

IV: Patent Application and Examination

1. Patent Applications and Grants

In 2009, filings from overseas dropped significantly due to the onset of financial crisis. Domestic filings, however, maintained a steady growth. During the same period, SIPO significantly enhanced its examination capacity.

(1) Patent Application

In 2009, SIPO received 976,686 patent applications, representing a year-on-year growth rate of 17.9%. 877,611 of which were from home, accounting for 89.9% of the total with a growth rate of 22.4% and 99,075 were from abroad, accounting for 10.1% with a decrease by 10.9%.

In 2009, all three kinds of domestic patent applications performed a sharp growth. There were 229,096 invention applications, representing 26.1% of the total number and up 17.7% compared to the year before, 308,861 utility model applications, representing 35.2% and up 37.9%, 339,654 industrial design applications, representing 38.7% and up 13.7%.

By the end of 2009, China had received a total number of 5,822,529 patent applications, 4,898,273 of which were from home, representing 84.1%, 924,256 were from abroad, representing 15.9%. Among them, 1,935,827 or 33.3% were inventions, 2,005,520 or 34.4% were utility models, 1,881,182 or 32.3% were industrial designs.

Table 1 Three Kinds of Domestic and Foreign Patent Applications According to Service and Non-Service in 2009

Kinds of Patents		Total			Domestic			Abroad			
		Total	Service	Non-Service	Sub-total	Service	Non-Service	Sub-total	Service	Non-Service	
Accumulated Total	Number of Application %	5822529	3042432	2780097	4898273	2154338	2743935	924256	888094	36162	
		100.0%	52.3%	47.7%	100.0%	44.0%	56.0%	100.0%	96.1%	3.9%	
This Year	Total	Number of Application %	976686	578282	398404	877611	483051	394560	99075	95231	3844
			100.0%	59.2%	40.8%	100.0%	55.0%	45.0%	100.0%	96.1%	3.9%
	Invention	Number of Application %	314573	254828	59745	229096	172181	56915	85477	82647	2830
			100.0%	81.0%	19.0%	100.0%	75.2%	24.8%	100.0%	96.7%	3.3%
	Utility Model	Number of Application %	310771	171025	139746	308861	169413	139448	1910	1612	298
			100.0%	55.0%	45.0%	100.0%	54.9%	45.1%	100.0%	84.4%	15.6%
	Design	Number of Application %	351342	152429	198913	339654	141457	198197	11688	10972	716
			100.0%	43.4%	56.6%	100.0%	41.6%	58.4%	100.0%	93.9%	6.1%

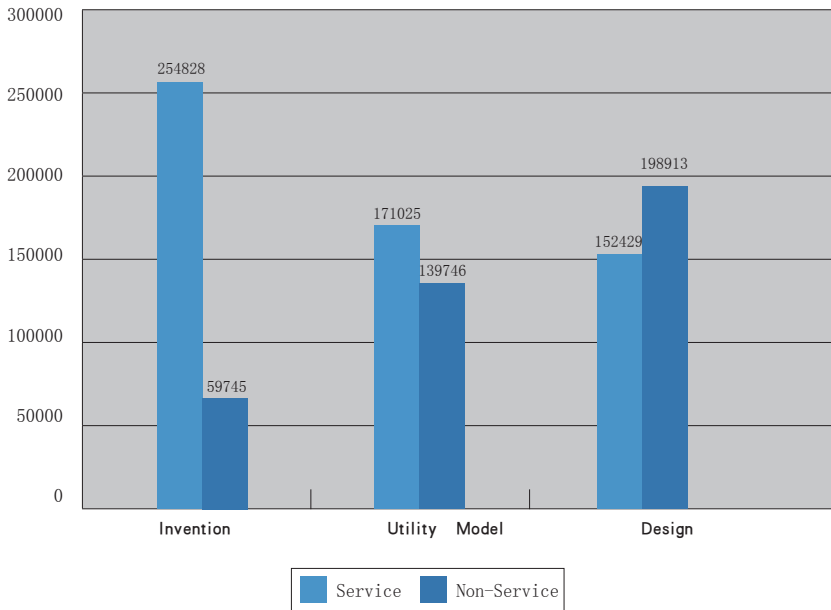


Figure 1 Statistics of Domestic and Foreign Applications of Three Kinds of Patents According to Service and Non-Service in 2009

