



Europäisches
Patentamt
European
Patent Office
Office européen
des brevets

Recent Developments at the EPO

欧盟专利局（EPO）近期发展



The EPO at a glance

一目了然：EPO



Our mission 任务

在40个国家经单一申请案提供专利保护
We provide patent protection for inventions in up to 40 European countries on the basis of one single application



Our locations 地点:

Munich (headquarters) 慕尼黑 (总部), The Hague 海牙, Berlin 柏林, Vienna 维也纳 and Brussels 布鲁塞尔



2nd largest

intergovernmental 欧洲第二大
institution in Europe 政府间机构



Self-financing 自资:

Budget of **EUR 2.4bn** 预算为24亿
without any public funding 无政府补助



7 000

employees 员工

, of which around 其中

4 300

highly qualified patent examiners working in all fields of technology 为各个领域的高度资格专利审查员

Our history 本局历史

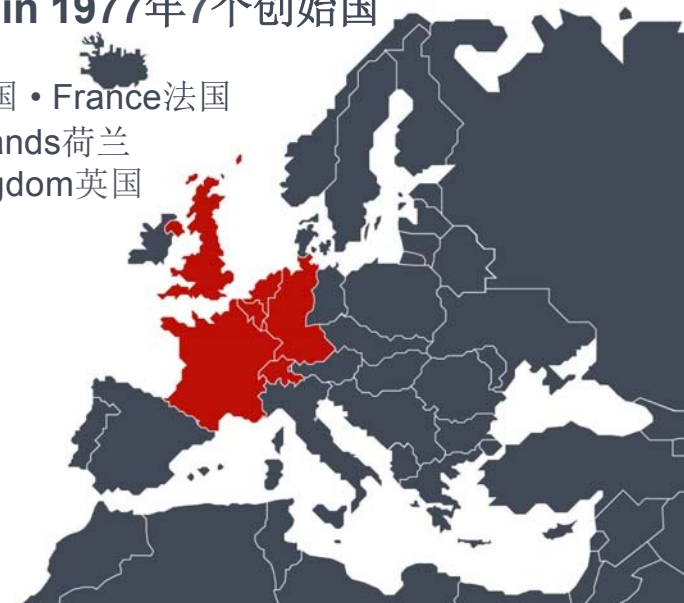
1973	● Diplomatic Conference in Munich 慕尼黑外交官大会
5 October 1973	● Signature of the European Patent Convention (EPC) by 16 countries 16个国家的代表签署欧洲专利公约
1977	● Entry into force of the EPC in seven countries 欧洲专利公约于7个国家生效 Founding of the European Patent Organisation & EPO 欧洲专利组织及欧洲专利局成立
2013	● Celebration of 40 years of the EPC 欧洲专利公约第40周年

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Seven founding states in 1977 7个创始国

Belgium 比利时 • Germany 德国 • France 法国
Luxembourg 卢森堡 • Netherlands 荷兰
Switzerland 瑞士 • United Kingdom 英国



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2019: One EPO application: uniform protection...

...in up to 44 countries, some 700 mil. people

2019:一次EPO申请，全面一致保护，于总人口7亿人的44个国家

38 European member states 38个欧盟成员国

Belgium • Germany • France • Luxembourg • Netherlands
 Switzerland • United Kingdom • Sweden • Italy • Austria • Liechtenstein •
 Greece • Spain • Denmark • Monaco • Portugal • Ireland • Finland • Cyprus •
 • Turkey • Bulgaria • Czech Rep. • Estonia • Slovakia
 Slovenia • Hungary • Romania • Poland • Iceland • Lithuania • Latvia
 • Malta • Croatia • Norway • Former Yugoslav Rep. Macedonia
 San Marino • Albania • Serbia

Two European extension states 两个扩大国

Bosnia and Herzegovina 黑塞哥维那 • Montenegro 黑山

Four validation states 四个验证国

Republic of Moldova 摩尔多瓦 • Morocco 摩洛哥 • Tunisia 突
 尼西亚 • Cambodia 柬埔寨

European Patent Office



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Structure of the European Patent Organisation

欧洲专利组织机构

European Patent Organisation 欧洲专利组织

Administrative Council 管理理事会

The legislative body 立法机构

- made up of representatives of member states 由成员国代表组成
- supervises the activities of the Office 监督专利局工作
- appoints the President 任命主席
- votes on the Office's budget 通过本局预算
- supervises the activities of the Boards of Appeal Unit 监督上诉委员会部门的工作

