



Europäisches  
Patentamt  
European  
Patent Office  
Office européen  
des brevets

# European Patent Office Patent Index 2019

Country profile: Belgium

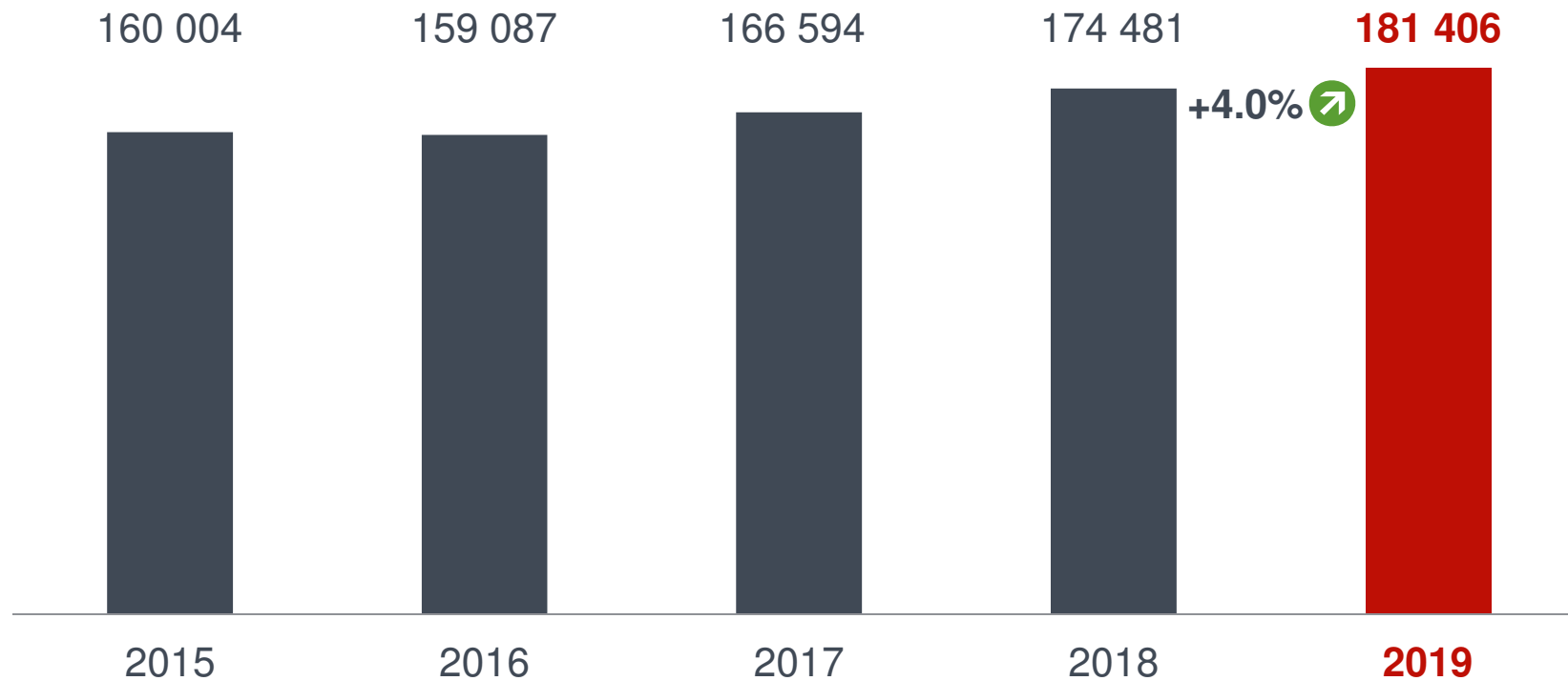


Contact: [press@epo.org](mailto:press@epo.org)

[www.epo.org/media](http://www.epo.org/media)

