

Applications

Application by IPR type

(unit: cases)

Category	2015	2016	2017	2018	2019
Patents	213,694	208,830	204,775	209,992	218,975
Utility models	8,711	7,767	6,811	6,232	5,447
Subtotal	222,405	216,597	211,586	216,224	224,422
Designs	67,954 (70,190)	64,678 (66,728)	62,528 (64,986)	62,823 (65,434)	64,111 (66,637)
Trademarks	185,443 (239,334)	170,347 (204,012)	168,556 (202,539)	185,968 (232,109)	204,998 (252,309)
Total	475,802 (533,929)	451,622 (696,167)	442,670 (485,922)	465,015 (513,767)	493,531 (543,368)

Note: Figures in parentheses include multiple applications.

PCT applications

(unit: cases)

Category	2015	2016	2017	2018	2019
Number of applications	14,594	15,595	15,790	16,991	18,885
Growth rate	11.1%	6.8%	1.2%	7.6%	11.1%

International trademark applications under the Madrid System

(unit: cases)

Category	2015	2016	2017	2018	2019
Korea as office of origin	990	942	1,053	1,322	1,419
Korea as designated office	12,931	11,259	14,362	14,373	16,509

International design applications under the Hague System

(unit: cases)

Category	2016	2017	2018	2019
Korea as office of origin	104	133	116	178
Korea as designated office	981	925	857	928

Comparison of domestic and foreign applications

(unit: cases)

Category			2015	2016	2017	2018	2019
Patents	Domestic	Cases	167,273	163,424	159,095	162,576	171,606
		Ratio	78.3%	78.3%	77.7%	77.40%	78.4%
	Foreign	Cases	46,421	45,406	45,680	47,416	47,396
		Ratio	21.7%	21.7%	22.3%	22.60%	21.6%
	Total		213,694	208,830	204,775	209,992	218,975
	Utility models	Domestic	Cases	8,294	7,395	6,448	5,768
Ratio			95.2%	95.2%	94.7%	92.60%	91.3%
Foreign		Cases	417	372	363	464	472
		Ratio	4.8%	4.8%	5.3%	7.40%	8.7%
Total		8,711	7,767	6,811	6,232	5,447	
Designs		Domestic	Cases	64,081 (65,895)	61,491 (62,618)	59,085 (60,379)	58,699 (60,021)
	Ratio		94.3% (91.3%)	95.1% (93.8%)	94.5% (92.9%)	93.4% (91.7%)	93.3% (91.8%)
	Foreign	Cases	3,873 (6,295)	3,187 (4,110)	3,443 (4,607)	4,124 (5,413)	4,234 (5,433)
		Ratio	5.7% (8.7%)	4.9% (6.2%)	5.5% (7.1%)	6.6% (8.3%)	6.7% (8.2%)
	Total		67,954 (72,190)	64,678 (66,728)	62,528 (64,986)	62,823 (65,434)	64,111 (66,637)
	Trademarks	Domestic	Cases	160,033 (191,485)	157,107 (183,612)	155,674 (181,229)	170,545 (207,958)
Ratio			86.3% (80.0%)	92.2% (90.0%)	92.4% (89.5%)	91.7% (89.6%)	92.8% (90.6%)
Foreign		Cases	25,410 (47,849)	13,240 (20,400)	12,882 (21,310)	15,423 (24,151)	14,794 (23,779)
		Ratio	13.7% (20.0%)	7.8% (10.0%)	7.6% (10.5%)	8.3% (10.4%)	7.2% (9.4%)
Total		185,443 (239,334)	170,347 (204,012)	168,556 (202,539)	185,968 (232,109)	204,998 (252,309)	
Total		Domestic	Cases	399,681 (257,380)	389,417 (417,049)	380,302 (407,151)	397,588 (436,323)
	Ratio		84.0% (48.2%)	86.2% (85.6%)	85.9% (85.0%)	85.5% (84.9%)	86.5% (85.8%)
	Foreign	Cases	76,121 (54,144)	62,205 (70,288)	62,368 (71,960)	67,427 (77,444)	66,869 (77,053)
		Ratio	16.0% (10.1%)	13.8% (14.4%)	14.1% (15.0%)	14.5% (15.1%)	13.5% (14.2%)
	Total		475,802 (533,929)	451,622 (487,337)	442,670 (479,111)	465,015 (513,767)	493,531 (543,368)

Note: Figures in parentheses include multiple applications.

Patent and utility model applications by technological field in 2019

(unit: cases)

Classification	Patents			Utility models		
	Domestic	Foreign	Subtotal	Domestic	Foreign	Subtotal
Electrical machinery, apparatus, energy	12,426	3,125	15,551	276	43	319
Audio-visual technology	5,329	1,356	6,685	108	15	123
Telecommunications	2,794	687	3,481	33	4	37
Digital communication	7,975	2,633	10,608	5	-	5
Basic communication processes	474	400	874	-	1	1
Computer technology	9,531	2,637	12,168	48	13	61
IT methods for management	10,321	534	10,855	26	5	31
Semiconductors	7,346	4,023	11,369	9	6	15
Optics	3,004	2,152	5,156	66	20	86
Measurement	6,256	1,618	7,874	85	8	93
Analysis of biological materials	621	250	871	2	2	4
Control	3,969	459	4,428	74	5	79
Medical technology	8,174	1,899	10,073	265	42	307
Organic fine chemistry	3,869	2,355	6,224	-	-	-
Biotechnology	3,071	1,926	4,997	-	-	-
Pharmaceuticals	2,838	1,847	4,685	-	-	-
Macromolecular chemistry, polymers	1,979	1,785	3,764	2	-	2
Food chemistry	3,928	284	4,212	26	4	30
Basic materials chemistry	2,841	1,816	4,657	15	3	18
Materials, metallurgy	2,731	1,462	4,193	8	2	10
Surface technology, coating	2,148	1,495	3,643	25	8	33
Micro-structural and nano-technology	36	27	63	-	-	-
Chemical engineering	3,644	950	4,594	85	16	101
Environmental technology	3,436	470	3,906	98	9	107
Handling	4,422	901	5,323	331	24	355
Machine tools	3,778	1,101	4,879	153	28	181
Engines, pumps, turbines	2,471	1,073	3,544	60	13	73
Textile and paper machines	1,733	619	2,352	30	3	33
Other special machines	6,729	1,463	8,192	319	12	331
Thermal processes and apparatus	3,480	375	3,855	132	13	145
Mechanical elements	2,946	1,070	4,016	141	38	179
Transport	8,969	1,269	10,238	318	15	333