European Patent Office 欧洲专利局

The executive body 行政机构

- searching, examining and publishing patent applications 负责搜索、审查及公布专利申请案
- holding opposition proceedings 主办异议程序
- appeal proceedings are the responsibility of the Board of Appeal Unit 上诉委员会部门负责上诉程序
- the members of the boards of appeal are independent in their decision-making 上诉委员会成员享有独立决定权

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Structure of the European Patent Office

欧洲专利局机构



European Patent Office

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Our five locations in Europe 我们在欧洲五个地点



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A multicultural working environment 多文化工作环境

- **35 different nationalities** 35个国籍
- Three languages for working in and for communicating with applicants:

三种工作及与申请人交流中使用的语言

- **English (EN)** 英文
- **French (FR)** 法文
- **German (DE)** 德文



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Three possible routes to file a patent 申请专利的三种方法

Route途径	National成员国国内	European欧洲	International国际
Via经过	National offices 各国专利局	European Patent Office or national offices欧洲 专利局或成员国专利局	International Bureau or European Patent Office or national offices 国际办事处、EPO或成员国专利局
Valid in 有效范围	One country 一个国家	Up to 38 countries 达38国 + two extension states + four validation states + 2个扩大国及4个验证过	Up to 152 countries 达152 个国家
In brief 一目了然	Applications are filed with the relevant national office and are valid for that state only 向当地相关当局申 请，仅于当地国家 有效	One single application in DE/EN/FR for all EPC contracting states. Same legal effects as national patents 单一法、英或德文申 请案，用于所有欧洲专 利公约缔约国，法律效 果跟成员国当地专利相 同	An international patent procedure, not an international patent. 国际专利 程序，而非国际专利。 After the international phase, applicants can choose to enter the national/regional phase in various states 申请起结束后申请者可以选择 加入各国国家 / 地区申请流程

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Improved timeliness 已改进的处理时间



搜索报告
接受申请案起6个月内
事实决定时间：4.4个月

审查时间
2020年前将审查时间
减缩到均12个月
事实审查时间22.3个月

异议阶段
均15个月内完成异议阶段
同时保障各方话语权
事实异议时间：18.6个月

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Largest prior art databases in the world

全球最大先前技术资料库



World's largest collection of documents 全球最大文件库

- Over 1.3 billion technical records of patent and non-patent literature

13亿余专利及非专利技术记载

- Over 51.7 million patent documents of Asian origin 5170万余亚洲专利文件
- 3.4 million standards-related documents 340万件标准相关的文件



CPC¹ becoming the new world standard for classification EPOQUE
CPC已成为了EPOQUE分类体系的世界新标准



search tool 搜索工具: a **benchmark** used by examiners **worldwide** 全球审查员的基准

- In 48 patent offices, including Australia, Brazil and China 于48国专利局, 含澳大利亚、巴西、中国



Machine translation from 31 languages into English 机器翻译: 31语种翻译成英文

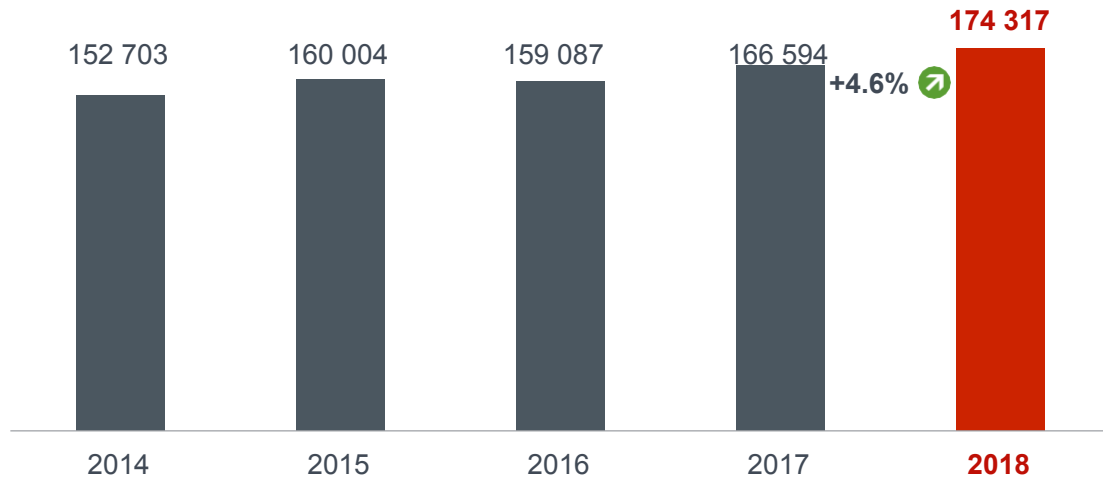
¹ Co-operative Patent Classification: classification system for patent documents jointly developed by the EPO and the US Patent and Trademark Office. EPO及美国专利商标局联合专利文件分类体系

