number of international applications ever filed. 2016 also marked the seventh consecutive year of growth. The highest numbers of international applications were filed by applicants domiciled in the U.S. (7,730) and Germany (7,544).

# L'Oréal of France became the top Madrid applicant in 2016

19. Top 10 Madrid System applicants



Source: WIPO Statistics Database, September 2017.

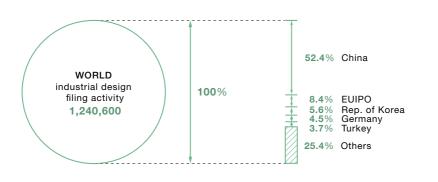
French cosmetics and beauty company L'Oréal filed 150 Madrid international applications in 2016, moving up from third place the year before to become the top Madrid filer. It was followed by pharmaceutical company Glaxo Group of the United Kingdom (U.K.) with 141 applications and German carmaker BMW with 117. Four of the 10 top Madrid System applicants were pharmaceutical companies.



## **Industrial designs**

#### More than half of all designs in applications filed worldwide were received by the IP office of China

20. Total application design counts



EUIPO is the European Union Intellectual Property Office.

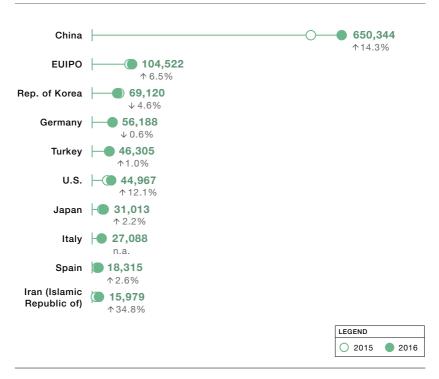
Source: WIPO Statistics Database, September 2017.

Three-quarters of global industrial design filing activity – as measured in design counts – took place in the top five offices in 2016, with the office of China alone receiving over half (52.4%) the world total. It was followed by the EUIPO (8.4%) and the Republic of Korea (5.6%).

WIPO uses the application design count to measure filing activity for industrial designs; in other words, we do not just count the number of applications, we count the number of designs in applications. Design count is a better way of comparing filing activity across IP offices, because at some offices users can register multiple designs through a single application.

## China leads by a huge margin on application design count

21. Application design counts for the top 10 offices



EUIPO is the European Union Intellectual Property Office. n.a. indicates not available.

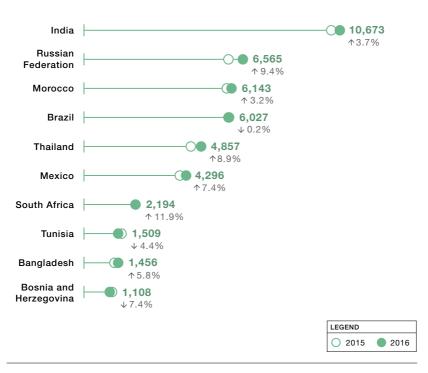
Source: WIPO Statistics Database, September 2017.

China's IP office received 650,344 designs in applications filed in 2016, primarily from Chinese applicants. In fact, it got more designs in applications filed than the next nine top offices added together. The EUIPO (104,522) and the Republic of Korea (69,120) were the second and third largest offices respectively in terms of design filing activity.

China (+14.3%), the Islamic Republic of Iran (+34.8) and the U.S. (+12.1%) recorded strong annual growth in the numbers of designs in applications received in 2016, whereas Germany (-0.6%) and the Republic of Korea (-4.6%) received fewer designs in applications.

## Among offices of middle-income countries, filing activity was particularly high in India

22. Application design counts for offices of selected middle-income countries



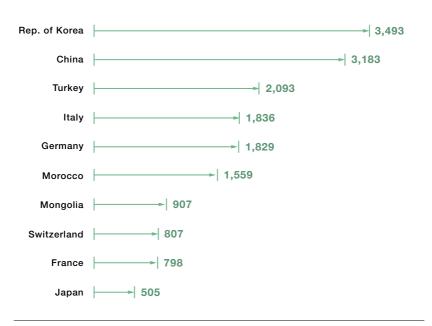
Source: WIPO Statistics Database, September 2017.

With over 10,000 designs in applications received, India had considerably higher filing activity than other large middle-income countries in 2016. Brazil (6,027), Morocco (6,143) and the Russian Federation (6,565) all received a similar number of designs in applications.