(unit: cases)

Classification	Patents			Utility models		
	Domestic	Foreign	Subtotal	Domestic	Foreign	Subtotal
Furniture, games	6,078	572	6,650	729	56	785
Other consumer goods	6,216	1,020	7,236	704	38	742
Civil engineering	8,886	513	9,399	499	13	512
Others	7,157	1,203	8,360	303	13	316
Total	171,606	47,369	218,975	4,975	472	5,447

Note: Figures for 2019 are preliminary.

Patent applications in biotechnology

(unit: cases)

Category	2015		2016		2017		2018		2019	
	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio
Domestic	5,601	74.0%	6,700	75.1%	7,328	74.9%	7,239	72.2%	7,269	71.0%
Foreign	1,972	26.0%	2,222	24.9%	2,462	25.1%	2,794	27.8%	2,973	29.0%
Total	7,572	100%	8,922	100%	9,790	100%	10,033	100%	10,242	100%

Note1: Figures for 2019 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.

Patent applications in business methods

(unit: cases)

Category	2015		2016		2017		2018		2019	
	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio
Domestic	8,621	94.4%	9,381	94.7%	8,852	95.2%	9,754	94.8%	10,321	95.1%
Foreign	510	5.6%	522	5.3%	446	4.8%	536	5.2%	534	4.9%
Total	9,131	100%	9,903	100%	9,298	100%	10,290	100%	10,855	100%

Note1: Figures for 2019 are preliminary.

Note2: Based on the Ninth Edition of the International Patent Classification.

Applications by residents of foreign countries/regions in 2019

(unit: cases)

Countries/Regions	Patent & Utility models		Designs		Trademarks		Total
	Domestic	PCT	Domestic	Hague	Domestic	Madrid	
United States of America	1,674	11,472	1,386 (1,985)	101 (273)	3,652 (6,478)	3,256 (5,845)	21,541 (27,727)
Japan	4,426	10,597	977 (1,160)	114 (238)	2,053 (4,111)	1,807 (3,836)	19,974 (24,368)
China	739	3,159	845 (932)	39 (79)	5,055 (6,127)	2,585 (4,112)	12,422 (15,148)
Germany	744	3,489	113 (147)	110 (386)	243 (511)	1,731 (5,245)	6,430 (10,522)
France	173	1,377	135 (178)	97 (228)	363 (505)	1,013 (2,613)	3,158 (5,074)
Switzerland	166	1,144	107 (138)	85 (272)	241 (382)	946 (2,342)	2,689 (4,444)
United Kingdom	103	963	61 (102)	30 (69)	522 (1,027)	739 (1,983)	2,418 (4,247)
Italy	65	400	41 (60)	136 (269)	157 (231)	861 (1,736)	1,660 (2,761)
Netherlands	104	887	177 (206)	39 (172)	70 (156)	286 (635)	1,563 (2,160)
Taiwan, Province of China	1,149	105	61 (68)	-	475 (709)	-	1,790 (2,031)
Sweden	76	716	45 (101)	17 (40)	61 (124)	271 (718)	1,186 (1,775)
Australia	11	215	33 (34)	-	152 (195)	358 (765)	769 (1,220)
Singapore	54	114	6 (17)	4 (6)	209 (395)	265 (622)	652 (1,208)
Canada	59	356	36 (59)	3 (6)	285 (551)	64 (102)	803 (1,133)
Finland	18	231	1 (1)	9 (27)	105 (384)	116 (358)	480 (1,019)
Denmark	12	171	29 (29)	26 (65)	31 (77)	212 (524)	481 (878)
Spain	11	119	5 (6)	5 (8)	75 (97)	290 (543)	505 (784)
Austria	88	247	1 (1)	3 (9)	12 (31)	166 (484)	517 (860)
Belgium	28	296	2 (3)	5 (12)	19 (27)	140 (284)	490 (650)
Cayman Islands	7	386	23 (26)	-	63 (228)	14 (46)	493 (693)
Israel	60	300	33 (41)	2 (4)	35 (50)	91 (150)	521 (605)
Russian Federation	5	89	-	2 (2)	28 (34)	138 (322)	262 (452)
Norway	4	114	3 (4)	6 (14)	7 (12)	86 (330)	220 (478)
Thailand	7	44	9 (12)	-	133 (184)	46 (53)	239 (300)
Luxembourg	8	118	42 (47)	1 (1)	21 (37)	70 (141)	260 (352)
Ireland	33	121	5 (5)	1 (2)	39 (67)	68 (102)	267 (330)
Turkey	4	35	13 (14)	1 (2)	12 (17)	110 (230)	175 (302)
New Zealand	7	30	8 (8)	-	36 (75)	70 (130)	151 (250)
Viet Nam	3	3	-	-	42 (53)	65 (134)	113 (193)
Czech Republic	1	24	1 (1)	-	7 (13)	51 (197)	84 (236)
Virgin Islands (British)	-	4	-	-	63 (169)	19 (34)	86 (207)
Poland	7	35	-	1 (1)	5 (7)	75 (157)	123 (207)
India	12	121	5 (5)	-	21 (21)	33 (52)	192 (211)
Liechtenstein	8	28	6 (16)	7 (28)	-	43 (78)	92 (158)

(unit: cases)