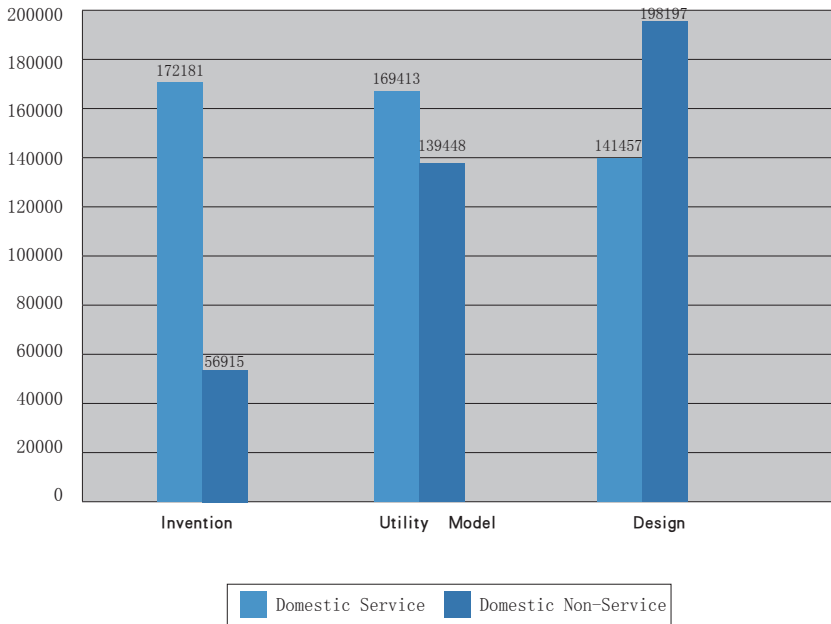


Figure 2 Statistics of Domestic Applications for Three Kinds of Patents According to Service and Non-Service in 2009

Total	Non-Service	Service				
877611	394560	Sub-total (A)	Colleges and Universities (B)	Scientific Research Institutions (B)	Enterprises (B)	Organizations (B)
		483051	61579	21271	394299	5902
		(B/A)	12.7%	4.4%	81.6%	1.2%

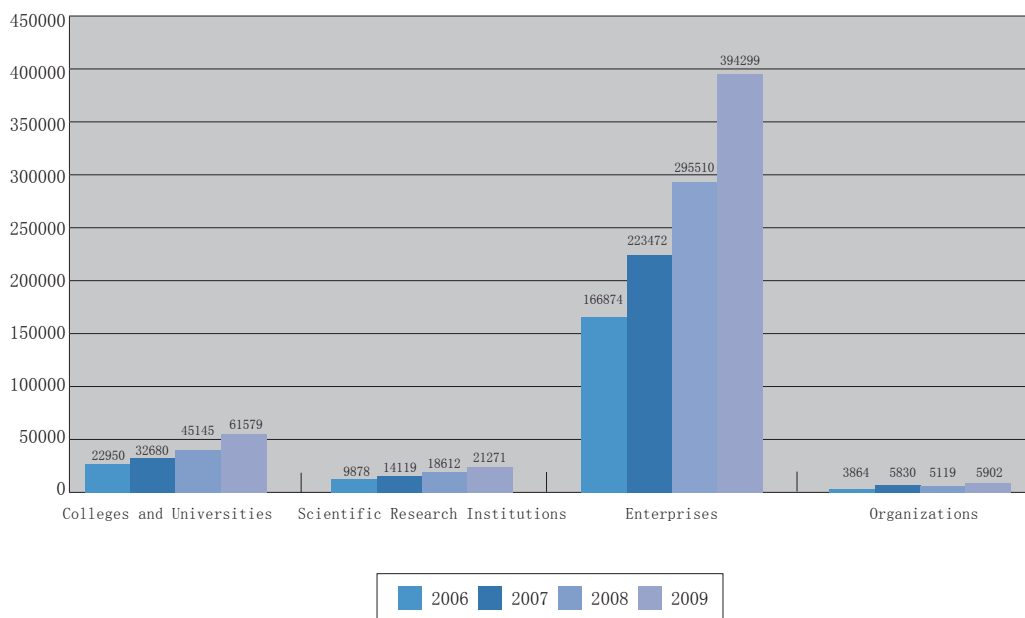


Figure 3 Growth of Domestic Applications for Service, 2005–2009

Table 3 Top Ten Colleges and Universities of Domestic According to Their Patent Applications in 2009

