



ASIAN TOP 100

PATENT FILERS

DECEMBER 2022

INTRODUCTION

As the largest continent in the world, Asia not only has a large number of countries and a broad population, but also has developed intellectual property systems and economic markets in Japan, China and Korea. Therefore, the development of patents in Asia has always been the focus of the world. Among the numerous Asian applicants, the companies with the most effective patents represent their huge R&D strength and market competitiveness. Therefore, this report will present the specific situation of the top 100 patent filers in Asia through search and analysis.

SEARCH RESULTS AND RANKING

This report counts the companies with the most patents under legal protection in Asia by far, and ranks them. At the same time, in order to understand the recent patent competitiveness of these companies, we also made statistics on their granted patents in 2020-2022. The results are shown in the following table. The results are shown in the following table. The results are shown in the table below.

Asian Top 100 Patent Filers

Rank	Standardized Current Assignee	Total	2020	2021	2022
1	SAMSUNG ELECTRONICS CO LTD	182,539	38,143	42,930	46,124
2	HUAWEI TECH CO LTD	105,433	30,079	39,600	43,065
3	TOYOTA JIDOSHA KK	98,847	16,276	20,086	22,511
4	LG ELECTRONICS INC	96,987	21,273	24,190	23,157
5	CANON KK	90,750	17,843	18,916	18,914
6	MITSUBISHI ELECTRIC CORP	85,756	15,886	17,546	16,384
7	STATE GRID CORP OF CHINA	85,276	15,875	18,297	19,246
8	HONDA MOTOR CO LTD	61,415	10,534	11,268	12,483
9	SONY CORP	49,814	12,277	11,625	9,592
10	GREE ELECTRIC APPLIANCES INC OF ZHUHAI	48,647	15,843	16,232	14,662
11	PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CO LTD	46,345	13,276	14,965	14,095
12	DENSO CORP	46,147	9,234	9,733	10,370
13	SAMSUNG DISPLAY CO LTD	45,402	9,814	12,348	14,364
14	SEIKO EPSON CORP	44,769	6,673	7,317	8,465
15	HYUNDAI MOTOR CO LTD	44,522	9,671	10,189	12,381
16	BOE TECH GRP CO LTD	44,417	11,708	14,683	16,386
17	TAIWAN SEMICON MFG CO LTD	43,487	6,991	11,289	13,672
18	CHINA PETROLEUM & CHEM CORP	40,944	7,211	9,754	11,925

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Rank	Standardized Current Assignee	Total	2020	2021	2022
19	FUJIFILM CORP	39,223	6,741	7,429	7,628
20	LG DISPLAY CO LTD	38,905	6,250	6,603	7,466
21	PANASONIC CORP	37,504	935	881	935
22	MIDEA GRP CO LTD	37,091	7,453	6,547	6,937
23	RICOH KK	36,449	5,984	6,194	5,792
24	LG CHEM LTD	35,454	9,850	9,864	7,919
25	GUANGDONG OPPO MOBILE TELECOMM CORP LTD	35,451	16,324	18,947	16,261
26	KK TOSHIBA	34,598	5,177	6,000	6,154
27	BROTHER KOGYO KK	34,322	3,149	3,823	4,052
28	SHARP KK	33,842	6,776	6,102	5,517
29	NEC CORP	32,560	5,911	6,989	7,726
30	NISSAN MOTOR CO LTD	31,247	4,397	3,753	3,561
31	TENCENT TECH (SHENZHEN) CO LTD	31,003	10,233	14,078	14,275
32	FUJITSU LTD	30,678	5,184	5,092	4,438
33	NIPPON STEEL CORP	28,706	5,626	5,733	5,153
34	MURATA MFG CO LTD	27,697	4,583	5,826	6,060
35	TSINGHUA UNIV	27,299	7,026	7,852	9,321
36	ZTE CORP	26,817	5,895	7,543	8,479
37	ZHEJIANG UNIV	23,429	7,278	8,339	12,374
38	SEMICON ENERGY LAB CO LTD	23,324	3,971	4,563	5,233
39	JFE STEEL CORP	23,025	3,255	4,179	4,327
40	KIA MOTORS CORP	22,700	8,296	8,597	10,137
41	HITACHI LTD	22,620	3,949	4,503	5,000
42	TOKYO ELECTRON LTD	21,638	3,920	5,361	5,830
43	PETROCHINA CO LTD	20,825	4,262	3,807	4,040
44	KAO CORP	20,237	3,167	3,614	3,764