Date of publication: 12 March 2020

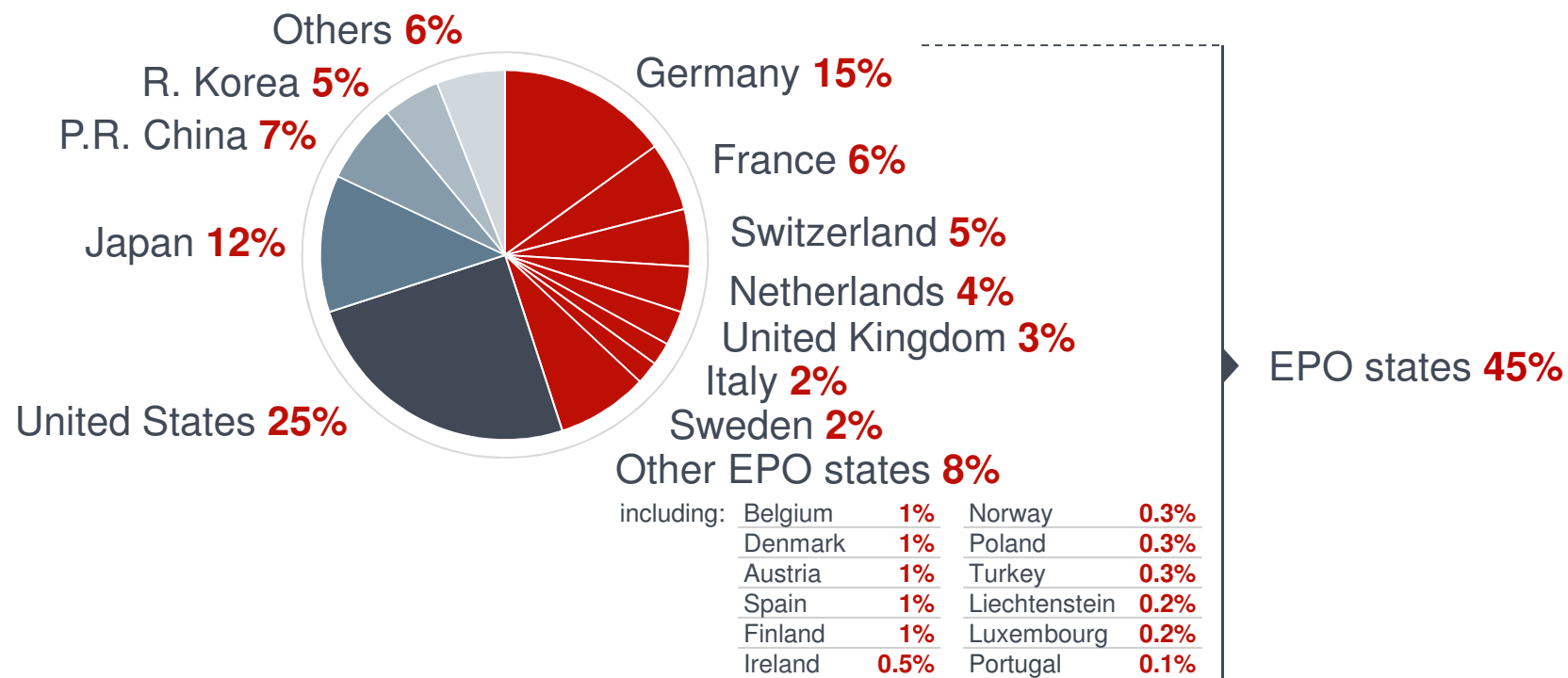
# Growth of European patent applications<sup>1</sup> – global



Source: EPO. Status: 27.1.2020.

<sup>1</sup> European patent applications include direct European applications and international (PCT) applications that entered the European phase during the reporting period.

# Origin of European patent applications<sup>1</sup> in 2019



Source: EPO. Status: 27.1.2020.

<sup>1</sup> 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 country of residence of the first applicant listed on the application form (first-named applicant principle).

Note: Sums may vary slightly due to rounding.