NO.	Name	Number
1	Zhejiang University	2244
2	Tsinghua University	1783
3	Shanghai Jiao Tong University	1549
4	Southeast University	1494
5	Beihang University	1039
6	Harbin Institute of Technology	1021
7	Donghua University	978
8	Hangzhou Dianzi University	938
9	Zhejiang University of Technology	821
10	Kunming University of Science and Technology	762

Table 4 Top Ten Scientific Research Institutions of Domestic According to Their Patent Applications in 2009

NO.	Name	Number
1	Industrial Technology Research Institute	490
2	Beijing Guanwuzhou Biological Science Institute	345
3	Institute of Microelectronics of CAS	304
4	China Electric Power Research Institute	300
5	Guiyang Aluminium Magnesium Design&Research Institute	258
6	Beijing General Research Institute for Nonferrous Metals	225
7	Dalian Institute of Chemical Physics CAS	188
8	Shanghai Institute of Ceramics CAS	173
9	State Grid Electric Power Research Institute	172
10	Changchun Institute of Applied Chemistry CAS	171

Table 5 Top Ten Enterprises of Domestic According to Their Patent Applications in 2009

NO.	Name	Number
1	ZTE Corp.	5719
2	Huawei Technologies	2868
3	Hongfujin Precision Industrial (Shenzhen) Co., Ltd	2306
4	Shanghai Zhangjiang Creative Industry Development Co. Ltd	1623
5	China Petroleum & Chemical Corporation	1463
6	Dalian Fuge Industrial Co., Ltd	1298
7	Chery Automobile Co., Ltd	1150
8	Huawei Technologies (Shenzhen)	1088
9	Semiconduct Manufacturing International Corporation (Shanghai)	1044
10	BYD Co., Ltd	1010

Table 6 Top Ten Foreign Enterprises According to Their Patent Applications in 2009

NO.	Country	Name	Number
1	Japan	Sony Corporation	2088
2	Japan	Panasonic Corporation	1825
3	Netherlands	Koninklijke Philips Electronics N.V.	1601
4	Korea	Samsung Eletronics Co., Ltd	1351
5	Japan	Toyota Motor Corporation	1201
6	Japan	Sharp Corporation	1073
7	Korea	LG Eletronics Corporation	1010
8	Japan	Canon Inc.	1003
9	United States	Global Operation of General Motors	946
10	United States	Qualcomm Inc.	844

Table 7 Top Ten Colleges and Universities of Domestic According to Their Invention Applications in 2009

NO.	Name	Number
1	Zhejiang University	1733
2	Tsinghua University	1380
3	Shanghai Jiao Tong University	982
4	Beihang University	955
5	Harbin Institute of Technology	936
6	Southeast University	712
7	Tianjin University	653
8	South China University of Technology	600
9	Shanghai University	565
10	Fudan University	515

Table 8 Top Ten Scientific Research Institutions of Domestic According to Their Invention Applications in 2009

NO.	Name	Number
1	Industrial Technology Research Institute	485
2	Beijing Guanwuzhou Biological Science Institute	345
3	Institute of Microelectronics of CAS	289
4	Dalian Institute of Chemical Physics CAS	187
5	Chemistry Institute CAS	169
6	Changchun Institute of Applied Chemistry CAS	167
7	Institute of Semiconductors CAS	163
8	Shanghai Institute of Ceramics CAS	162
9	China Electric Power Research Institute	160
10	Beijing General Research Institute for Nonferrous Metals	152

Table 9 Top Ten enterprises of Domestic According to Their Invention Applications in 2009

NO.	Name	Number
1	ZTE Corp.	5427
2	Huawei Technologies	2813
3	Hongfujin Precision Industrial(Shenzhen) Co.,Ltd	2032
4	China Petroleum & Chemical Corporation	1259
5	Semiconduct Manufacturing International Corporation(Shanghai)	907
6	Datang Mobile Communications Equipment Co.,Ltd	842
7	Inventec Corp.	723
8	H3C Techonlogies Co., Limited	693
9	Huawei Technologies(Shenzhen)	654
10	AU Optronics Corp.	622

Table 10 Top Ten Foreign Enterprises According to Their Invention Applications in 2009