Countries/Regions	Patent & Utility models		Designs		Trademarks		Total
	Domestic	PCT	Domestic	Hague	Domestic	Madrid	
Cyprus	2	7	-	2 (2)	4 (6)	37 (103)	52 (120)
Malaysia	11	10	3 (3)	-	56 (59)	4 (10)	84 (93)
Saudi Arabia	-	105	-	-	9 (9)	3 (7)	117 (121)
Mexico	-	23	1 (1)	-	35 (51)	7 (9)	66 (84)
Indonesia	1	-	4 (4)	-	41 (58)	6 (9)	52 (72)
Portugal	-	24	1 (1)	1 (3)	9 (10)	25 (39)	60 (77)
Barbados	35	15	5 (5)	-	15 (30)	1 (1)	71 (86)
Greece	1	34	1 (1)	1 (1)	8 (18)	13 (27)	58 (82)
Others	2	-	-	-	35 (61)	-	37 (63)
Philippines	-	2	-	-	23 (39)	12 (18)	37 (59)
United Arab Emirates	-	5	-	-	34 (44)	5 (5)	44 (54)
Malta	-	11	-	-	4 (7)	20 (48)	35 (66)
Hungary	1	14	1 (3)	2 (2)	2 (4)	16 (44)	36 (68)
Ukraine	-	2	1 (1)	3 (3)	-	29 (48)	35 (54)
Bulgaria	-	3	-	1 (1)	-	26 (56)	30 (60)
Monaco	-	-	-	-	9 (9)	10 (57)	19 (66)
Chile	2	7	-	-	31 (34)	-	40 (43)
Brazil	-	18	-	-	17 (30)	-	35 (48)
Estonia	-	2	-	1 (1)	2 (2)	13 (37)	18 (42)
Romania	-	2	-	-	1 (1)	10 (43)	13 (46)
Slovenia	1	2	-	1 (1)	-	16 (33)	20 (37)
Jersey(U.K.)	-	3	-	-	-	11 (37)	14 (40)
Latvia	-	2	-	-	-	18 (29)	20 (31)
Slovakia	-	8	-	-	-	10 (28)	18 (36)
Argentina	-	1	-	-	18 (22)	1 (1)	20 (24)
South Africa	-	14	2 (2)	-	10 (13)	1 (1)	27 (30)
Croatia	-	2	-	-	2 (2)	13 (23)	17 (27)
Lithuania	-	10	-	-	1 (1)	10 (17)	21 (28)
Belarus	2	-	-	-	7 (7)	6 (13)	15 (22)
Qatar	-	1	-	-	13 (20)	-	14 (21)
Uzbekistan	9	1	-	-	10 (10)	1 (1)	21 (21)
Antigua and Barbuda	-	28	-	-	1 (1)	-	29 (29)
The Hong Kong Special Administrative Region of the People's Republic of China	1	3	-	-	12 (14)	-	16 (18)

(unit: cases)

Countries/Regions	Patent & Utility models		Designs		Trademarks		Total
	Domestic	PCT	Domestic	Hague	Domestic	Madrid	
Iceland	-	1	-	1 (1)	-	11 (14)	13 (16)
Morocco	-	-	-	-	-	8 (20)	8 (20)
Panama	-	-	-	-	7 (14)	-	7 (14)
Kazakhstan	-	1	-	-	7 (7)	2 (4)	10 (12)
Serbia	-	-	-	1 (1)	-	5 (14)	6 (15)
Pakistan	1	1	1 (1)	-	6 (10)	-	9 (13)
Iran (Islamic Republic of)	1	-	-	-	-	6 (12)	7 (13)
Egypt	-	-	-	-	3 (9)	3 (3)	6 (12)
Bermuda	-	2	-	-	4 (4)	3 (5)	9 (11)
Republic of Moldova	-	-	-	-	-	8 (9)	8 (9)
Colombia	-	-	-	-	6 (8)	1 (1)	7 (9)
Tunisia	-	-	-	-	-	8 (8)	8 (8)
Lebanon	-	-	-	-	7 (9)	-	7 (9)
Seychelles	-	1	-	-	5 (8)	-	6 (9)
Kyrgyzstan	-	-	-	-	-	1 (12)	1 (12)
Mongolia	1	-	-	-	4 (4)	1 (3)	6 (8)
The Macao Special Administrative Region of the People's Republic of China	-	1	1 (1)	-	4 (5)	-	6 (7)
Cuba	-	2	-	-	-	5 (5)	7 (7)
Kuwait	-	1	-	-	5 (6)	-	6 (7)
Peru	-	1	-	-	4 (7)	-	5 (8)
Costa Rica	1	2	-	-	3 (5)	-	6 (8)
Belize	-	1	-	-	5 (5)	-	6 (6)
Marshall Islands	-	-	-	-	-	3 (7)	3 (7)
Samoa	2	1	-	-	2 (4)	-	5 (7)
Georgia	-	-	-	-	-	3 (5)	3 (5)
Armenia	-	-	-	-	1 (1)	3 (3)	4 (4)
Sri Lanka	-	2	-	-	1 (1)	2 (2)	5 (5)
Brunei Darussalam	-	1	-	-	-	2 (3)	3 (4)
Bahamas	-	-	-	-	1 (5)	-	1 (5)
Bahrain	-	2	-	-	2 (2)	-	4 (4)
Saint Kitts and Nevis	-	2	-	-	2 (2)	-	4 (4)
Andorra	-	1	-	-	2 (2)	-	3 (3)
Myanmar	2	-	-	-	1 (1)	-	3 (3)

(unit: cases)