# Top countries for European patent applications<sup>1</sup>

## TOP40

	2019	Change		2019	Change		2019	Change			
1	United States	46 201	5.5%	15	Spain	1 887	6.0%	29	Luxembourg	427	-0.9%
2	Germany	26 805	0.5%	16	Canada	1 822	14.5%	30	Saudi Arabia	361	38.3%
3	Japan	22 066	-2.3%	17	Finland	1 703	-1.4%	31	Puerto Rico	292	-18.7%
4	P.R. China	12 247	29.2%	18	Chinese Taipei	1 576	-10.3%	32	Portugal	272	23.1%
5	France	10 163	-2.9%	19	Israel	1 531	6.8%	33	Barbados	268	-17.5%
6	R. Korea	8 287	14.1%	20	Australia	986	1.8%	34	Russian Federation	241	9.5%
7	Switzerland	8 249	3.6%	21	Ireland	878	6.3%	35	Czech Republic	198	-20.2%
8	Netherlands	6 954	-2.6%	22	India	637	-8.9%	36	Brazil	190	18.8%
9	United Kingdom	6 156	6.9%	23	Norway	632	3.6%	37	New Zealand	179	-4.8%
10	Italy	4 456	1.2%	24	Cayman Islands	503	40.5%	38	Greece	139	15.8%
11	Sweden	4 381	8.0%	25	Singapore	487	-1.0%	39	Hong Kong SAR (China)	125	13.6%
12	Belgium	2 423	3.2%	26	Poland	469	-9.6%	40	Slovenia	121	21.0%
13	Denmark	2 404	0.8%	27	Turkey	465	-19.0%				
14	Austria	2 341	2.6%	28	Liechtenstein	437	1.2%				

Source: EPO. Status: 27.1.2020.

<sup>1</sup> 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.