The chart above shows the total numbers of designs contained in applications filed at IP offices of selected middle-income countries in 2016. For application design counts for all other IP offices (where available), see the statistical table starting on page 37.

## The Republic of Korea leads the world in the number of designs in applications per unit of GDP (USD 100 billion)

23. Resident application design count relative to GDP for selected origins

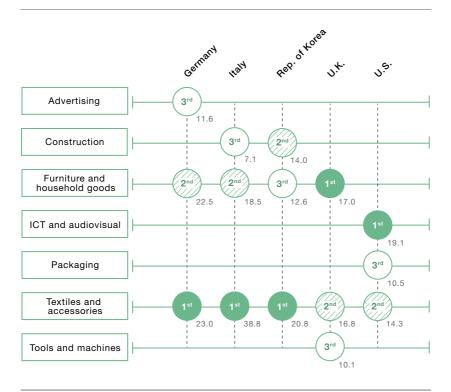


Sources: WIPO Statistics Database and World Bank, September 2017.

Calculating design counts per unit of GDP allows us to compare industrial design filing activity by residents of countries with different filing systems (single-design versus multi-design) and economies of very different sizes. On this measure, the Republic of Korea performs very strongly. It had the highest resident design count per unit of GDP in 2016, followed by China, Turkey and Italy.

## Which industries led design filing by applicants from different countries?

24. The top three industry sectors for selected origins



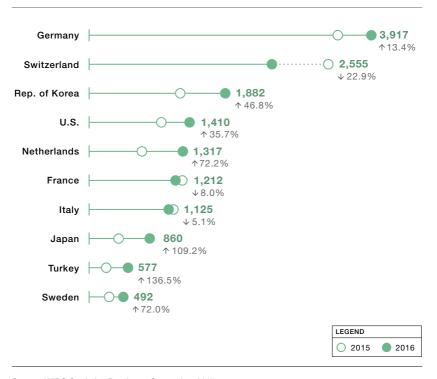
Numbers in grey show percentage share.

Source: WIPO Statistics Database, September 2017.

Grouping the 32 Locarno classes into 12 industry sectors allows us to analyze the areas of strength or specialization of different countries. The textiles and accessories sector featured among the top three sectors for industrial design filing for all top five origins. Construction was one of the top three sectors for applicants from Italy and the Republic of Korea, whereas advertising ranked among the top three for those in Germany, and ICT (information and communications technology) and audiovisual for applicants based in the U.S.

## Germany, Switzerland and the Republic of Korea were the three largest users of the Hague System

25. Designs in Hague international applications for the top 10 origins



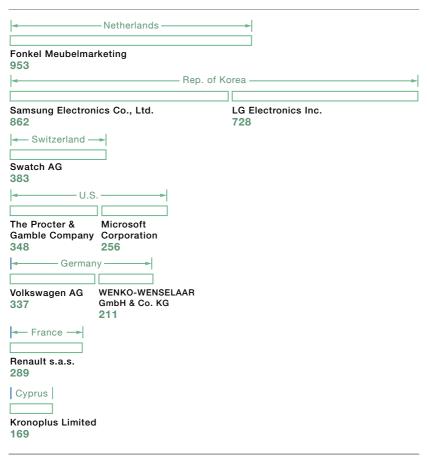
Source: WIPO Statistics Database, September 2017.

The Hague System makes it possible for an applicant to obtain protection for industrial designs in multiple jurisdictions by filing a single application with the International Bureau of WIPO. It simplifies the process of multinational registration by eliminating the need to file a separate application in each jurisdiction in which protection is sought. Hague applicants can protect up to 100 industrial designs for products belonging to one and the same class through a single application.

Around 18,700 designs in Hague applications were filed in 2016, up 13.9% on 2015 and marking a decade of continuous year-on-year growth. Applicants based in Germany (3,917) had the highest number of designs in Hague applications filed, followed by those in Switzerland (2,555) and the Republic of Korea (1,882).

## **Dutch furniture company Fonkel Meubelmarketing** was the top Hague applicant

26. Top 10 Hague System applicants based on design count



Source: WIPO Statistics Database, September 2017.

With 953 designs in applications, Fonkel Meubelmarketing surpassed Samsung Electronics of the Republic of Korea (862) to become the top user of the Hague System in 2016. LG Electronics (728), also of the Republic of Korea, was the third-largest user of the System.