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45	DAIKIN IND LTD	19,932	3,425	4,168	5,347
46	NIPPON TELEGRAPH & TELEPHONE CORP	19,376	3,692	4,061	5,509
47	KYOCERA CORP	19,213	3,296	3,705	3,884
48	OLYMPUS CORP	19,048	2,246	2,070	1,493
49	SK HYNIX INC	18,489	3,886	4,149	4,971
50	KONICA MINOLTA INC	18,351	4,202	3,823	2,964
51	GD MIDEA AIR-CONDITIONING EQUIP CO LTD	18,261	4,371	3,950	4,142
52	LG ENERGY SOLUTION LTD	18,253	3,195	5,102	9,742
53	DAI NIPPON PRINTING CO LTD	18,114	3,215	3,504	3,757
54	FUJIFILM BUSINESS INNOVATION CORP	17,824	1,477	3,420	3,844
55	HAIER SMART HOME CO LTD	17,692	5,624	11,083	16,408
56	SUMITOMO ELECTRIC IND LTD	17,670	4,323	4,654	4,865
57	YAZAKI CORP	17,338	2,374	2,694	3,150
58	SHIN ETSU CHEM CO LTD	17,030	2,638	2,938	3,133
59	IND TECH RES INST	16,820	1,344	1,463	1,405
60	BEIJING XIAOMI MOBILE SOFTWARE CO LTD	16,773	6,522	8,256	9,368
61	AU OPTRONICS CORP	16,462	1,448	1,554	1,634
62	MITSUBISHI CHEM CORP	16,082	2,223	2,568	2,486
63	SUMITOMO CHEM CO LTD	15,944	3,740	4,169	3,864
64	BYD CO LTD	15,773	2,582	3,497	4,615
65	SAMSUNG SDI CO LTD	15,482	2,223	2,994	2,767
66	SOUTH CHINA UNIV OF TECH	15,392	4,634	5,493	6,175
67	KYOCERA DOCUMENT SOLUTIONS INC	15,387	3,407	2,905	2,592
68	POSCO	15,043	2,254	1,961	2,095
69	ZHEJIANG GEELY HLDG GRP CO LTD	14,647	2,616	2,968	5,244
70	SUMITOMO RUBBER IND LTD	14,623	2,663	2,672	2,508

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Rank	Standardized Current Assignee	Total	2020	2021	2022
71	TORAY IND INC	14,584	3,982	4,321	3,794
72	LENOVO (BEIJING) CO LTD	14,561	2,626	2,801	3,042
73	SOUTHEAST UNIV	14,214	3,625	4,732	6,898
74	MITSUBISHI HEAVY IND LTD	14,122	2,356	2,626	2,991
75	YAMAHA MOTOR CO LTD	13,723	1,617	1,737	1,687
76	FANUC LTD	13,676	3,850	3,128	2,076
77	NIKON CORP	13,666	2,017	1,699	1,567
78	NITTO DENKO CORPORATION	13,618	3,695	4,567	4,484
79	ORMON CORPORATION	13,614	2,987	3,700	3,936
80	ELECTRONICS & TELECOMM RES INST	13,446	2,988	3,259	3,750
81	LIG NEX1 CO LTD	13,290	2,835	3,040	3,679
82	NTT DOCOMO INC	13,247	3,488	4,112	4,586
83	HARBIN INST OF TECH	13,123	3,322	4,547	7,380
84	FUJI ELECTRIC CO LTD	13,071	2,397	2,545	2,610
85	BRIDGESTONE CORP	13,065	2,263	2,008	1,564
86	TDK CORPORATION	13,047	2,097	2,443	2,630
87	VIVO MOBILE COMM CO LTD	12,771	5,687	10,277	9,949
88	HUAZHONG UNIV OF SCI & TECH	12,767	5,996	5,962	6,622
89	ZHEJIANG SHAOXING SUPOR DOMESTIC ELECTRICAL APPLIANCE CO LTD	12,611	2,551	2,703	2,054
90	JOYOUNG CO LTD	12,391	2,763	1,656	1,952
91	CASIO COMPUTER CO LTD	12,281	1,622	1,590	1,904
92	XIAN JIAOTONG UNIV	12,085	4,778	5,843	6,898
93	TCL CHINA STAR OPTOELECTRONICS TECH CO LTD	12,006	2,115	2,016	2,020
94	HITACHI ASTEMO LTD	11,941	1,488	2,890	3,220
95	RENESAS ELECTRONICS CORP	11,780	1,080	999	817