Countries/Regions	Patent & Utility models		Designs		Trademarks		Total
	Domestic	PCT	Domestic	Hague	Domestic	Madrid	
Nigeria	-	-	2 (2)	-	-	-	2 (2)
Gibraltar	-	-	-	-	-	2 (2)	2 (2)
Lao People's Democratic Republic	-	-	-	-	-	2 (2)	2 (2)
The former Yugoslav Republic of Macedonia	-	-	-	-	-	1 (3)	1 (3)
Montenegro	-	-	-	-	-	1 (3)	1 (3)
Cameroon	-	-	-	-	-	1 (2)	1 (2)
Libyan Arab Jamahiriya	-	1	-	-	1 (1)	-	2 (2)
Ghana	-	-	-	-	1 (2)	-	1 (2)
Maldives	-	-	-	-	1 (2)	-	1 (2)
Ethiopia	-	-	-	-	1 (1)	-	1 (1)
Commonwealth of Puerto Rico	-	-	-	-	1 (1)	-	1 (1)
Namibia	-	-	-	-	1 (1)	-	1 (1)
Tajikistan	-	-	-	-	1 (1)	-	1 (1)
Netherlands Antilles	-	-	-	-	1 (1)	-	1 (1)
Liberia	-	-	-	-	1 (1)	-	1 (1)
Guernsey	-	-	-	-	-	1 (1)	1 (1)
Jordan	-	2	-	-	-	-	2 (2)
Anguilla	-	-	1 (1)	-	-	-	1 (1)
Mauritius	-	-	-	-	-	1 (1)	1 (1)
Trinidad and Tobago	-	-	1 (1)	-	-	-	1 (1)
Azerbaijan	-	-	-	-	-	1 (1)	1 (1)
Syrian Arab Republic	-	-	-	-	-	1 (1)	1 (1)
Oman	-	-	-	-	1 (1)	-	1 (1)
Cambodia	-	-	-	-	1 (1)	-	1 (1)
Nepal	1	-	-	-	-	-	1 (1)
European Patent Office (EPO)	1	-	-	-	-	-	1 (1)
Bangladesh	1	-	-	-	-	-	1 (1)
San Marino	-	1	-	-	-	-	1 (1)
Total	9,945	37,896	4,234 (5,433)	858 (2,229)	14,794 (23,779)	16,495 (35,793)	84,222 (115,075)

Note: Figures in parentheses include multiple applications.

Examinations

Patents and utility models

(unit: cases)

Category		2015	2016	2017	2018	2019	
Patents	First Action	Approval of registration	10,433	7,872	9,891	9,126	9,637
		Notice of preliminary rejection or amendment	149,484	163,347	158,013	148,772	158,527
		Other notices	947	991	1,012	1,202	1,613
		Withdrawal or abandonment	3,909	2,582	2,196	2,190	2,594
		Total	164,773	174,792	171,112	161,290	172,371
	Final Decisions	Approval of registration	92,748	101,678	110,408	106,129	115,302
		Rejection or cancellation	52,963	66,055	62,869	55,613	50,944
		Withdrawal abandonment, annulment, or rejection	3,909	4,320	3,841	3,636	3,914
		Total	149,620	172,053	177,118	165,378	170,160
	Utility models	First Action	Approval of registration	425	317	337	235
Notice of preliminary rejection or amendment			6,856	6,848	6,161	5,258	4,739
Other notices			39	25	13	12	21
Withdrawal or abandonment			249	131	122	113	109
Total			7,569	7,321	6,633	5,618	5,094
Final Decisions		Approval of registration	3,204	2,935	3,040	2,619	2,329
		Rejection or cancellation	3,775	4,214	3,729	3,282	2,815
		Withdrawal abandonment, annulment, or rejection	249	268	234	196	217
		Total	7,228	7,417	7,003	6,097	5,361

Designs and trademarks

(unit: cases)

Category		2015	2016	2017	2018	2019		
Designs	First Action	Publication/approval of registration	27,800 (28,987)	31,398 (32,755)	29,453 (30,598)	27,559 (28,708)	31,029 (32,218)	
		Notice of preliminary rejection	38,041 (40,394)	31,540 (33,951)	30,275 (32,647)	29,654 (31,962)	29,303 (31,778)	
		Other notices	-	-	-	-	-	
		Total	65,841 (69,381)	62,938 (66,706)	59,728 (63,245)	57,213 (60,670)	60,332 (63,996)	
	Final Decisions	Approval of registration	57,006 (59,068)	55,783 (58,302)	51,166 (53,480)	50,161 (52,750)	53,987 (56,989)	
		Rejection	9,404 (10,072)	8,396 (9,496)	7,190 (7,978)	7,356 (8,089)	7,343 (8,055)	
		Total	66,410 (69,140)	64,179 (67,798)	58,356 (61,458)	57,517 (60,839)	61,330 (65,044)	
	Trademarks	First Action	Publication/approval of registration	96,005 (108,545)	98,921 (112,521)	94,490 (107,033)	96,236 (109,983)	98,557 (112,244)
			Notice of preliminary rejection	68,578 (90,758)	73,377 (106,332)	69,393 (97,656)	73,376 (106,978)	77,623 (116,298)
			Other notices	-	-	-	-	-
Final Decisions		Total	164,583 (199,303)	172,298 (218,853)	163,883 (204,689)	169,612 (216,961)	176,180 (228,542)	
		Approval of registration	128,500 (154,670)	136,948 (173,024)	133,378 (166,963)	133,359 (168,237)	145,794 (187,392)	
		Rejection	31,745 (38,463)	33,015 (41,813)	31,773 (39,414)	29,873 (36,697)	32,014 (41,658)	
Total	160,245 (193,133)	169,963 (214,837)	165,151 (206,377)	163,232 (204,934)	177,808 (229,050)			

Note: Figures in parentheses include multiple applications.