# European patent applications<sup>1</sup> per million inhabitants

## TOP30

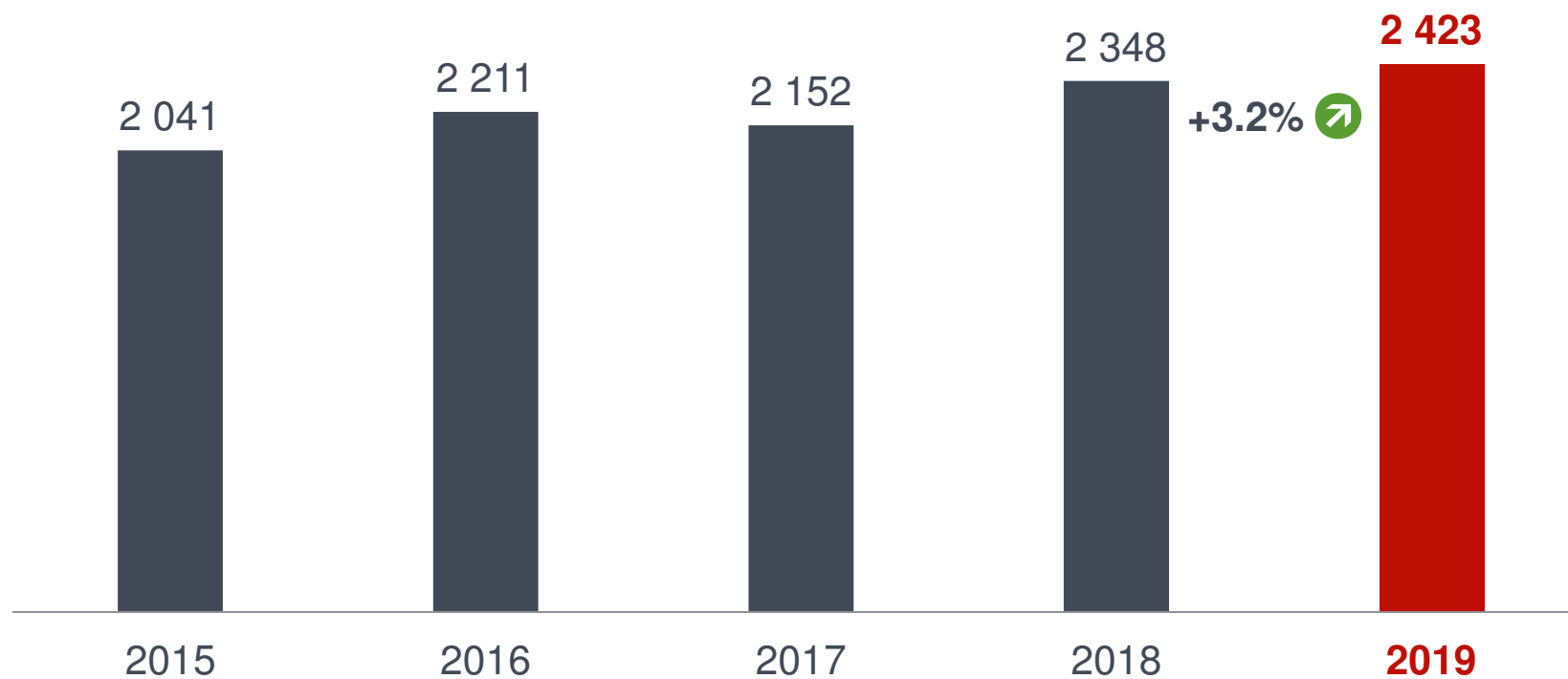
	Applications 2019	Population <sup>2</sup>	Ratio: appl. per mio. inhabitants		Applications 2019	Population <sup>2</sup>	Ratio: appl. per mio. inhabitants			
1	Switzerland	8 249	8 348 737	<b>988</b>	16	United Kingdom	6 156	65 436 510	<b>94</b>	
2	Sweden	4 381	10 121 794	<b>433</b>	17	Puerto Rico	292	3 240 261	<b>90</b>	
3	Denmark	2 404	5 841 522	<b>412</b>	18	Singapore	487	6 102 937	<b>80</b>	
4	Netherlands	6 954	17 216 476	<b>404</b>	19	Italy	4 456	62 334 799	<b>71</b>	
5	Germany	26 805	80 313 272	<b>334</b>	20	Chinese Taipei	1 576	23 577 456	<b>67</b>	
6	Finland	1 703	5 555 154	<b>307</b>	21	Slovenia	121	2 102 538	<b>58</b>	
7	Austria	2 341	8 828 456	<b>265</b>	22	Canada	1 822	37 390 640	<b>49</b>	
8	Belgium	2 423	11 647 253	<b>208</b>	23	Estonia	49	1 236 641	<b>40</b>	
9	Israel	1 531	8 550 149	<b>179</b>	24	Australia	986	25 113 443	<b>39</b>	
10	Japan	22 066	125 853 035	<b>175</b>	25	Spain	1 887	49 683 254	<b>38</b>	
11	Ireland	878	5 123 219	<b>171</b>	26	Cyprus	47	1 252 147	<b>38</b>	
12	R. Korea	8 287	51 635 813	<b>160</b>	27	New Zealand	179	4 854 878	<b>37</b>	
13	France	10 163	67 611 479	<b>150</b>	28	Portugal	272	10 328 384	<b>26</b>	
EU28: 140 ▶	14	United States	46 201	330 268 840	<b>140</b>	29	Czech Republic	198	10 695 547	<b>19</b>
	15	Norway	632	5 421 399	<b>117</b>	30	Hong Kong SAR (China)	125	7 232 810	<b>17</b>

Source: EPO. Status: 27.1.2020.

<sup>1</sup> 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.

<sup>2</sup> Source of population figures: U.S. Census Bureau, International Data Base.