NO.	Country	Name	Number
1	Japan	Sony Corporation	1970
2	Japan	Panasonic Corporation	1620
3	Netherlands	Koninklijke Philips Electronics N.V.	1450
4	Japan	Toyota Motor Corporation	1125
5	Korea	Samsung Eletronics Co.,Ltd	1063
6	Japan	Sharp Corporation	1059
7	Japan	Canon Inc.	973
8	United States	Global Operation of General Motors	902
9	Korea	LG Eletronics Corporation	849
10	United States	Qualcomm Inc.	844

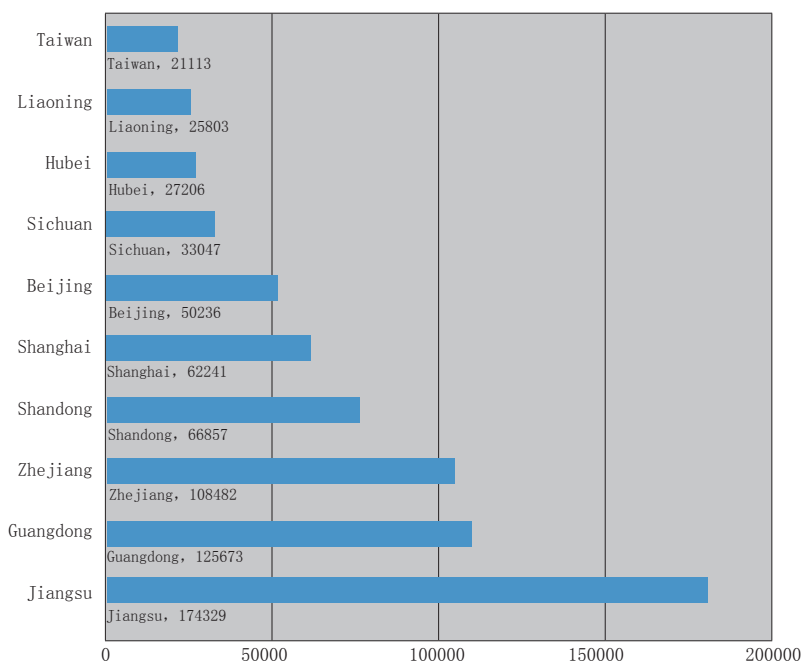


Figure 4 Top Ten Domestic Provinces and Municipalities According to Their Patent Applications in 2009

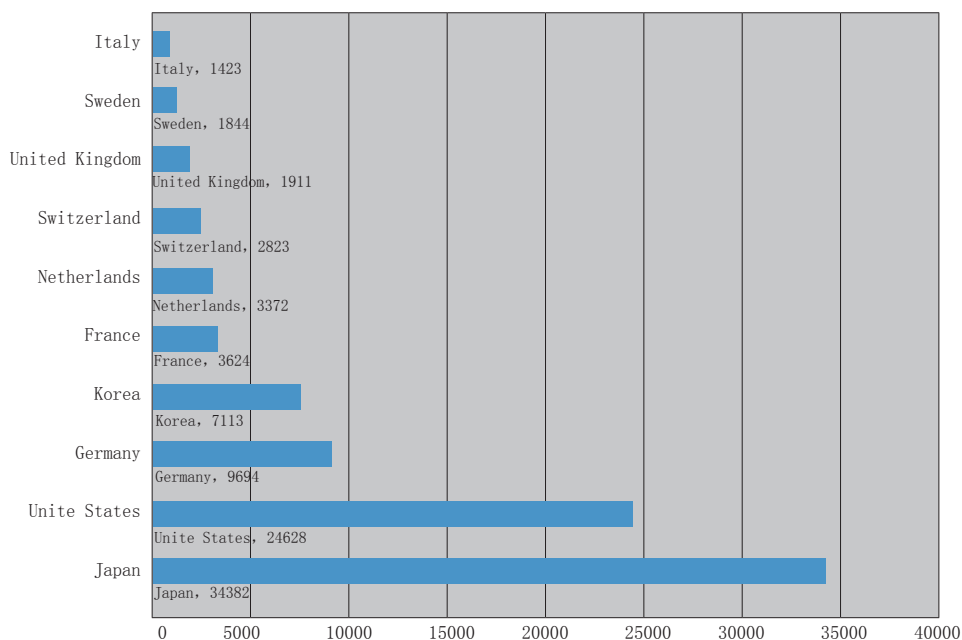


Figure 5 Top Ten Countries According to Their Patent Applications in 2009

(2) Distribution of Patent Applications by Countries/Regions

As of December 31, 2009, 150 countries and regions had filed patent applications in China. In the year of 2009, China received patent applications from 97 countries and regions, with Afghanistan, Honduras, Guatemala and Yemen being newly added into the list. The top 10 countries or regions in terms of application volume in 2009 were Japan, United States of America, Germany, Republic of Korea, France, the Netherlands, Switzerland, United Kingdom, Sweden and Italy.