The top 10 Hague applicants produce a wide range of goods, ranging from consumer electronics and software to household and personal hygiene products, and from construction materials to watches and vehicles.



# **Additional information**

# Statistical tables

Applications by office, 2016

	Applications				
IP office <sup>a</sup>	Patent	Utility model	Trademark	Industrial design count <sup>C</sup>	
African Intellectual Property Organization	506		12,487	824	
African Regional Intellectual Property Organization	697	28	487	83	
Albania <sup>i</sup>	25	4	7,808	942	
Algeria <sup>f</sup>	672		26,448		
Andorra	3		2,387		
Antigua and Barbuda <sup>g,h</sup>	12		1,718	1	
Argentina	3,809	205	71,058	1,653	
Armenia	126	32	9,133	438	
Australia	28,394	1,855	135,073	7,278	
Austria	2,315	679	23,230	2,140	
Azerbaijan	163	20	11,584	640	
Bahamas	37		1,406		
Bahrain	177		11,215	90	
Bangladesh	344		12,375	1,456	
Barbados	41		1,094	4	
Belarus	521	416	18,759	549	
Belgium <sup>j</sup>	1,173				
Belize	37			291	
Benelux Office for Intellectual Property			66,514	1,269	
Bhutan <sup>9</sup>			1,746		
Bolivia (Plurinational State of)	253	25	7,923	63	
Bonaire, Sint Eustatius and Saba <sup>g</sup>			1,612		
Bosnia and Herzegovina	66		10,543	1,108	
Botswana <sup>i</sup>	7	4	3,271	105	
Brazil	28,010	2,936	166,368	6,027	
Brunei Darussalam <sup>i</sup>				108	
Bulgaria	241	462	18,166	925	
Cambodia <sup>d,e,g,h</sup>	65	7	4,099	69	
Canada	34,745		153,722	6,170	
Chile	2,907	110	45,368	401	
China	1,338,503	1,475,977	3,697,916	650,344	
China, Hong Kong SAR	14,092	762	71,715	4,936	
China, Macao SAR	51	15	11,507	218	
Colombia	2,203	270	42,737	533	
Costa Rica			14.170	64	
Costa Rica	505	20	14,173	04	
Croatia Croatia	505 188	83	8,333	1,134	

	Applications				
IP office <sup>a</sup>	Patent	Utility model	Trademark class count <sup>b</sup>	Industrial design count <sup>c</sup>	
Curaçao			2,809		
Cyprus	4		2,982	46	
Czech Republic	839	1,264	24,414	1,098	
Democratic People's Republic of Korea <sup>g,i</sup>			2,517	55	
Denmark	1,850	144	11,147	405	
Dominican Republic	273	19	13,012	71	
Ecuador	374	41	15,890	136	
Egypt h	2,149		35,122	2,663	
El Salvador	175	7	10,620	40	
Estonia	30	61	4,411	291	
Eurasian Patent Organization	3,380				
European Patent Office	159,358				
European Union Intellectual Property Office			369,970	104,522	
Finland <sup>h</sup>	1,368	450	10,405	450	
France	16,218	472	274,201	14,751	
Gambia <sup>f</sup>			544		
Georgia	274	70	9,425	655	
Germany	67,899	14,030	209,983	56,188	
Ghana	31	2	5,519	569	
Greece <sup>g</sup>	646	23	2,362	1,113	
Grenada	17		635		
Guatemala	269	8		392	
Guyana	18		905		
Honduras	195	7	7,548	37	
Hungary	665	304	13,237	994	
Iceland	38		9,074	314	
India	45,057		313,623	10,673	
Indonesia	8,538	542	63,721	3,893	
Iran (Islamic Republic of)	15,632		190,762	15,979	
Iraq <sup>d</sup>	437				
Ireland	287		6,999	181	
Israel	6,419		18,815	1,865	
Italy	9,821	2,199	94,037	27,088	
Jamaica	78		5,349	183	
Japan	318,381	6,480	451,320	31,013	
Jordan	278		7,346	101	
Kazakhstan	1,224	716	22,924	239	
Kenya <sup>f</sup>	203	136	10,870	104	
Kuwait <sup>d,f</sup>	228		13,051		
Kyrgyzstan	89	24	6,357	461	
Lao People's Democratic Republic <sup>9</sup>			1,686		
Latvia	113		5,296	242	
Lebanon d,f	304		1,537		
Lesotho <sup>9</sup>			1,715		
Liberia <sup>9</sup>			2,039		