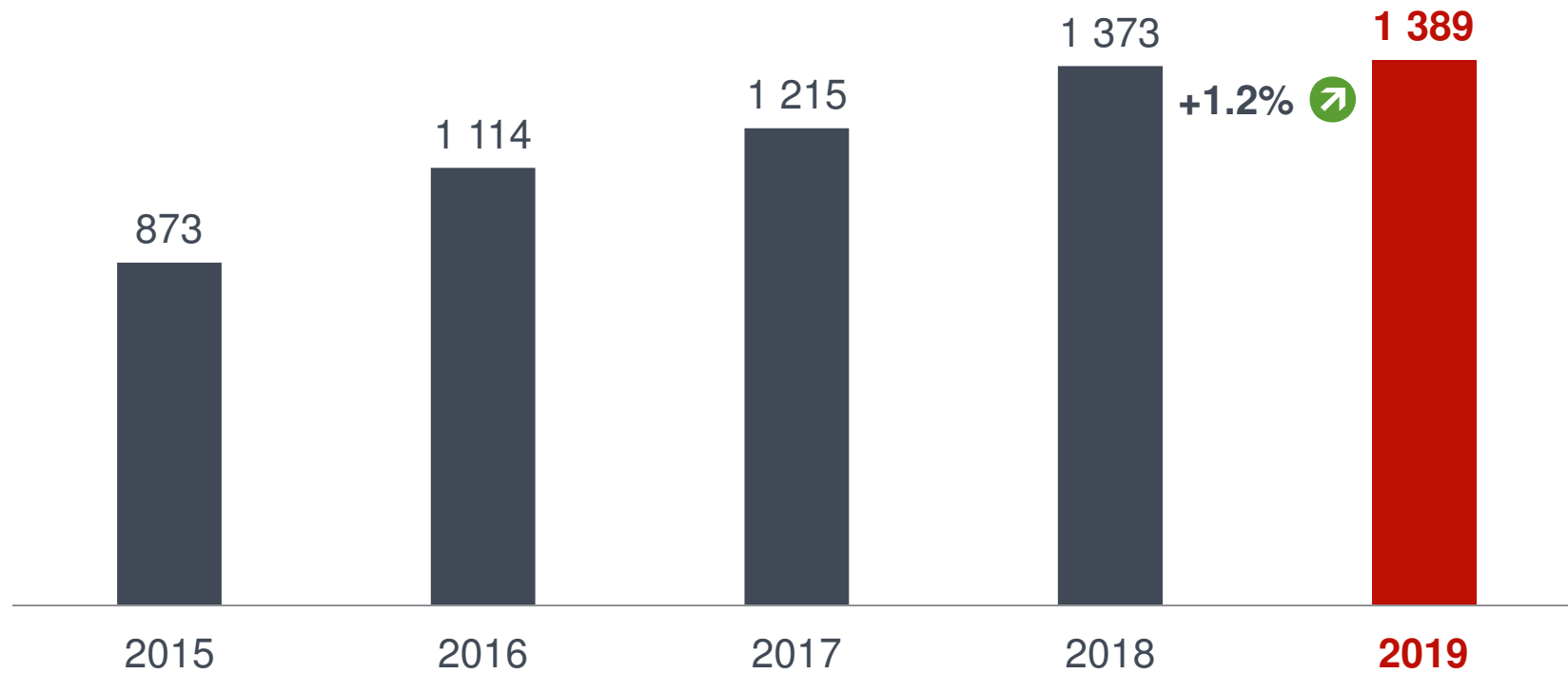
## European patent applications – Belgium



Source: EPO. Status: 27.1.2020.

<sup>1</sup> 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.

# European patent grants<sup>1</sup> – Belgium



Source: EPO. Status: 27.1.2020.

<sup>1</sup> 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.