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Total European patent applications in 2018

欧洲专利申请案2018总数



Source: EPO. Status: 21.1.2019.

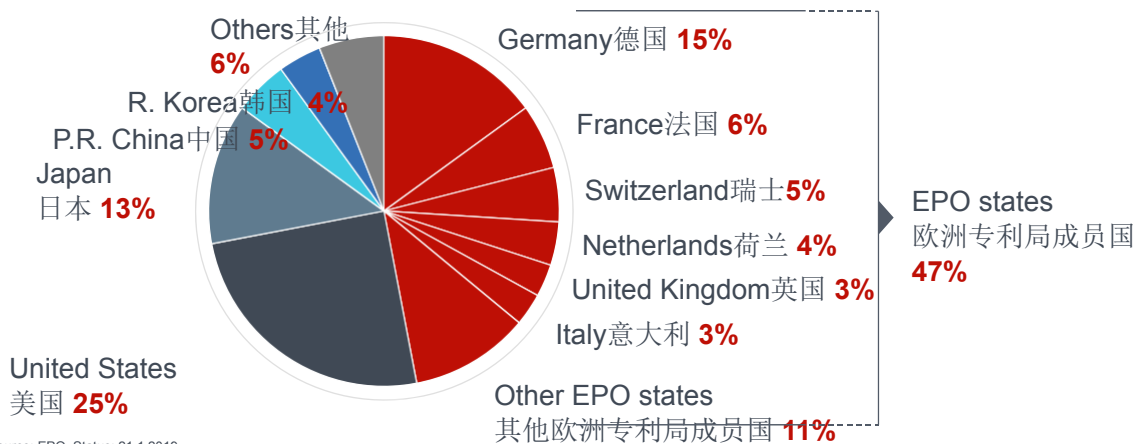
European patent applications include direct European applications and international (PCT) applications that entered the European phase during the reporting period. 包含报告期的欧洲专利及同时期加入欧盟阶段的国际程序专利PCT。

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Origin of European patent applications¹ in 2018

欧洲专利2018年申请者国籍



Source: EPO. Status: 21.1.2019.

European patent applications include direct European applications and international (PCT) applications that entered the European phase during the reporting period. 包含报告期的欧洲专利及同时期加入欧盟阶段的国际程序专利 (PCT) The geographic origin is based on the first-named applicant principle. 地理位置分类基于第一申请者的居住地。 Note: Sums may vary slightly due to rounding. 由于四舍五入的关系，数字相加结果可能不等于所列总数。

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Leading fields of technology 领导技术领域

TOP前10

			2018	Change	变化幅度
1 (=)	Medical technology 医疗技术		13 795	5.0%	↗
2 (=)	Digital communication 数字通信		11 940	0.7%	↗
3 (=)	Computer technology 电脑技术		11 718	3.3%	↗
4 (=)	Electrical machinery, apparatus, energy 电子机械、设备、发电		10 722	4.7%	↗
5 (=)	Transport 交通运输		9 039	5.9%	↗
6 (=)	Measurement 衡量		8 744	9.3%	↗
7 (=)	Pharmaceuticals 制药业		7 441	13.9%	↗
8 (+1)	Biotechnology 生物技术		6 742	12.1%	↗
9 (+1)	Other special machines 其他特别技术 ranging from agriculture to 3D printing 农业至3D打印		6 379	10.9%	↗
10 (-2)	Organic fine chemistry 有机精细化学		6 233	- 3.6%	↘

Source: EPO. Status: 21.1.2019.

European patent applications include direct European applications and international (PCT) applications that entered the European phase during the reporting period. The definition of the fields is based on the WIPO-IPC technology concordance.