(3) Distribution of Patent Applications by Technical Fields

The invention applications in 2009 could be summarized as follows according to their IPC: preparations for medical, dental or toilet purposes (A61K) continued domination of IPC subclasses for domestic filings, though having dropped down 27.0% compared to the year before. Wireless communication networks (H04W) took the second place with over ten thousands filings and over 90% of which were domestic ones. The traditional giant filings from both home and abroad in H04Q decreased sharply and dipped below top 10.

Table 11 Applications for Patents for Inventions and Utility Models Classified According to IPC in 2009

	A-H Total	A	B	C	D	E	F	G	H
Accumulated Total	3868136	795454	715972	385667	75446	231627	487119	546676	630175
	100.0%	20.6%	18.5%	10.0%	2.0%	6.0%	12.6%	14.1%	16.3%
This year	580845	103822	110998	57267	10059	31686	76489	83299	107225
	100.0%	17.9%	19.1%	9.9%	1.7%	5.5%	13.2%	14.3%	18.5%
Inventions	288508	43277	39726	48457	4985	8890	24711	51390	67072
	100.0%	15.0%	13.8%	16.8%	1.7%	3.1%	8.6%	17.8%	23.2%
Utility models	292337	60545	71272	8810	5074	22796	51778	31909	40153
	100.0%	20.7%	24.4%	3.0%	1.7%	7.8%	17.7%	10.9%	13.7%

Table 12 Top Ten IPC Sub–Classes of Applications for Invention in 2009

Inventions	Sub-classes	Number	Domestic	Sub-classes	Number	Abroad	Sub-classes	Number
1	A61K	14030	1	A61K	11570	1	H01L	3804
2	H04W	11908	2	H04W	10771	2	G06F	3385
3	G06F	11795	3	G06F	8410	3	H04L	2747
4	H04L	9596	4	H04L	6849	4	H04N	2728
5	H01L	7761	5	G01N	4804	5	A61K	2460
6	H04N	6140	6	A23L	4294	6	C07D	1874
7	G01N	5970	7	H01L	3957	7	A61B	1481
8	A23L	4615	8	H04N	3412	8	H01M	1388
9	C07D	4018	9	C04B	2535	9	G02B	1280
10	C07C	3449	10	C02F	2500	10	G01N	1166

Table 13 Top Ten IPC Sub–Classes of Applications for Utility Models in 2009

Utility Models	Sub–Classes	Number	Domestic	Sub–Classes	Number
1	H01R	5758	1	H01R	5664
2	F21S	5469	2	F21S	5444
3	B65D	5188	3	B65D	5147
4	A47G	4940	4	A47G	4923
5	A61B	4500	5	A61B	4479
6	B01D	4267	6	B01D	4249
7	A47J	4217	7	A47J	4167
8	G01N	3923	8	G01N	3915
9	F16K	3717	9	F16K	3700
10	A61M	3398	10	A61M	3388

Table 14 Three Kinds of Domestic and Foreign Patents Granted According to Service and Non-Service in 2009

Kinds of Patents		Total			Domestic			Abroad			
		Sub-total	Service	Non-Service	Sub-total	Service	Non-Service	Sub-total	Service	Non-Service	
Accumulated Total	Number of Granted	3082534	1561164	1521370	2643852	1139125	1504727	438682	422039	16643	
	%	100.0%	50.6%	49.4%	100.0%	43.1%	56.9%	100.0%	96.2%	3.8%	
This Year	Total	Number of Granted	581992	339896	242096	501786	262222	239564	80206	77674	2532
		%	100.0%	58.4%	41.6%	100.0%	52.3%	47.7%	100.0%	96.8%	3.2%
	Invention	Number of Granted	128489	113687	14802	65391	52265	13126	63098	61422	1676
		%	100.0%	88.5%	11.5%	100.0%	79.9%	20.1%	100.0%	97.3%	2.7%
	Utility Model	Number of Granted	203802	112025	91777	202113	110625	91488	1689	1400	289
		%	100.0%	55.0%	45.0%	100.0%	54.7%	45.3%	100.0%	82.9%	17.1%
	Design	Number of Granted	249701	114184	135517	234282	99332	134950	15419	14852	567
		%	100.0%	45.7%	54.3%	100.0%	42.4%	57.6%	100.0%	96.3%	3.7%