Average first office action pendency

(unit: month)

Category	2015	2016	2017	2018	2019
Patents / Utility models	10.0	10.6	10.4	10.3	10.8
Trademarks	4.7	4.8	5.0	5.5	6.8
Designs	4.4	4.7	4.9	4.9	5.4

Average total pendency

(unit: month)

Category	2015	2016	2017	2018	2019
Patents / Utility models	16.0	16.2	15.9	15.8	15.6
Trademarks	10.0	9.6	9.8	10.4	11.1
Designs	68	5.9	6.2	6.5	6.9

PCT international search reports and preliminary examinations undertaken by KIPO

(unit: cases)

Category	2015	2016	2017	2018	2019
International Search Reports	28,468	28,176	25,955	24,123	27,167
International Preliminary Examinations	208	209	169	131	131

Note: Based on KIPO data

Registrations

Registrations by IPR type

(unit: cases)

Category	2015	2016	2017	2018	2019
Patents	101,873	108,875	120,662	119,014	125,661
Utility models	3,253	2,854	2,993	2,715	2,417
Subtotal	105,126	111,729	123,655	121,729	128,078
Designs	54,551	55,602	49,293	49,905	52,850
Trademarks	114,746	119,255	116,704	115,025	125,594
Total	274,423	286,586	289,652	286,659	306,522

Note: Trademark registration renewals are excluded.

Comparison of domestic and foreign registrations

(unit: cases)

Category			2015	2016	2017	2018	2019
Patents	Domestic	Cases	76,319	82,400	90,847	89,229	94,852
		Ratio	74.9%	75.7%	75.3%	75.0%	75.5%
	Foreign	Cases	25,554	26,475	29,815	29,785	30,809
		Ratio	25.1%	24.3%	24.7%	25.0%	24.5%
	Total		101,873	108,875	120,662	119,014	125,661
	Utility models	Domestic	Cases	3,073	2,694	2,810	2,521
Ratio			94.5%	94.4%	93.9%	92.9%	92.6%
Foreign		Cases	180	160	183	194	179
		Ratio	5.5%	5.6%	6.1%	7.1%	7.4%
Total		3,253	2,854	2,993	2,715	2,417	
Designs		Domestic	Cases	49,933	50,242	44,052	44,150
	Ratio		91.5%	90.4%	89.4%	88.5%	87.1%
	Foreign	Cases	4,618	5,360	5,241	5,755	6,839
		Ratio	8.5%	9.6%	10.6%	11.5%	12.9%
	Total		54,551	55,602	49,293	49,905	52,850

(unit: cases)

Category			2015	2016	2017	2018	2019
Trademarks	Domestic	Cases	95,484	99,934	96,993	94,532	102,333
		Ratio	83.2%	83.8%	83.1%	82.2%	81.5%
	Foreign	Cases	19,262	19,321	19,711	20,493	23,261
		Ratio	16.8%	16.2%	16.9%	17.8%	18.5%
	Total		114,746	119,255	116,704	115,025	125,594
	Total	Domestic	Cases	224,809	235,270	234,702	230,432
Ratio			81.9%	82.1%	81.0%	80.4%	80.1%
Foreign		Cases	49,614	51,316	54,950	56,227	61,088
		Ratio	18.1%	17.9%	19.0%	19.6%	19.9%
Total		274,423	286,586	289,652	286,659	306,522	

Patent and utility model registrations by technological field in 2019

(unit: cases)

Classification	Patents			Utility models		
	Domestic	Foreign	Subtotal	Domestic	Foreign	Subtotal
Electrical machinery, apparatus, energy	7,552	2,387	9,939	179	9	188
Audio-visual technology	3,340	1,110	4,450	57	5	62
Telecommunications	2,174	450	2,624	13	1	14
Digital communication	3,621	1,756	5,377	1	-	1
Basic communication processes	370	277	647	-	-	-
Computer technology	5,130	2,104	7,234	15	14	29
IT methods for management	3,500	241	3,741	8	-	8
Semiconductors	4,448	2,773	7,221	8	6	14
Optics	2,688	1,573	4,261	14	5	19

(unit: cases)

Classification	Patents			Utility models		
	Domestic	Foreign	Subtotal	Domestic	Foreign	Subtotal
Measurement	4,591	1,168	5,759	70	5	75
Analysis of biological materials	406	124	530	2	-	2
Control	1,965	312	2,277	30	1	31
Medical technology	3,693	945	4,638	124	5	129
Organic fine chemistry	2,052	1,319	3,371	1	-	1
Biotechnology	1,987	772	2,759	2	-	2
Pharmaceuticals	1,481	715	2,196	-	-	-
Macromolecular chemistry, polymers	1,091	1,192	2,283	-	-	-
Food chemistry	2,036	118	2,154	8	-	8
Basic materials chemistry	1,931	1,269	3,200	5	-	5
Materials, metallurgy	2,133	986	3,119	5	1	6
Surface technology, coating	1,339	957	2,296	10	1	11
Micro-structural and nano-technology	53	39	92	-	-	-
Chemical engineering	2,260	620	2,880	42	5	47
Environmental technology	2,124	365	2,489	37	6	43
Handling	2,575	594	3,169	155	14	169
Machine tools	2,519	755	3,274	94	11	105
Engines, pumps, turbines	1,780	963	2,743	28	5	33
Textile and paper machines	1,227	473	1,700	13	2	15
Other special machines	3,944	928	4,872	179	6	185
Thermal processes and apparatus	2,031	242	2,273	66	5	71
Mechanical elements	1,889	758	2,647	68	20	88
Transport	5,190	1,155	6,345	134	8	142
Furniture, games	3,092	386	3,478	319	12	331
Other consumer goods	2,786	544	3,330	284	28	312
Civil engineering	5,725	387	6,112	267	4	271
Total	94,852	30,809	125,661	2,238	179	2,417

Note: Figures for 2019 are preliminary.

Patent registrations in biotechnology

(unit: cases)

Category	2015		2016		2017		2018		2019	
	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio
Domestic	2,917	77.3%	3,507	78.6%	4,709	80.9%	4,524	79.3%	4,534	78.4%
Foreign	857	22.7%	955	21.4%	1,111	19.1%	1,149	20.3%	1,249	21.6%
Total	3,774	100%	4,462	100%	5,820	100%	5,673	100%	5,783	100%

Note1: Figures for 2019 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.