# Leading fields of technology<sup>1</sup> – global

## TOP 10

		2019	Change	
1	Digital communication	14 175	19.6%	↗
2	Medical technology	13 833	0.9%	↗
3	Computer technology	12 774	10.2%	↗
4	Electrical machinery, apparatus, energy	11 255	5.5%	↗
5	Transport	9 635	6.6%	↗
6	Measurement	9 045	3.8%	↗
7	Pharmaceuticals	7 697	4.4%	↗
8	Biotechnology	6 801	1.7%	↗
9	Other special machines	6 436	1.5%	↗
10	Organic fine chemistry	6 167	-0.5%	↘

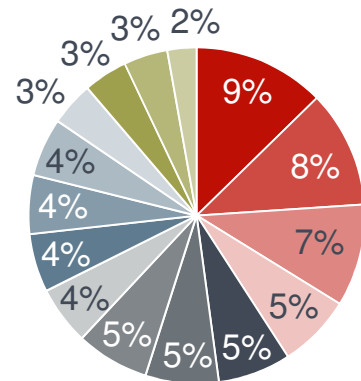
Source: EPO. Status: 27.1.2020.

<sup>1</sup> 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](http://www.wipo.int/export/sites/www/ipstats/en/statistics/patents/xls/ipc_technology.xls)

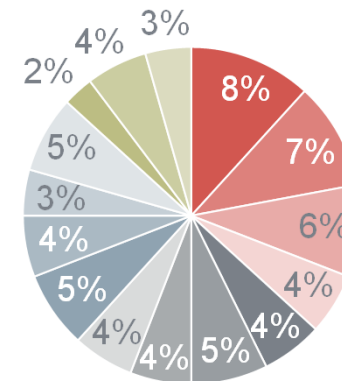


# Leading 15 fields of technology<sup>1</sup> – Belgium<sup>2</sup> (73% of all applications)

## 2019



## 2018



- Other special machines
- Biotechnology
- Pharmaceuticals
- Materials, metallurgy
- Transport

- Medical technology
- Measurement
- Organic fine chemistry
- Civil engineering
- Basic materials chemistry

- Chemical engineering
- Electrical machinery, apparatus, energy
- Surface technology, coating
- Computer technology
- Textile and paper machines

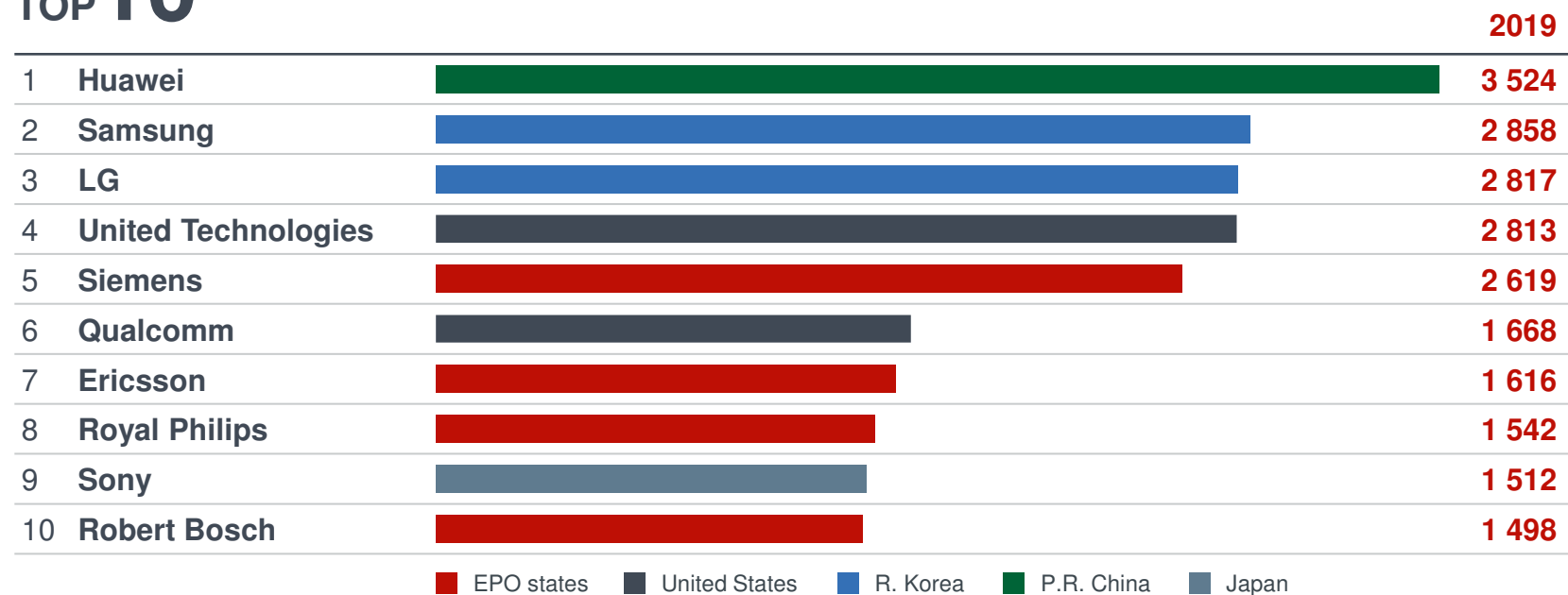
Source: EPO. Status: 21.1.2019.