Patent   Utility mode   Trademark   des	Applications				
Liechtenstein k           8,756           Lithuania         153          6,773           Luxembourg j         4444             Madagascar         36          6,050           Malawi         4          1,167           Malaysia         7,236         159         39,107           Malta         4          602           Mauritius         38          2,328           Mexico         17,413         711         141,726           Monaco         14          9,249           Mongolia         219         206         12,040           Montenegro g         10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia i           4,849           Nepal         37          5,078           Netherlands j         2,604	Industrial				
Lithuania         153          6,773           Luxembourg J         444             Madagascar         36          6,050           Malawi         4          1,167           Malaysia         7,236         159         39,107           Malta         4          602           Mauritius         38          2,328           Mexico         17,413         711         141,726           Monaco         14          9,249           Mongolia         219         206         12,040           Montenegro g         10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia f           4,849           Nepal         37          5,078           Netherlands J         2,604					
Luxembourg J         444             Madagascar         36          6,050           Malawi         4          1,167           Malaysia         7,236         159         39,107           Matta         4          602           Mauritius         38          2,328           Mexico         17,413         711         141,726           Monaco         14          9,249           Mongolia         219         206         12,040           Montenegro g         10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia l           4,849           Nepal         37          5,078           Netherlands J         2,604	1,239				
Madagascar       36        6,050         Malawi       4        1,167         Malaysia       7,236       159       39,107         Malta       4        602         Mauritius       38        2,328         Mexico       17,413       711       141,726         Monaco       14        9,249         Mongolia       219       206       12,040         Montenegro 9       10        7,236         Morocco       1,303        29,046         Mozambique       40       8       5,337         Namibia i         4,849         Nepal       37        5,078         Netherlands j       2,604	423				
Malawi         4          1,167           Malaysia         7,236         159         39,107           Malta         4          602           Mauritius         38          2,328           Mexico         17,413         711         141,726           Monaco         14          9,249           Mongolia         219         206         12,040           Montenegro g         10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia l           4,849           Nepal         37          5,078           Netherlands J         2,604					
Malaysia         7,236         159         39,107           Malta         4          602           Mauritius         38          2,328           Mexico         17,413         711         141,726           Monaco         14          9,249           Mongolia         219         206         12,040           Montenegro g         10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia i           4,849           Nepal         37          5,078           Netherlands j         2,604	170				
Malta         4          602           Mauritius         38          2,328           Mexico         17,413         711         141,726           Monaco         14          9,249           Mongolia         219         206         12,040           Montenegro g         10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia i           4,849           Nepal         37          5,078           Netherlands j         2,604					
Mauritius         38          2,328           Mexico         17,413         711         141,726           Monaco         14          9,249           Mongolia         219         206         12,040           Montenegro g         10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia i           4,849           Nepal         37          5,078           Netherlands j         2,604	1,427				
Mexico         17,413         711         141,726           Monaco         14          9,249           Mongolia         219         206         12,040           Montenegro g         10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia i           4,849           Nepal         37          5,078           Netherlands j         2,604					
Monaco         14          9,249           Mongolia         219         206         12,040           Montenegro g         10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia i           4,849           Nepal         37          5,078           Netherlands j         2,604	4.000				
Mongolia         219         206         12,040           Montenegro g         10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia i           4,849           Nepal         37          5,078           Netherlands j         2,604	4,296				
Montenegro <sup>g</sup> 10          7,236           Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia <sup>i</sup> 4,849           Nepal         37          5,078           Netherlands <sup>j</sup> 2,604	1,218				
Morocco         1,303          29,046           Mozambique         40         8         5,337           Namibia i           4,849           Nepal         37          5,078           Netherlands j         2,604	823				
Mozambique         40         8         5,337           Namibia i           4,849           Nepal         37          5,078           Netherlands i         2,604	919				
Namibia i          4,849           Nepal         37          5,078           Netherlands i         2,604	6,143				
Nepal         37          5,078           Netherlands j         2,604	32				
Netherlands <sup>j</sup> 2,604	118				
<u> </u>	34				
New Zealand 6,386 45,830	1,358				
Norway 2,060 43,127	3,931				
Oman <sup>g,i</sup> 5,551	903				
Pakistan 840 36,126	555				
Panama 417 11 12,607	52				
Papua New Guinea <sup>d,h</sup> 861	39				
Patent Office of the Cooperation Council 1,949 for the Arab States of the Gulf					
Peru 1,163 247 30,708	303				
Philippines 3,419 1,191 47,953	1,569				
Poland i 4,396 1,151 46,387	138				
Portugal 751 118 30,474	2,291				
Qatar 564					
Republic of Korea 208,830 7,767 231,978	69,120				
Republic of Moldova         155         156         11,067	902				
Romania 1,063 49 24,984	1,337				
Russian Federation 41,587 11,112 251,549	6,565				
Rwanda <sup>h</sup> 128 3 2,377	69				
Saint Vincent and the Grenadines <sup>d</sup> 7					
Samoa <sup>d</sup> 4 218	2				
<u>San Marino <sup>g</sup> 458 3,240</u>	14				
Sao Tome and Principe i 1,439	88				
Saudi Arabia <sup>f</sup> 3,266 18,254	937				
Serbia 213 61 16,410	1,400				
Sierra Leone <sup>g</sup> 1,874					
Singapore 10,980 45,332	4,337				
Sint Maarten (Dutch Part) <sup>g</sup> 1,724					
Slovakia 235 359 14,169					