Patent registrations in business methods

(unit: cases)

Category	2015		2016		2017		2018		2019	
	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio	Cases	Ratio
Domestic	2,023	92.9%	3,145	93.9%	3,782	93.7%	3,560	93.1%	3,500	93.6%
Foreign	154	7.1%	204	6.1%	253	6.3%	262	6.9%	241	6.4%
Total	2,177	100%	3,349	100%	4,035	100%	3,822	100%	3,741	100%

Note1: Figures for 2019 are preliminary.

Note2: Based on the Ninth Edition of the International Patent Classification.

Registrations by resident of foreign countries/regions in 2019

(unit: cases)

Countries/Regions	Patent & Utility models		Designs		Trademarks		Total
	Domestic	PCT	Domestic	Hague	Domestic	Madrid	
United States of America	7,434	767	1,765	294	2,987 (5,272)	2,401 (4,090)	15,648 (19,622)
Japan	10,351	1,014	1,300	253	1,860 (3,193)	1,277 (2,590)	16,055 (18,701)
China	1,838	228	754	39	3,465 (4,383)	1,222 (1,866)	7,546 (9,108)
Germany	2,619	242	201	357	195 (371)	1,632 (4,373)	5,246 (8,163)
Switzerland	621	50	134	184	270 (517)	653 (1,725)	1,912 (3,231)
France	984	113	97	183	272 (386)	847 (1,924)	2,496 (3,687)
United Kingdom	521	51	88	47	434 (892)	471 (1,291)	1,612 (2,890)

(unit: cases)

Countries/Regions	Patent & Utility models		Designs		Trademarks		Total
	Domestic	PCT	Domestic	Hague	Domestic	Madrid	
Sweden	450	36	85	69	60 (134)	213 (669)	913 (1,443)
Canada	187	21	83	-	287 (487)	12 (22)	590 (800)
Netherlands	601	70	66	145	44 (74)	229 (552)	1,155 (1,508)
Italy	247	35	64	133	117 (207)	704 (1,484)	1,300 (2,170)
Taiwan, Province of China	648	78	49	1	312 (410)	-	1,088 (1,186)
Australia	78	12	40	-	110 (149)	322 (640)	562 (919)
Israel	96	12	32	-	33 (41)	75 (159)	248 (340)
Luxembourg	61	9	31	2	29 (64)	82 (275)	214 (442)
Denmark	92	9	28	15	21 (41)	148 (396)	313 (581)
Singapore	74	4	24	9	191 (266)	117 (199)	419 (576)
Barbados	64	2	20	-	9 (22)	1 (1)	96 (109)
Belgium	124	14	18	15	24 (35)	107 (196)	302 (402)
The Macao Special Administrative Region of the People's Republic of China	-	-	14	-	4 (5)	-	18 (19)
Finland	195	24	9	22	11 (24)	131 (419)	392 (693)
India	49	6	5	-	19 (26)	10 (14)	89 (100)
Spain	68	7	4	9	40 (45)	216 (385)	344 (518)
Malaysia	13	3	4	-	43 (44)	1 (3)	64 (67)
Norway	40	4	4	16	10 (12)	63 (183)	137 (259)
New Zealand	26	3	4	-	30 (52)	71 (141)	134 (226)
Brazil	8	1	3	-	16 (23)	-	28 (35)
Mexico	9	-	3	-	29 (35)	6 (15)	47 (62)
Ireland	99	4	2	4	65 (105)	47 (87)	221 (301)
Liechtenstein	16	-	2	38	2 (2)	38 (128)	96 (186)
Viet Nam	-	-	2	-	21 (24)	29 (59)	52 (85)
Anguilla	-	-	1	-	-	-	1 (1)
Czech Republic	13	1	1	5	11 (17)	24 (47)	55 (84)
Estonia	-	-	1	2	-	7 (19)	10 (22)
Greece	13	2	1	-	3 (4)	14 (20)	33 (40)
Hungary	9	-	1	-	5 (6)	11 (42)	26 (58)
Indonesia	1	-	1	-	46 (62)	3 (7)	51 (71)
Cayman Islands	56	6	1	-	60 (207)	6 (17)	129 (287)
Latvia	-	-	1	-	-	5 (10)	6 (11)
Poland	14	1	1	3	3 (5)	21 (45)	43 (69)

(unit: cases)

Countries/Regions	Patent & Utility models		Designs		Trademarks		Total
	Domestic	PCT	Domestic	Hague	Domestic	Madrid	
Thailand	11	1	1	-	79 (95)	16 (30)	108 (138)
West Indies	-	-	-	-	2 (2)	-	2 (2)
Commonwealth of Puerto Rico	-	-	-	-	1 (1)	-	1 (1)
United Arab Emirates	4	-	-	-	30 (46)	2 (7)	36 (57)
Antigua and Barbuda	5	-	-	-	1 (5)	-	6 (10)
Armenia	-	-	-	-	1 (1)	3 (3)	4 (4)
Netherlands Antilles	-	-	-	-	2 (2)	-	2 (2)
Argentina	-	-	-	-	7 (7)	-	7 (7)
Austria	206	22	-	14	25 (131)	102 (285)	369 (658)
Bangladesh	2	-	-	-	-	-	2 (2)
Bulgaria	5	-	-	-	-	21 (34)	26 (39)
Bahrain	-	-	-	-	1 (1)	-	1 (1)
Bermuda	1	-	-	-	7 (8)	5 (10)	13 (19)
Brunei Darussalam	-	-	-	-	-	1 (4)	1 (4)
Bolivia	-	-	-	-	1 (3)	-	1 (3)
Bahamas	4	-	-	-	5 (9)	-	9 (13)
Belarus	-	-	-	-	-	1 (8)	1 (8)
Belize	1	-	-	-	-	2 (3)	3 (4)
Chile	6	-	-	-	25 (29)	-	31 (35)
Colombia	-	-	-	-	4 (6)	4 (11)	8 (17)
Costa Rica	1	-	-	-	23 (30)	-	24 (31)
Cuba	3	-	-	-	3 (8)	3 (3)	9 (14)
Curacao	-	-	-	-	-	2 (2)	2 (2)
Cyprus	4	2	-	-	7 (8)	19 (39)	32 (53)
European Patent Office (EPO)	-	-	-	-	2 (7)	-	2 (7)
Georgia	-	-	-	-	-	3 (4)	3 (4)
The Hong Kong Special Administrative Region of the People's Republic of China	-	-	-	-	10 (17)	-	10 (17)
Honduras	-	-	-	-	1 (2)	-	1 (2)
Croatia	-	-	-	2	2 (4)	-	4 (6)
Haiti	1	-	-	-	-	-	1 (1)
Iraq	-	-	-	-	2 (5)	-	2 (5)
Iran (Islamic Republic of)	1	-	-	-	1 (1)	1 (2)	3 (4)
Iceland	-	-	-	-	-	6 (16)	6 (16)
Jersey (U.K.)	2	-	-	-	-	2 (4)	4 (6)
Jamaica	-	-	-	-	3 (9)	-	3 (9)
Jordan	3	-	-	-	1 (3)	-	4 (6)
Kenya	-	-	-	-	-	1 (1)	1 (1)
Kyrgyzstan	-	-	-	1	-	-	1 (1)
Saint Kitts and Nevis	-	-	-	-	1 (3)	-	1 (3)