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Rank	Standardized Current Assignee	Total	2020	2021	2022
96	KUBOTA LTD	11,758	1,822	2,453	3,106
97	KIOXIA CORP	11,595	2,087	2,547	3,271
98	SHANGHAI JIAO TONG UNIV	11,399	4,040	5,212	6,566
99	ADVANCED NEW TECH CO LTD	11,220	4,804	5,554	2,051
100	SANKYO CO LTD	11,195	3,058	3,095	3,804

On the whole, Samsung Electronics holds the most effective patents in Asia, far exceeding Huawei, which ranks second. At the same time, most of the top 100 patent filers have maintained high patent activity in the past three years. For example, Samsung, Huawei, Toyota, Canon and other companies have maintained an increasing trend in the volume of patents granted in the past three years. However, there are some companies, such as Sony and Nissan, whose patent activity has declined in recent years.

CATEGORY AND GEOGRAPHIC TERRITORIES

Among the top 100 patent applicants in Asia, 91 are enterprises, and the other 9 are universities, as shown in **Figure 1**.

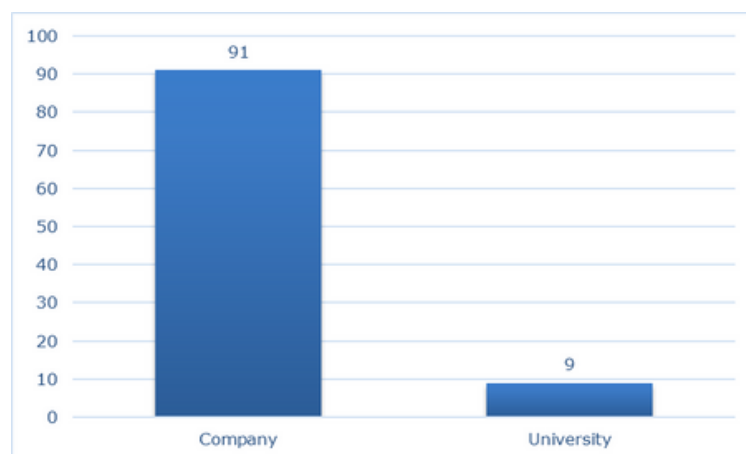


Figure 1 Category

At the same time, according to the analysis of the regions of these applicants, we can find that they are all from Japan, China and Korea, and Japan has the largest number of applicants, as shown in **Figure 2**. This is enough to reflect the advantages of the above three countries in terms of patents, and also reflects the shortcomings of other Asian countries in this regard.

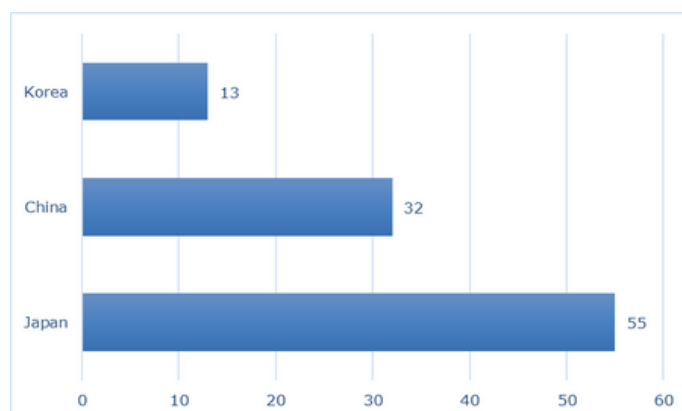


Figure 2 Geographic Territories

CATEGORY AND GEOGRAPHIC TERRITORIES

By analyzing the main countries of origin, it can be found that Japan, China and Korea are the main technical sources of the applicant's patents analyzed in this report, as shown in **Figure 3**. Further analysis of the applicant's target market countries shows that China is the most important target market country, followed by Japan and the United States, as shown in **Figure 4**.