	Applications				
IP office <sup>a</sup>	Patent	Utility model	Trademark class count <sup>b</sup>	Industrial design count <sup>C</sup>	
Slovenia <sup>9,i</sup>			2,714	540	
South Africa	9,711		37,976	2,194	
Spain	2,922	2,439	79,795	18,315	
Sri Lanka	573		10,828	382	
Sudan	285		4,772	381	
Suriname i			1,358	38	
Swaziland <sup>d,f</sup>	2		2,462		
Sweden	2,384		20,730	750	
Switzerland	1,771		89,670	11,125	
Syrian Arab Republic	112		10,473	211	
T F Y R of Macedonia <sup>g</sup>			7,842	938	
Tajikistan <sup>d,e,h</sup>	1	93	5,205	131	
Thailand		2,571	56,131	4,857	
Trinidad and Tobago	136		2,907	110	
Tunisia	583		11,667	1,509	
Turkey	6,848	3,534	227,159	46,305	
Turkmenistan <sup>g,i</sup>		**	4,625	73	
Uganda	16		3,044		
Ukraine	4,095	9,584	69,611	8,793	
United Arab Emirates	1,574	8	18,777	3,978	
United Kingdom	22,059		142,147	10,030	
United Republic of Tanzania <sup>d</sup>	2				
United States of America	605,571		545,587	44,967	
Uruguay <sup>d,e,f,h</sup>	558	54	9,463	57	
Uzbekistan	555	158	12,215	467	
Viet Nam	5,228	478	82,041	3,394	
Yemen	32	1	4,403	46	
Zambia <sup>g</sup>			2,417		
Zimbabwe	13		3,232	**	
World total (2016 estimate)	3,127,900	1,553,300	9,768,200	1,240,600	

- a. Not all listed countries/territories/intergovernmental organizations have an IP office. Also, some offices do not receive applications for some IP rights. Only offices with at least one application filed are presented.
- b. Application class count is the sum of classes specified in applications received directly by an office plus, where applicable, those specified in designations received by the office via the Madrid System.
- c. Application design count is the sum of designs contained in applications received directly by an office plus, where applicable, those contained in designations received by the office via the Hague System.
- d. Data on patent applications are from 2015.
- e. Data on utility model applications are from 2015.
- f. Data on trademark application class count are from 2015.
- g. Only Madrid designation data are available, so the trademark application class count may be incomplete.
- h. Data on application design count are from 2015.

- i. Only Hague designation data are available, so the total application design count may be incomplete.
- j. This country does not have a national trademark or industrial design office. All applications for trademark and design protection are filed at the Benelux Office for Intellectual Property or the European Union Intellectual Property Office.
- k. The Swiss Federal Institute of Intellectual Property acts as the receiving office for patent applications.
- .. indicates either zero, not available or not applicable.

Source: WIPO Statistics Database, September 2017.