(4) Patent Grants

In 2009, SIPO granted 581,992 patents, with a growth rate of 41.2%, in which 501,786, or 86.2%, were granted to domestic applications, representing a growth rate of 42.4%, while 80,206, or 13.8% to foreign applications, increased by 34.6%. Among the patents granted to domestic applications, 65,391 or 13.0% were invention patents, representing a 40.4% up, 202,113 or 40.3% were utility model patents, a 15.4% up and 234,282 or 46.7% were industrial design patents, a dramatic 79.3% up. Among the patents granted to foreign applications, 63,098 or 78.7% were invention patents, increased by 33.9%, 1,689 or 2.1% were utility model patents, showing 12.2% up and 15,419 or 19.2% were industrial design patents with the increase rate of 40.8%.

In 2009, patents granted to domestic applications increased by 1.2% to 50.9% of the total number, overtaking their foreign counterparts for the first time.

By the end of 2009, SIPO had granted a cumulative total of 3,082,534 patents. Numbers for invention, utility model and industrial design were 586,643, 1,368,634 and 1,127,257 respectively, each accounting for 19.0%, 44.4% and 36.6%. 2,643,852 were granted to domestic applications and 438,682 to foreign applications, accounting for 85.8% and 14.2% of the total respectively.

2. Patent Examination

In 2009, the three kinds of patents maintained their rapid expansion in the volumes of both the examined and the resolved. 228,617 first office actions had been transmitted with a year-on-year growth rate of 21.9%, while 194,850 invention applications completed their substantive examination with a growth rate of 32.7%, 262,648 utility model applications and 388,905 industrial designs also completed their (preliminary) examination and with each of their growth rate of 28.3% and a remarkable 80.1%.

Substantive examination duration of invention patents remained the same as that of the previous year at 25.8 months, utility model further reduced to 5.8 months and industrial design dramatically shortened its duration from 9.5 months to 5.5 months.

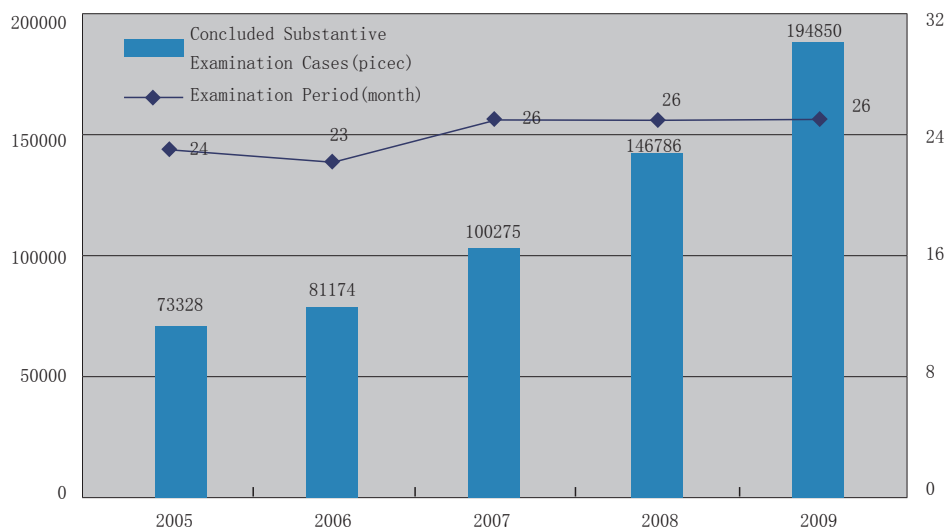


Figure 6 Cases Resolved and Their Durations for Substantive Examination from 2005–2009

In 2009, SIPO recruited 200 staffs in total for formality check, flow management, substantive patent examination, reexamination and invalidation, with a total number of 3,074 staffs on its payroll at year end.