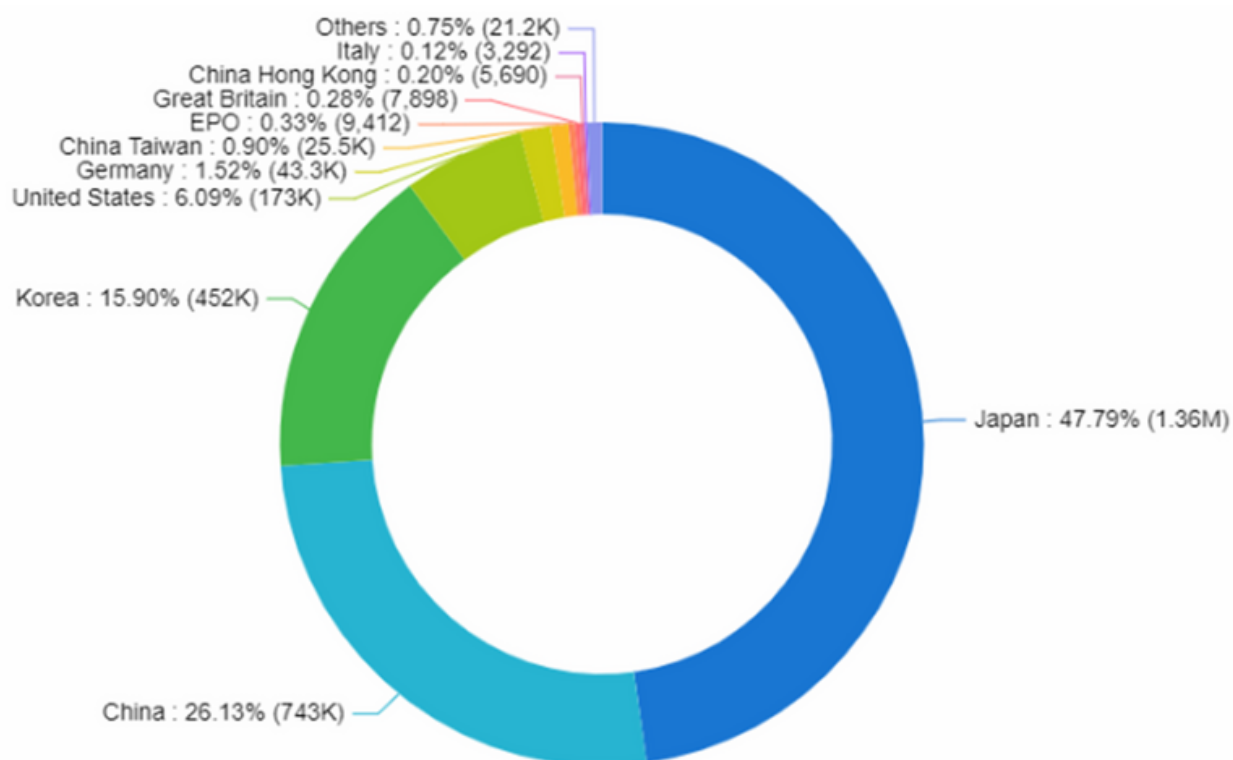


Figure 3 Countries of origin

CATEGORY AND GEOGRAPHIC TERRITORIES

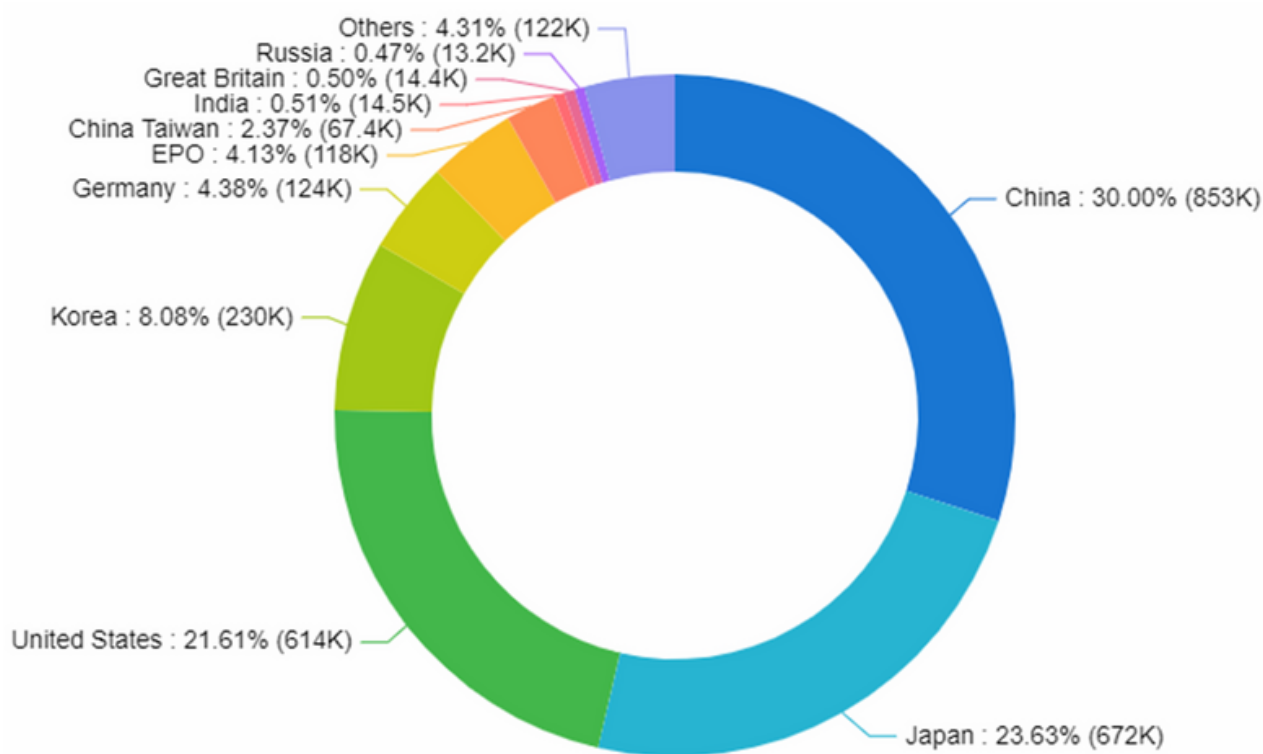


Figure 4 Countries of targeted geographic markets

KEY TECHNOLOGIES

The key technical fields of patents applied by the top 100 patent filers in Asia are analyzed, and the results are shown in **Figure 5**. It can be seen that semiconductor, digital communication and data processing are the technical fields that the above applicants mainly focus on. This also shows that enterprises in these fields have stronger technological innovation capabilities, thus applying for more patents.