International applications by origin via the PCT, Madrid and Hague Systems, 2016

	International applications			
Origin <sup>a</sup>	PCT	Madrid	Hague <sup>b</sup>	
Albania		1	2	
Algeria	13	3		
Andorra	8	4		
Antigua and Barbuda		1		
Argentina	46	2		
Armenia	9	18	1	
Australia	1,836	2,060	6	
Austria	1,422	1,095	371	
Azerbaijan	4	6		
Bahamas	5	15		
Bahrain	6	1		
Barbados	114	3		
Belarus	14	143		
Belgium	1,219	696	158	
Belize	4	20		
Benin				
Bermuda		5		
Bosnia and Herzegovina	4	22	3	
Botswana	1			
Brazil	567	1		
Brunei Darussalam	5			
Bulgaria	58	248	38	
Burundi	2			
Cambodia		1		
Cameroon	2	2		
Canada	2,332	65		
Chile	197	2		
China	43,094	3,820	96	
Colombia	100	39		
Congo	1		·	
Costa Rica	4	1		
Côte d'Ivoire	2		 1	
Croatia	39	139	64	
Cuba	2	2		
Curação		11	·	
Cyprus	37	162	298	
Czech Republic	199	322	143	
Democratic People's Republic of Korea	4	5		
Democratic Republic of the Congo	1		•	
Denmark	1,354	600	344	
Dominica	·	1		
	6	3	·	
Dominican Republic	9		·	
Ecuador			•	
Egypt	43	19	•	

	International applications			
Origin <sup>a</sup>	PCT	Madrid	Hague b	
El Salvador	1			
Estonia	24	50	26	
Fiji		5		
Finland	1,525	537	42	
France	8,210	4,124	1,212	
Gabon	1			
Georgia	13	30	2	
Germany	18,305	7,544	3,917	
Ghana	2		1	
Greece	111	113	21	
Guatemala	2			
Guyana		1		
Honduras	1			
Hungary	178	138	3	
Iceland	56	38	1	
India	1,528	175		
Indonesia	8	1		
Iran (Islamic Republic of)	63	39		
Iraq	1		<u></u>	
Ireland	441	181	4	
Israel	1,838	281	8	
Italy	3,362	3,079	1,125	
Japan	45,214	2,412	860	
Jordan	1			
Kazakhstan	21	90	<u></u>	
Kenya	4	11	<del></del>	
Kuwait	3			
Kyrgyzstan		5		
Lao People's Democratic Republic	2			
Latvia	24	98	3	
Lebanon	6	1		
Liechtenstein	249	90		
Lithuania	28	114	9	
Luxembourg	431	466	<u></u>	
Madagascar		3		
Malawi	1			
Malaysia	189	4	<u></u> 1	
Malta	87	53	3	
Marshall Islands		2		
Mauritius	4	9		
Mexico	289	74		
	289			
Micronesia (Federated States of)	13			
Monaco Mongolia	13	2		
ivioligolia	<u>'</u>			

	International applications			
Origin <sup>a</sup>	PCT	Madrid		
Montenegro	3	21		
Morocco	35	111	15	
Mozambique	1			
Namibia	2			
Netherlands	4,676	1,492	1,317	
New Zealand	308	409	3	
Nigeria	4			
Norway	653	300	143	
Oman	8		1	
Panama	60	8		
Peru	24			
Philippines	29	28		
Poland	344	447	173	
Portugal	184	220	35	
Qatar	14			
Republic of Korea	15,552	941	1,882	
Republic of Moldova	10	47	7	
Romania	44	97	8	
Russian Federation	896	1,178	5	
Saint Vincent and the Grenadines		1		
Samoa	1			
San Marino	8	9		
Saudi Arabia	295			
Senegal	7			
Serbia	15	240	76	
Seychelles	3	12		
Singapore	864	490	22	
Slovakia	55	121	12	
Slovenia	69	169	85	
South Africa	287	4	1	
Spain	1,506	1,327	238	
Sri Lanka	16	1		
Suriname		1		
Sweden	3,720	695	492	
Switzerland	4,366	3,068	2,555	
Syrian Arab Republic	2	7		
T F Y R of Macedonia	3	62	3	
Thailand	155	6		
Trinidad and Tobago	38			
Tunisia	6	27	<u></u>	
Turkey	1,065	1,281	577	
Ukraine	162	409	97	
United Arab Emirates	81	19		
United Kingdom	5,501	3,012	330	
United States of America	56,590	7,730	1,410	