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Top applicants in 2018 2018年 申请冠军公司

TOP前10

			2018
1 (+1)	Siemens 西门子		2 493
2 (-1)	Huawei 华为		2 485
3 (+1)	Samsung 三星		2 449
4 (-1)	LG		2 376
5 (+2)	United Tech 联合技术		1 983
6 (=)	Royal Philips 皇家飞利浦		1 617
7 (-2)	Qualcomm 高通		1 593
8 (+2)	Ericsson 爱立信		1 472
9 (+3)	GenElectric 通用电气		1 307
10 (-1)	Robert Bosch		1 286

● EPO states 成员国 ● United States 美 ● P.R. China 中 ● R. Korea 韩

Source: EPO. Status: 21.1.2019.

This is the ranking of the main consolidated applicants at the EPO in 2018 (first-named applicant principle). It is based on European patent applications filed with the EPO, which include direct European applications and international (PCT) applications that entered the European phase during the reporting period. Applications by identifiable subsidiaries, not necessarily located in the same country, are allocated to the consolidated applicants. The countries refer to the country of residence of the headquarters. 基于提交给EPO的申请案，包含欧洲及已加入欧洲程序的国际PCT申请案。子公司的申请案归类于相对的母公司。国籍照公司总部的所在地。

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Top countries for European patent applications

欧洲专利申请大国

TOP前40

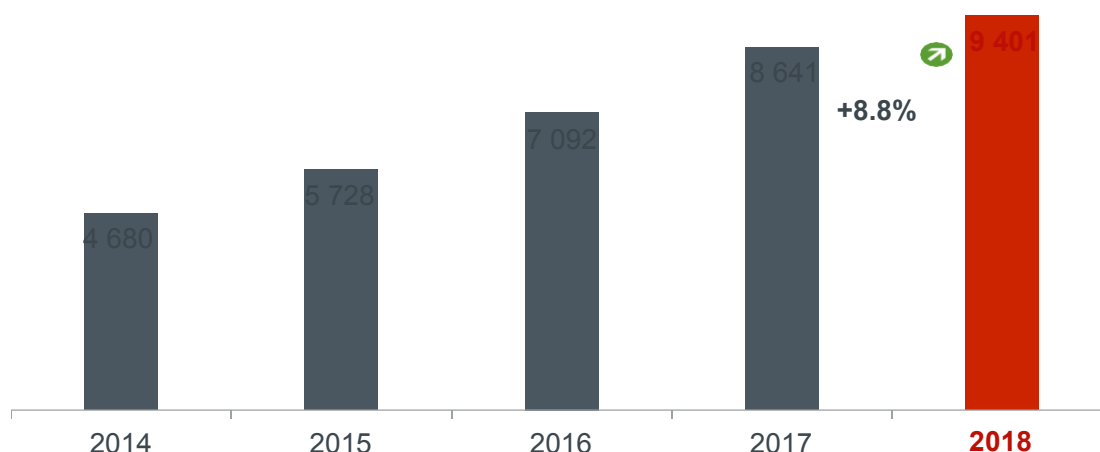
	2018	Change		2018	Change		2018	Change
1 United States美国	43 612	2.7%	15 Spain西班牙	1 776	6.3%	29 Cayman Islands开曼群岛	367	52.9%
2 Germany德国	26 734	4.7%	16 Chinese Taipei台北	1 767	8.9%	30 Puerto Rico波多黎各	365	31.3%
3 Japan日本	22 615	3.9%	17 Finland芬兰	1 728	-3.8%	31 Barbados巴巴多斯	332	95.3%
4 France法国	10 317	-2.8%	18 Canada加拿大	1 596	5.5%	32 Saudi Arabia沙特阿拉伯	264	88.6%
5 P.R. China中国	9 401	8.8%	19 Israel以色列	1 456	4.9%	33 Czech Republic捷克	242	17.5%
6 Switzerland瑞士	7 927	7.8%	20 Australia澳大利亚	978	16.3%	34 Russian Federation俄罗斯	229	13.4%
7 R. Korea韩国	7 296	13.0%	21 Ireland爱尔兰	801	21.4%	35 Portugal葡萄牙	220	46.7%
8 Netherlands荷兰	7 140	1.4%	22 India印度	710	4.7%	36 New Zealand新西兰	194	-3.5%
9 United Kingdom英国	5 736	7.8%	23 Norway挪威	610	14.9%	37 Brazil巴西	161	-2.4%
10 Italy意大利	4 399	0.9%	24 Turkey土耳其	572	-37.2%	38 Greece希腊	120	17.6%
11 Sweden瑞典	4 050	7.1%	25 Poland波兰	534	19.7%	38 Hungary匈牙利	120	26.3%
12 Denmark丹麦	2 390	14.4%	26 Singapore新加坡	523	20.2%	40 Hong Kong香港	112	2.8%
13 Belgium比利时	2 360	9.7%	27 Luxembourg卢森堡	455	-14.6%			
14 Austria奥地利	2 292	3.8%	28 Liechtenstein列支敦士登	429	12.9%			