<sup>1</sup> 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](http://www.wipo.int/export/sites/www/ipstats/en/statistics/patents/xls/ipc_technology.xls)

<sup>2</sup> The geographic origin is based on the first-named applicant principle.

# Top EPO applicants<sup>1</sup> 2019 – global

## TOP 10



Source: EPO. Status: 27.1.2020.

<sup>1</sup> This is the ranking of the main consolidated applicants at the EPO in 2019 (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.

# Top EPO applicants 2019 – global

## TOP50

	2019		2019		2019
1 Huawei	3 524	18 Panasonic	782	35 Sabic	552
2 Samsung	2 858	19 Hitachi	740	36 Toyota Motor	541
3 LG	2 817	20 Nokia	733	37 Valeo	539
4 United Technologies	2 813	21 Canon	698	38 Airbus	530
5 Siemens	2 619	22 ABB	689	39 Bayer	524
6 Qualcomm	1 668	23 Mitsubishi Electric	685	40 Honeywell	514
7 Ericsson	1 616	24 Hoffmann-La Roche	677	41 Rolls-Royce	494
8 Royal Philips	1 542	25 Boeing	661	42 Merck KGaA	482
9 Sony	1 512	26 Signify	656	43 Unilever	455
10 Robert Bosch	1 498	27 Procter & Gamble	618	44 InterDigital	425
11 BASF	1 366	28 Continental	617	45 Alibaba	424
12 General Electric	1 247	29 Dow Chemical	608	45 Philip Morris	424
13 Alphabet	1 196	30 CEA <sup>1</sup>	597	47 Volkswagen	422
14 Microsoft	1 112	31 3M	576	48 Safran	411
15 Johnson & Johnson	973	32 Fraunhofer-Gesellschaft <sup>2</sup>	575	49 Toshiba	406
16 Oppo	900	33 HP	566	50 Mitsubishi Heavy Industries	401
17 Intel	818	33 Medtronic	566		

Source: EPO. Status: 27.1.2020.

<sup>1</sup> Commissariat à l'énergie atomique et aux énergies alternatives.

<sup>2</sup> Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.

# Top applicants at the EPO in 2019 from Belgium<sup>1</sup>

## TOP 10

1	SOLVAY	306
2	IMEC	174
3	UMICORE	89
4	K.U. LEUVEN	70
5	UNIVERSITEIT GENT	67
6	AGFA	56
7	MELEXIS	48
8	VIB	44
9	VITO	40
10	ANHEUSER-BUSCH INBEV	34

Source: EPO. Status: 27.1.2020.

<sup>1</sup> This is the ranking of the main consolidated applicants at the EPO in 2019 (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.