(unit: cases)

Countries/Regions	Patent & Utility models		Designs		Trademarks		Total
	Domestic	PCT	Domestic	Hague	Domestic	Madrid	
Kuwait	-	-	-	-	10 (11)	-	10 (11)
Kazakhstan	1	-	-	-	3 (3)	1 (8)	5 (12)
Lebanon	-	-	-	-	1 (1)	-	1 (1)
Sri Lanka	-	-	-	-	2 (4)	-	2 (4)
Lithuania	3	-	-	1	-	9 (16)	13 (20)
Morocco	-	-	-	-	-	1 (5)	1 (5)
Monaco	-	-	-	-	5 (5)	5 (9)	10 (14)
Republic of Moldova	-	-	-	-	-	2 (3)	2 (3)
Mongolia	-	-	-	-	1 (3)	2 (4)	3 (7)
Malta	9	-	-	1	4 (6)	4 (9)	18 (25)
Mauritius	-	-	-	-	7 (13)	-	7 (13)
Maldives	-	-	-	-	1 (2)	-	1 (2)
Panama	-	-	-	-	4 (6)	-	4 (6)
Peru	-	-	-	-	2 (3)	-	2 (3)
Philippines	1	-	-	-	14 (15)	17 (28)	32 (44)
Pakistan	1	-	-	-	3 (4)	-	4 (5)
Portugal	6	-	-	3	4 (4)	35 (47)	48 (60)
Qatar	-	-	-	-	4 (7)	-	4 (7)
Romania	1	-	-	-	-	4 (6)	5 (7)
Serbia	-	-	-	-	-	1 (2)	1 (2)
Russian Federation	26	1	-	3	22 (23)	91 (236)	143 (289)
Saudi Arabia	57	7	-	-	13 (29)	-	77 (93)
Seychelles	-	-	-	-	23 (24)	-	23 (24)
Slovenia	1	-	-	1	-	4 (8)	6 (10)
Slovakia	2	-	-	6	-	3 (10)	11 (18)
San Marino	-	-	-	-	-	2 (6)	2 (6)
Syrian Arab Republic	-	-	-	-	-	1 (1)	1 (1)
Turkey	11	1	-	5	3 (6)	56 (101)	76 (124)
Ukraine	1	-	-	12	-	17 (27)	30 (40)
Uruguay	1	-	-	-	6 (6)	-	7 (7)
Uzbekistan	1	-	-	-	-	-	1 (1)
Virgin Islands (British)	8	2	-	-	42 (59)	12 (18)	64 (87)
Samoa	1	-	-	-	6 (6)	-	7 (7)
Yemen	-	-	-	-	2 (2)	-	2 (2)
South Africa	12	1	-	-	7 (14)	-	20 (27)
Others	-	-	-	-	1 (1)	9 (62)	10 (63)
Total	28,122	2,866	4,945	1,894	11,575 (18,342)	11,686 (25,165)	61,088 (81,334)

Note: Figures in parentheses include multiple applications

Trials and appeals

Trials and appeals requested

(unit: cases)

Category		2015	2016	2017	2018	2019
Appeal against examiner's decision to reject application	Patents	6,093	5,470	4,351	3,624	2,820
	Utility models	112	200	180	162	128
	Designs	119	109	90	102	58
	Trademarks	1,559 (2,293)	1,626 (2,284)	1,569 (2,295)	1,437 (2,046)	1,330 (1,868)
	Subtotal	7,883 (8,617)	7,405 (8,063)	6,190 (6,916)	5,325 (5,934)	4,336 (4,874)
Appeals against examiner's decision to dismiss amendment	Patents	-	1	1	1	-
	Utility models	-	-	-	-	-
	Designs	7 (15)	5	1	-	-
	Trademarks	6 (7)	5 (11)	-	-	3
	Subtotal	13 (22)	11 (17)	2	1	3
Appeals against examiner's decision of cancellation	Patents	-	-	-	-	-
	Utility models	1	-	-	-	-
	Designs	4	2	-	1	3
	Trademarks	-	-	-	-	-
	Subtotal	5	2	-	1	3
Trials for correction	Patents	134	145	136	128	127
	Utility models	6	9	4	-	2
	Designs	-	-	-	-	-
	Trademarks	-	-	-	-	-
	Subtotal	140	154	140	128	129
Invalidation	Patents	2,194	548	529	460	478
	Utility models	80	50	27	21	15
	Designs	209 (210)	247	194	207	215
	Trademarks	584 (658)	492 (553)	433 (486)	472 (559)	472 (541)
	Subtotal	3,067 (3,142)	1,337 (1,398)	1,183 (1,236)	1,160 (1,247)	1,180 (1,249)