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European patent applications¹ – P.R. China

欧洲专利中国申请者总数



Source: EPO, Status: 21.1.2019.

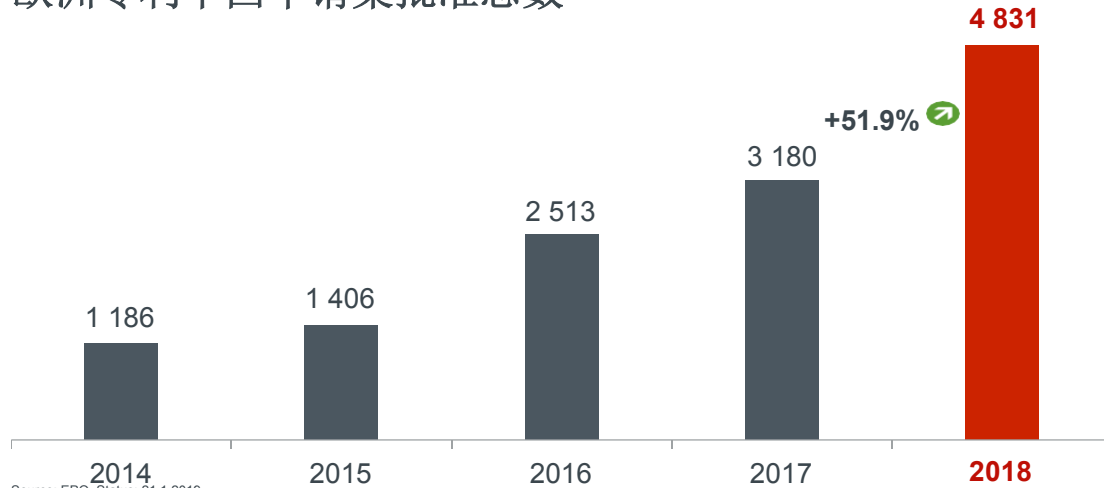
¹ European patent applications include direct European applications and international (PCT) applications that entered the European phase during the reporting period. The geographic origin is based on the first-named applicant principle. 包含报告期的欧洲专利及同时期加入欧盟阶段的国际程序专利（PCT）。地理位置分类基于第一申请者的居住地。

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European patent grants¹ – P.R. China

欧洲专利中国申请案批准总数



Source: EPO, Status: 21.1.2019.

¹ The analysis is based on published patents granted by the EPO. In cases where several patentees are mentioned on the published patent, the country of residence of the first patentee listed applies. 多个申请者联合申请专利请宽下，照第一申请者的居住国。

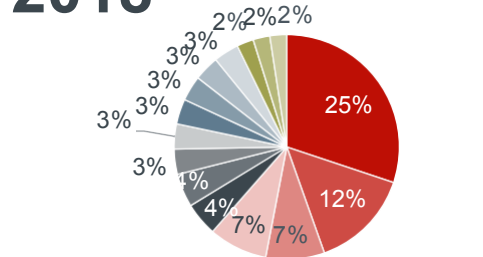
European Patent Office

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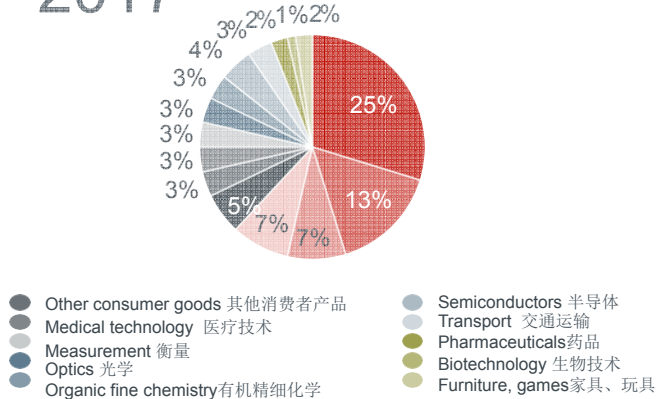
Leading 15 fields of technology¹ – P.R. China²