Among the recruited staffs, 12% has doctor's degrees, 81% with master's degrees and 7% with bachelor's degrees. For those substantive examination departments exigent of high technical professionals, 96% of the new examiners has a master degree or higher.

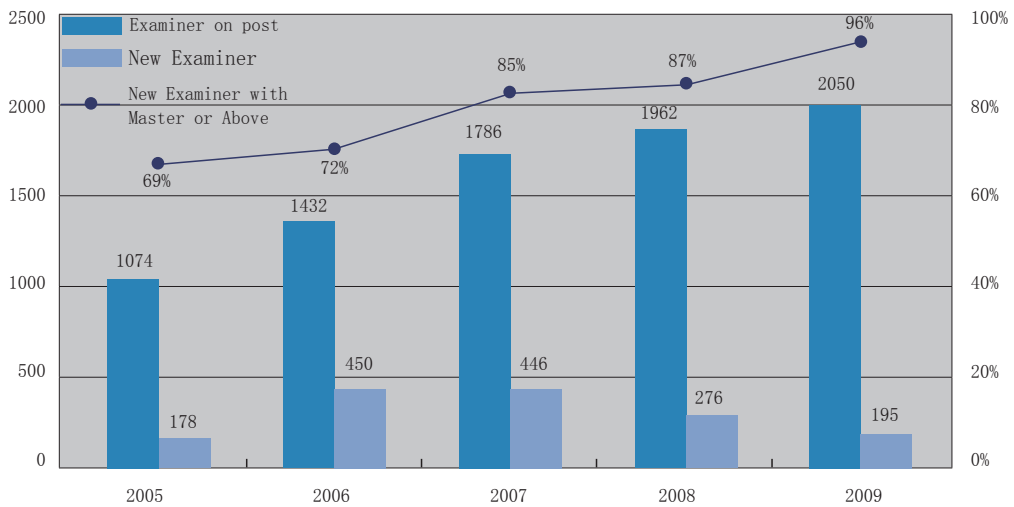


Figure 7 Changes in Numbers of Substantive Examiners and Their Degrees from 2005–2009

3. PCT Applications

As a Receiving Office of the Patent Cooperation Treaty (PCT), SIPO received 8,000 PCT applications, up 31.6% in 2009. Among those received applications, 7,225 were filed in Chinese while 775 in English. Since 1994, SIPO has received a total number of 32,881 international applications.

From May 1, 2007, SIPO started to adopt the PCT-SAFE (Secure Applications Filed Electronically), and 83% of applications were filed electronically in 2009.

As an International Searching Authority, SIPO has transmitted a total of 29,352 international search reports (to international bureau) since 1994, of which 6,776 were transmitted in 2009 with a growth rate of 11.2%.

As an International Preliminary Examining Authority, SIPO has transmitted a total of 5,156 international preliminary examination reports (to international bureau) since 1994, of which 420 were transmitted in 2009, remaining the same level as the year before.