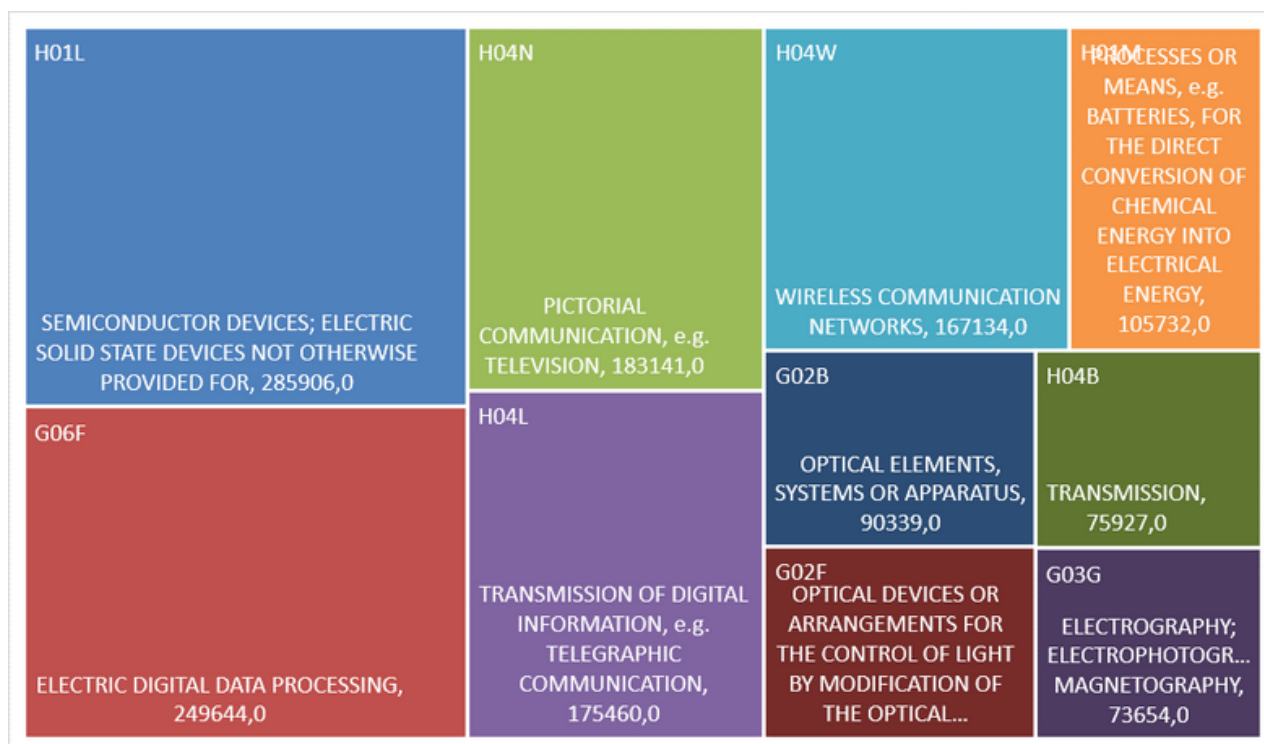


Figure 5 The top 10 IPC classification numbers

KEY TECHNOLOGIES

Further analysis of the technical fields concerned by the top 10 patent filers shows that Samsung and TSMC have great advantages in the field of semiconductor devices, Huawei has obvious advantages in the field of pictorial communication, and Canon has the most patents in image communication, as shown in **Figure 6**.

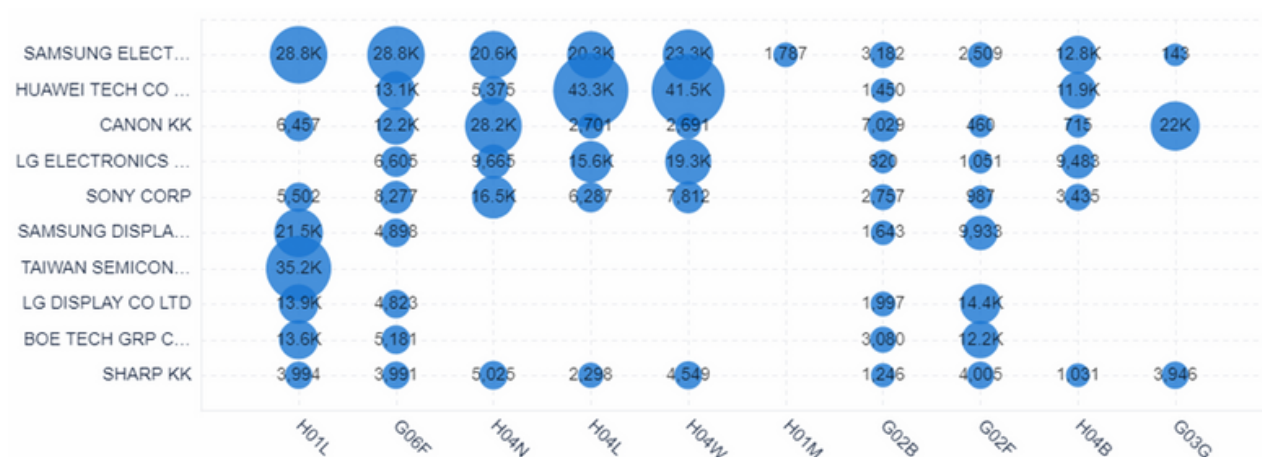


Figure 6 Top assignees of key technologies

CONCLUSION

The top 100 patent filers in Asia are all concentrated in Japan, China and Korea, and most of them have maintained a high technological innovation ability, which has led to the continuous increase in the volume of patents granted in recent years, thus further enhancing their competitive advantage in the market. At the same time, the above patent filers are mainly concentrated in the electronic information industry and manufacturing industry, which also reflects the strong competitiveness of Asia in these industries.

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