(unit: cases)

Category		2015	2016	2017	2018	2019
Trials to confirm scope of IP right	Patents	691	632	671	512	348
	Utility models	53	47	29	20	21
	Designs	138	149	136	151	136
	Trademarks	93 (132)	101 (170)	90 (102)	158 (175)	103 (123)
	Subtotal	975 (1,014)	929 (998)	926 (938)	841 (858)	608 (628)
Cancellation trials on trademark registration	Patents	-	-	1	1	-
	Utility models	-	-	-	-	-
	Designs	-	-	-	17	-
	Trademarks	1903 (2305)	2,122 (2,526)	2,124 (2,474)	2,523 (3,011)	2,574 (3,193)
	Subtotal	1903 (2305)	2,122 (2,526)	2,125 (2,475)	2,541 (3,029)	2,574 (3,193)
Opposition of patent/utility model	Patents	-	-	109	150	174
	Utility models	-	-	1	4	1
	Designs	-	-	1	-	-
	Trademarks	-	-	-	-	-
	Subtotal	-	-	111	154	175
Grand total	Patents	9,112	6,796	5,689	4,876	3,947
	Utility models	252	306	240	207	167
	Designs	477 (486)	512	421	478	412
	Trademarks	4,145 (5,395)	4,346 (5,544)	4,216 (5,357)	4,590 (5,791)	4,482 (5,728)
	Total	13,986 (15,245)	11,960 (13,158)	10,566 (11,565)	10,151 (11,352)	9,008 (10,254)

Note1: Figures in parentheses include multiple applications.

Note2: Opposition of patents / Utility model has been enforced from March, 2019

* 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

(unit: cases)

Category		2015		2016		2017		2018		2019	
		Accep-tance	Ratio	Accep-tance	Ratio	Accep-tance	Ratio	Accep-tance	Ratio	Accep-tance	Ratio
Ex partes	Patents	1,046	30.4%	1,036	29.0%	1,078	30.3%	1,370	31.1%	1,977	36.3
	Utility models	29	27.6%	32	33.0%	33	26.0%	40	20.5%	48	24.2
	Designs	46 (54)	35.4% (39.1%)	50	43.1%	43	31.9%	21	20.6%	27	32.5
	Trademarks	844 (1,368)	52.4% (58.7%)	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)
	Subtotal	1,965 (2,497)	37.2% (41.5%)	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)
Inter partes	Patents	687	38.7%	526	42.2%	616	46.2%	552	49.1%	653	53.4
	Utility models	66	56.9%	52	50.5%	45	54.9%	19	35.2%	16	35.6
	Designs	161 (161)	47.5% (47.5%)	164 (166)	54.8% (55.1%)	187	47.9%	210	51.0%	142	48.3
	Trademarks	1,401 (1,653)	69.0% (68.1%)	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)
	Subtotal	2,315 (2,567)	54.4% (55.1%)	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)
Grand total	Patents	1,733	33.2%	1,562	32.4%	1,694	34.6%	1,922	34.7%	2,630	39.4
	Utility models	95	43.0%	84	42.0%	78	37.3%	59	23.7%	64	26.3
	Designs	207 (215)	44.1% (45.1%)	214 (216)	51.6% (51.8%)	230	43.8%	231	44.9%	169	44.8
	Trademarks	2,245 (3,021)	61.7% (63.5%)	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)
	Total	4,280 (5,064)	44.8% (47.5%)	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)

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

(unit: cases)

Category		2015	2016	2017	2018	2019
Patents	Domestic	5,809	3,891	3,499	3,214	2,545
	Foreign	3,303	2,905	2,190	1,662	1,402
Utility models	Domestic	240	301	237	201	164
	Foreign	12	5	3	6	3
Designs	Domestic	432	459	373	419	381
	Foreign	54	53	48	59	31
Trademarks	Domestic	3,057	3,014	2,703	3,077	2,939
	Foreign	2,338	2,530	1,513	1,513	1,543
Total		15,245	13,158	10,566	10,151	9,008

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

Income and expenditures / KIPO staff

Income

(unit: USD)

Category	2015	2016	2017	2018	2019
Income from fees	387,177,426	397,276,404	428,025,022	446,163,758	443,443,731
Income carried over from the previous year	29,384,892	22,901,485	28,072,668	42,855,898	17,542,755
Internal income and others	47,850,417	90,568,774	119,661,120	148,403,121	115,788,238
Total	464,412,736	510,746,664	575,758,810	637,422,777	576,774,723

Expenditures

(unit: USD)

Category	2015	2016	2017	2018	2019
Non-personnel resources (projects)	258,066,111	360,459,363	393,025,808	455,687,588	413,003,996
Personnel resources	97,273,767	99,443,391	106,532,589	116,102,191	116,951,668
Deposit for special fund	85,636,518	23,621,577	35,270,004	47,461,470	37,046,713
Total	440,976,396	483,524,330	534,828,401	619,251,249	567,002,377

KIPO staff

(unit: number of positions)

Category	2015	2016	2017	2018	2019	
Examiners	Patents and utility models	741	734	832	875	839
	Designs and trademarks	159	162	165	162	191
Administrative judges	95	95	103	107	107	
Administrative staff	605	601	527	517	604	
Total	1,600	1,592	1,627	1,661	1,741	

Academic and professional credentials of KIPO examiners

(unit: number of staff)

Category	Ph. D	Master's degrees	Patent attorney certificate only	Lawyer certificate only	Professional engineer certificate only	
Examiners	Patents and utility models	326	67	32	5	17
	Trademarks	5	1	3	2	0
	Designs	3	7	1	0	0
	Total	334	75	36	7	17