Origin <sup>a</sup>	Internat		
	PCT	Madrid	Hague <sup>b</sup>
Uruguay	14		
Uzbekistan	2	4	
Venezuela (Bolivarian Republic of)	1	2	**
Viet Nam	10	100	15
Yemen	1		**
Zimbabwe	2		
Others/Unknown	210	15	200
Total	232,904	53,493	18,716

a. Origin is defined as the country/territory of the stated address of residence of the applicant. Where more than one applicant is listed in an application, the origin is based on the first named applicant. Only origins with at least one international application filed in 2016 are presented.

Source: WIPO Statistics Database, September 2017.

b. Data represent the number of designs contained in Hague international applications.

<sup>..</sup> indicates zero or not applicable.

## Statistical resources

#### **IP Statistics Data Center**

The WIPO IP Statistics Data Center is a free online service for accessing WIPO's statistics on patents, utility models, trademarks, industrial designs and the use of the PCT, Madrid and Hague Systems. Users can select from a wide range of indicators to view or download data. This tool is intended for IP professionals, researchers and policymakers and can be accessed via the IP Statistics webpage: <a href="https://www.wipo.int/ipstats">www.wipo.int/ipstats</a>.

#### **IP Statistical Country Profiles**

Visit WIPO's IP Statistical Country Profile webpages for more statistics and longer time series for patent, utility model, trademark and industrial design data. Like WIPO's IP Statistics Data Center, this service can be accessed via the IP Statistics webpage: www.wipo.int/ipstats.

The IP Statistical Country Profiles are also available in French and Spanish.

# **Glossary**

#### Class count

The number of classes specified in a trademark application or registration. In the international trademark system and at certain national and regional offices, an applicant can file a trademark application that specifies one or more of the 45 goods and services classes of the Nice Classification. Offices use a single-or multi-class filing system. For example, the offices of Japan, the Republic of Korea and the United States of America (U.S.) as well as many European IP offices have multi-class filing systems. The offices of Brazil, Malaysia and Mexico follow a single-class filing system, requiring a separate application for each class in which an applicant seeks trademark protection. To capture the differences in application numbers across offices, it is useful to compare their respective application and registration class counts.

## **Design count**

The number of designs contained in an industrial design application or registration. Under the Hague System for the International Registration of Industrial Designs, it is possible for an applicant to obtain protection for up to 100 industrial designs for products belonging to one and the same class by filing a single application. Some national or regional IP offices allow applications to contain more than one design for the same product or within the same class, while others allow only one design per application. In order to capture the differences in application numbers across offices, it is useful to compare their respective application and registration design counts.

## Hague international application

An application for the international registration of an industrial design filed under the WIPO-administered Hague System.

## **Hague System**

The abbreviated form of the Hague System for the International Registration of Industrial Designs. The System comprises several international treaties: the Hague Act of 1960 and the Geneva Act of 1999. The Hague System makes it possible for an applicant to register up to 100 industrial designs in multiple jurisdictions by filing a single application with the International Bureau of WIPO. It simplifies multinational registration by reducing the requirement to file separate applications with each IP office. The System also simplifies subsequent

management of the industrial design, since it is possible to record changes or renew the registration through a single procedural step.

## Industrial design

Industrial designs are applied to a wide variety of industrial products and handicrafts. They refer to the ornamental or aesthetic aspects of a useful article, including compositions of lines or colors or any three-dimensional forms that give a special appearance to a product or handicraft. The holder of a registered industrial design has exclusive rights against unauthorized copying or imitation of the design by third parties. Industrial design registrations are valid for a limited period. The term of protection is usually 15 years for most jurisdictions. However, differences in legislation exist, notably in China, which provides for a 10-year term from the application date.

#### In force

Refers to IP rights that are currently valid or, in the case of trademarks, active. To remain in force, IP protection must be maintained.

### Intellectual property (IP)

Creations of the mind: inventions, literary and artistic works, and symbols, names, images and designs used in commerce. IP is divided into two categories: industrial property – which includes patents, utility models, trademarks, industrial designs and geographical indications of source – and copyright, which includes literary and artistic works such as novels, poems, plays, films, musical works, drawings, paintings, photographs, sculptures and architectural designs. Rights related to copyright include those of performing artists in their performances, those of producers of sound recordings in their recordings and those of broadcasters in their radio and television programs.