In 2009, 53,633 PCT applications entered China's national phase,

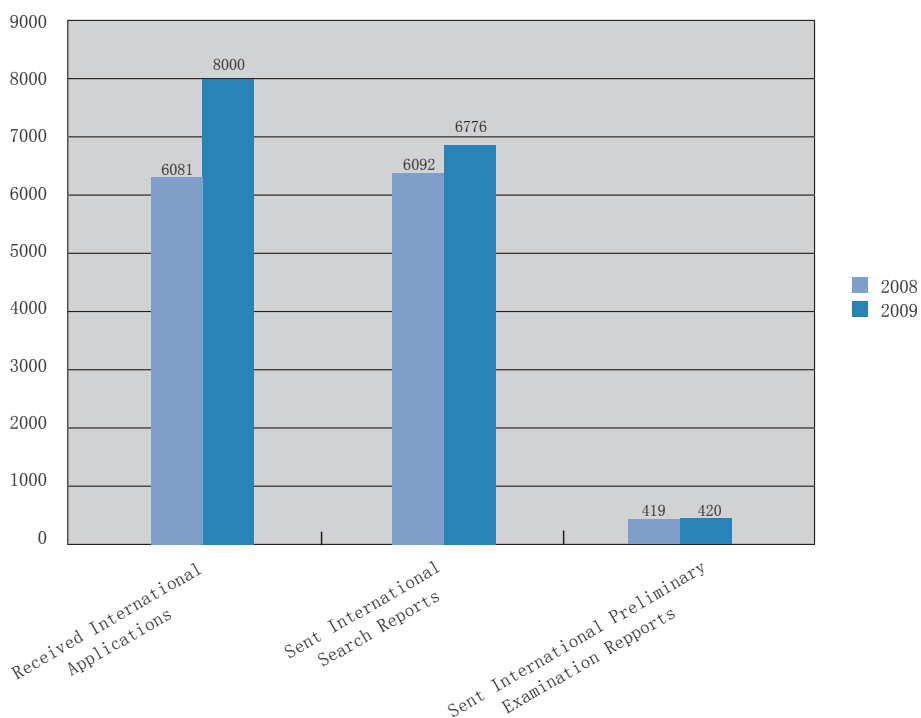


Figure 8 Statistics of PCT International Application, International Searching and International Preliminary Examination (2008–2009)

representing a decline of 6.8% compared to the year before, of which 53,492 were invention applications and 141 were utility model applications. Since 1994, SIPO had received a total of 412,131 PCT applications for entering China's national phase.

4. Registration of Applications for Layout Designs of Integrated Circuits

In 2009, SIPO received 817 applications for registration of layout designs of integrated circuits, and 655 registrations were published and certificated. Since the implementation of the *Regulation on Protection of Layout Designs of Integrated Circuits* on October 1, 2001, SIPO had received a total of 3,368 applications for registration, and 2,957 registrations were published and certificated.

5. Reexamination of Patent Application and Invalidation of Patent Right

(1) Requests for Reexamination Received and Cases Resolved

Comparing with 2008, 2009 saw an increase of 4,835 requests for reexamination, or a growth rate of 111%, to a total number of 9,195. Of all the requests received in 2009, 9,141 cases were related to invention patent applications, on which rejection decisions had been made and then subjected to appeals, accounting for 99.4% of the total number, 45 cases were related to utility models, accounting for 0.5% and 9 cases were related to industrial designs, accounting for 0.1%.

In the same year, a total number of 6,697 reexamination cases were resolved, which included 6,599 inventions, 84 utility models and 14 industrial designs.

Since 1985, the Patent Reexamination Board had received 31,587 requests for reexamination and resolved 25,109 reexamination cases by the end 2009.

(2) Requests for Invalidation Received and Cases Resolved

In 2009, 2,247 requests for invalidation were received, representing a volume increase of 209 or a growth rate of 10% as compared with 2008. Of the requests received in 2009, 444 cases were related to invention patents, accounting for 19.8% of the total number, 1,102 were related to utility models, accounting for 49% and 701 were related to industrial designs, accounting for 31.2%.

In this year, 2,310 requests for invalidation were resolved, which included 456 inventions, 1,078 utility models and 776 industrial designs.

Since 1985, the Patent Reexamination Board had received a total number of 23,334 requests for invalidation and resolved 21,718 cases by the end of 2009.

(3) Patent Administrative Litigation

In 2009, 987 cases were received by the Beijing No.1 Intermediate People's Court or appealed to the Beijing High People's Court, of which 125 cases were against the reexamination decisions, 858 were against the decisions on requests for invalidation of patent rights and 4 were against others issues.

In 2009, Beijing No.1 Intermediate People's Court resolved 594 cases against the reexamination and invalidation decisions made by the Patent Reexamination Board, 64 of which were related to reexamination, 528 to invalidation and 2 to others.

In this year, Beijing High People's Court resolved 337 cases against the reexamination and invalidation decisions made by the Patent Reexamination Board, 35 of which were related to reexamination and 302 to invalidation.

(4) Revocation of Layout Designs of Integrated Circuits Registration

Since the promulgation of the *Regulation on Protection of Layout Designs of Integrated Circuits* on October 1, 2001, SIPO had received 4 requests for revocation, two of which had been resolved by December 31, 2009.

(5) Construction and Functioning of Circuit Tribunals

The Patent Reexamination Board established its circuit tribunals in dispute intensified areas, such as Guangdong, Sichuan, Shandong and Jiangsu. The establishment and functioning of the circuit tribunals has saved the litigation costs for parties, improved the efficiency of prosecution, brought convenience to the parities involved and realized the prospect of making the tribunals act as local bases for IP law education, practice and dissemination.



On May 4, Deputy Commissioner Zhang Qin unveiled the plaque of the fourth Circuit Tribunals.