# European patent applications<sup>1</sup> 2019 – regional breakdown – Belgium













Region	Province	2019	Share	Change
Vlaanderen	Vlaams Brabant	409	16.9%	13.9% ↗
	Antwerpen	387	16.0%	6.9% ↗
	Oost-Vlaanderen	334	13.8%	-1.8% ↘
	West-Vlaanderen	321	13.3%	7.0% ↗
	Limburg	103	4.3%	-12.0% ↘
Wallonie	Brabant-Wallon	231	9.5%	-4.5% ↘
	Liège	149	6.2%	0.0% →
	Hainaut	92	3.8%	19.5% ↗
	Namur	16	0.7%	-11.1% ↘
	Luxembourg	14	0.6%	16.7% ↗
Bruxelles	Bruxelles	365	15.1%	-1.9% ↘
<b>Region</b>				
Vlaanderen		1 554	64.2%	5.1% ↗
Wallonie		502	20.7%	0.8% ↗
Bruxelles-Capitale		365	15.1%	-1.9% ↘

Source: EPO. Status: 27.1.2020.

<sup>1</sup> 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.

# Leading European regions for patent applications<sup>1</sup> at the EPO in 2019





















Region	Country	2019	Change
1 Bayern	DE	7 969	-3.2% 
2 Île-de-France	FR	6 516	-2.9% 
3 Nordrhein-Westfalen	DE	5 322	3.9% 
4 Baden Württemberg	DE	5 169	1.8% 
5 North Brabant	NL	3 757	4.9% 
6 Stockholm	SE	2 389	4.8% 
7 Hessen	DE	2 134	-3.1% 
8 Greater London	GB	2 101	8.1% 
9 Niedersachsen	DE	1 769	3.5% 
10 Rheinland-Pfalz	DE	1 637	2.6% 
11 Vlaanderen	BE	1 554	5.1% 
12 Lombardia	IT	1 493	6.2% 
13 Hovedstaden	DK	1 357	-7.3% 

Region	Country	2019	Change
14 Auvergne-Rhône-Alpes	FR	1 328	0.7% 
15 Helsinki-Uusimaa	FI	1 219	2.6% 
16 Vaud	CH	1 051	-11.8% 
17 Zürich	CH	1 049	3.5% 
18 North West England	GB	1 021	34.9% 
19 South Holland	NL	1 012	-5.1% 
20 Aargau	CH	957	15.9% 
21 Basel-Stadt	CH	953	-2.8% 
22 East of England	GB	781	12.5% 
23 Neuchâtel	CH	759	-2.8% 
24 Berlin	DE	746	3.3% 
25 Emilia-Romagna	IT	744	-0.9% 

Source: EPO. Status: 27.1.2020.

<sup>1</sup> 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.

# Leading EU regions for patent applications<sup>1</sup> at the EPO in 2019

Region	Country	2019	Change	Region	Country	2019	Change
1 Bayern	DE	7 969	-3.2% 	11 Vlaanderen	BE	1 554	5.1% 
2 Île-de-France	FR	6 516	-2.9% 	12 Lombardia	IT	1 493	6.2% 
3 Nordrhein-Westfalen	DE	5 322	3.9% 	13 Hovedstaden	DK	1 357	-7.3% 
4 Baden Württemberg	DE	5 169	1.8% 	14 Auvergne-Rhône-Alpes	FR	1 328	0.7% 
5 North Brabant	NL	3 757	4.9% 	15 Helsinki-Uusimaa	FI	1 219	2.6% 
6 Stockholm	SE	2 389	4.8% 	16 North West England	GB	1 021	34.9% 
7 Hessen	DE	2 134	-3.1% 	17 South Holland	NL	1 012	-5.1% 
8 Greater London	GB	2 101	8.1% 	18 East of England	GB	781	12.5% 
9 Niedersachsen	DE	1 769	3.5% 	19 Berlin	DE	746	3.3% 
10 Rheinland-Pfalz	DE	1 637	2.6% 	20 Emilia-Romagna	IT	744	-0.9% 

Source: EPO. Status: 27.1.2020.

<sup>1</sup> 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.