#### Madrid international application

An application for international registration under the Madrid System, which is a request for protection of a trademark in one or more of the Madrid members. Such international applications must be based on a basic mark; in other words, the applicant must already have registered or applied to register the mark with the national or regional office of a Madrid member.

## **Madrid System**

The abbreviated form of the Madrid System for the International Registration of Marks, established under the Madrid Agreement and the Madrid Protocol and administered by WIPO. The Madrid System makes it possible for an

applicant to register a trademark in a large number of countries by filing a single application at their national or regional IP office if it is party to the System. The Madrid System simplifies the process of multinational trademark registration by reducing the requirement to file separate applications at each office. It also simplifies subsequent management of the mark, since it is possible to record changes or renew the registration through a single procedural step. Registration through the Madrid System does not create an international trademark, and the decision to register or refuse the trademark remains in the hands of each national or regional office. Trademark rights are limited to the jurisdiction of each office.

#### **Patent**

A set of exclusive rights granted by law to applicants for inventions that are new, non-obvious and commercially applicable. A patent is valid for a limited period of time (generally 20 years), during which patent holders can commercially exploit their inventions on an exclusive basis. In return, applicants are obliged to disclose their inventions to the public in a manner that enables others skilled in the art to replicate the invention. The patent system is designed to encourage innovation by providing innovators with time-limited exclusive legal rights, thus enabling them to appropriate the returns from their innovative activity.

## PCT international application

A patent application filed through the WIPO-administered Patent Cooperation Treaty (PCT System).

#### **PCT System**

The PCT, an international treaty administered by WIPO, facilitates the acquisition of patent rights in a large number of jurisdictions. The PCT System simplifies the process of multiple national patent filings by reducing the requirement to file a separate application in each jurisdiction. However, the decision whether to grant patent rights remains in the hands of national and regional patent offices, and patent rights remain limited to the jurisdiction of the patent-granting authority. The PCT international application process starts with the international phase, during which an international search and possibly a preliminary examination are performed, and concludes with the national phase, during which a national or regional patent office decides on the patentability of an invention according to national law.

#### Resident

For statistical purposes, a resident application refers to an application filed with the IP office of, or acting for, the state or jurisdiction in which the first named applicant in the application has residence. For example, an application filed with the Japan Patent Office (JPO) by a resident of Japan is considered a resident application for the JPO. Resident applications are sometimes referred to as "domestic applications". A resident grant/registration is an IP right issued on the basis of a resident application.

#### **Trademark**

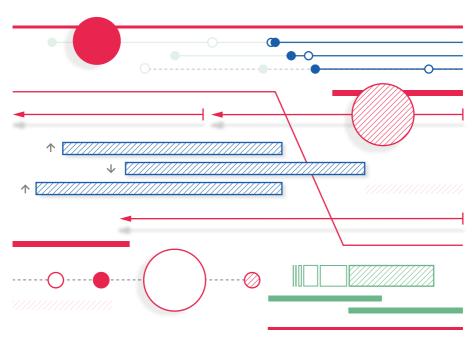
A sign used by the owner of certain products or the provider of certain services to distinguish them from the products or services of other companies. A trademark can consist of words and combinations of words (for instance, slogans), names, logos, figures and images, letters, numbers, sounds and moving images, or a combination thereof. The procedures for registering trademarks are governed by the legislation and procedures of national and regional IP offices. Trademark rights are limited to the jurisdiction of the IP office that registers the trademark. Trademarks can be registered by filing an application at the relevant national or regional office(s) or by filing an international application through the Madrid System.

#### **Utility model**

A special form of patent right granted by a state or jurisdiction to an inventor or the inventor's assignee for a fixed period of time. The terms and conditions for granting a utility model are slightly different from those for normal patents (including a shorter term of protection and less stringent patentability requirements). The term can also describe what are known in certain countries as "petty patents", "short-term patents" or "innovation patents".

## **World Intellectual Property Organization (WIPO)**

A United Nations specialized agency dedicated to the promotion of innovation and creativity for the economic, social and cultural development of all countries through a balanced and effective international IP system. WIPO was established in 1967 with a mandate to promote the protection of IP throughout the world through cooperation among states and in collaboration with other international organizations.



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