中国申请者15个领导技术领域

2018



2017



- Digital communication 数字通信
- Computer technology 电脑技术
- Electrical machinery, apparatus, energy 电子机械、设备、发电
- Telecommunications 电讯
- Audio-visual technology 音响技术

Source: EPO, Status: 21.1.2019.

¹ The definition of the fields is based on the WIPO IPC technology concordance. The table is available at: http://www.wipo.int/export/sites/www/ipstats/en/statistics/patents/xls/ipc_technology.xls

² The geographic origin is based on the first-named applicant principle. 地点分类基于第一申请者所在地。

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Top EPO applicants 2018 – global 2018全球EPO申请冠军

TOP50

	2018		2018		2018
1 Siemens西门子	2493	18 Valeo法雷奥	784	35 ABB	571
2 Huawei华为	2485	19 Alphabet	779	36 Bayer拜耳	559
3 Samsung三星	2449	20 Nokia诺基亚	738	37 SABIC 沙特基础	557
4 LG	2376	21 Continental大陆集团	691	38 Toshiba 东芝	545
5 United Technologies联合	1983	22 Hitachi日立	658	39 Guangdong Oppo广东移动通信	523
6 Royal Philips皇家飞利浦	1617	23 Mitsubishi Electric三菱	655	40 Mitsubishi Heavy 三菱重工	512
7 Qualcomm高通	1593	24 Hoffmann-La Roche	651	41 Airbus空客	509
8 Ericsson爱立信	1472	25 3M	635	42 Unilever 联合利华	502
9 General Electric通用电气	1307	25 Honeywell	635	43 DSM	500
10 Robert Bosch	1286	27 HP	626	44 Fraunhofer- 弗劳恩霍夫协会	468
11 Sony索尼	1278	28 Dow Chemical	623	45 Philip Morris	457
12 BASF巴斯夫	1256	29 Toyota Motor丰田	608	46 Merck默克药厂	432
13 Intel英特尔	1057	30 CEA ¹	597	47 Safran	423
14 Johnson & Johnson强生	982	31 Boeing波音	596	48 BOE Technology京东方科技	419
15 Microsoft微软	975	32 Medtronic	593	49 Nestlé雀巢	382
16 Canon佳能	816	33 Procter & Gamble宝洁	580	50 Apple苹果	375
17 Panasonic松下	815	34 Philips Lighting	573		

Source: EPO, Status: 21.1.2019.

¹ Commissariat à l'énergie atomique et aux énergies alternatives.² Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.

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Top applicants at the EPO in 2018 from P.R. China¹

2018年中国申请冠军

TOP20

1 HUAWEI TECHNOLOGIES华为	2485
2 GUANGDONG OPPO MOBILE TELECOMMUNICATIONS	523
3 BOE TECHNOLOGY京东方	419
4 ZTE中兴通讯	337
5 ALIBABA阿里巴巴	264
6 XIAOMI小米	183
7 SHENZHEN GOODIX TECHNOLOGY深圳汇顶科技	120
8 CONTEMPORARY AMPEREX TECHNOLOGY新能源科技	103
9 CHINA ACADEMY OF TELECOMMUNICATIONS TECHNOLOGY中国电信科技	102
10 TENCENT腾讯	99
11 BAIDU百度	88
12 BYD比亚迪	76
13 NINGBO GEELY AUTOMOBILE RESEARCH & DEVELOPMENT宁波吉利	63
13 QINGDAO HAIER WASHING MACHINE 青岛海尔	63
15 SZ DJI TECHNOLOGY 深圳大疆创新科技	61
16 MIDEA美的	59
17 LENOVO联想	58
18 CHINESE ACADEMY OF SCIENCES中国科学院	52
19 BEIJING DIDI INFINITY TECHNOLOGY AND DEVELOPMENT滴滴无限	49
19 NUCTECH同方威视	49

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- Thank you for your attention
- 谢谢各位的关注