European patent applications1 Portugal in comparison with other countries

| | | | | Share of total |
|---------------|---------|---------|---------------|-----------------|
| | | | % change 2021 | applications in |
| Origin | 2020 | 2021 | vs. 2020 | 2021 |
| PORTUGAL | 251 | 286 | 13.9% | 0.2% |
| EPO states2 | 81,531 | 83,775 | 2.8% | 44% |
| All countries | 180,417 | 188,600 | 4.5% | |

European patent applications1

Development in the number of applications from Portugal over the last 10 years

| | | 1 | | | | | | | | | | | | | | | | i . | Share of total |
|--------------------|---------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------------|
| | | 1 | | | | | | | | | | | | | | | 1 | 1 | applications in |
| | 2012 | 2013 | 2013/2012 | 2014 | 2014/2013 | 2015 | 2015/2014 | 2016 | 2016/2015 | 2017 | 2017/2016 | 2018 | 2018/2017 | 2019 | 2019/2018 | 2020 | 2020/2019 | 2021 | 2021/2020 2021 |
| PORTUGAL | 76 | 95 | 25.0% | 113 | 18.9% | 141 | 24.8% | 157 | 11.3% | 150 | -4.5% | 221 | 47.3% | 272 | 23.1% | 251 | -7.7% | 286 | 13.9% 0.2% |
| Total applications | 148,562 | 148,027 | -0.4% | 152,703 | 3.2% | 160,004 | 4.8% | 159,087 | -0.6% | 166,594 | 4.7% | 174,481 | 4.7% | 181,532 | 4.0% | 180,417 | -0.6% | 188,600 | 4.5% |
| - | | | | | | | | | | | | | | | | | | | |

European patent grants3

| Development in the number of patents granted to applicants from Portugal over the last 10 | J years | | | | | | | | | | | | | | | | | | |
|---|---------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-------------------|
| | | | | | | | | | | | | | | | | | | | Share of total |
| | | | | | | | | | | | | | | | | | | | patent grants |
| | 2012 | 2013 | 2013/2012 | 2014 | 2014/2013 | 2015 | 2015/2014 | 2016 | 2016/2015 | 2017 | 2017/2016 | 2018 | 2018/2017 | 2019 | 2019/2018 | 2020 | 2020/2019 | 2021 | 2021/2020 in 2021 |
| PORTUGAL | 30 | 26 | -13.3% | 22 | -15.4% | 46 | 109.1% | 59 | 28.3% | 68 | 15.3% | 90 | 32.4% | 110 | 22.2% | 119 | 8.2% | 116 | -2.5% 0.1% |
| Total patents granted | 65,655 | 66,712 | 1.6% | 64,613 | -3.1% | 68,419 | 5.9% | 95,940 | 40.2% | 105,635 | 10.1% | 127,625 | 20.8% | 137,784 | 8.0% | 133,715 | -3.0% | 108,799 | -18.6% |

European patent applications1 Top technology fields4 - Portugal

| TECHNOLOGY FIELD | 2020 | 2021 | 2021/2020 |
|---|------|------|-----------|
| Computer technology | 10 | 32 | 220.0% |
| Biotechnology | 17 | 31 | 82.4% |
| Medical technology | 30 | 29 | -3.3% |
| Transport | 7 | 15 | 114.3% |
| Furniture, games | 7 | 15 | 114.3% |
| Measurement | 15 | 13 | -13.3% |
| Pharmaceuticals | 25 | 13 | -48.0% |
| Food chemistry | 8 | 10 | 25.0% |
| Electrical machinery, apparatus, energy | 5 | 9 | 80.0% |
| Basic materials chemistry | 6 | 9 | 50.0% |
| Civil engineering | 9 | 9 | 0.0% |
| IT methods for management | 4 | 8 | 100.0% |
| Organic fine chemistry | 7 | 8 | 14.3% |
| Environmental technology | 5 | 8 | 60.0% |
| Other special machines | 11 | 8 | -27.3% |

European patent applications1

Top Portuguese applicants7

| COMPANY | 2021 |
|--|------|
| FEEDZAI - CONSULTADORIA E INOVAÇÃO TECNOLÓGICA, S.A. | 1 |
| UNIVERSIDADE DO MINHO | 1 |
| SWORD HEALTH S.A. | 1 |
| NOVADELTA - COMÉRCIO E INDÚSTRIA DE CAFÉS, LDA | 1 |
| UNIVERSIDADE DO PORTO | |
| INSTITUTO POLITÉCNICO DE LEIRIA | |
| UNIVERSIDADE DE AVEIRO | |
| OLI - SISTEMAS SANITARIOS, S.A. | |
| RAIZ - INSTITUTO DE INVESTIGAÇÃO DA FLORESTA E PAPEL | |
| ABYSSAL S.A. | |
| CIIMAR - CENTRO INTERDISCIPLINAR DE INVESTIGAÇÃO MARINHA E AMBIENTAL | |
| INL - INTERNATIONAL IBERIAN NANOTECHNOLOGY LABORATORY | |
| UNIVERSIDADE DE COIMBRA | |
| UNIVERSIDADE NOVA DE LISBOA | |

Source: EPO.

Status: 1.2.2022.

- 1 European patent applications include direct European applications and international (PCT) applications that entered the European phase during the reporting period.
- 2 EPO states: the 38 member states of the European Patent Organisation, which includes the 27 states of the EU.
- 3 The analysis is based on published patents granted by the EPO.
- 4 The definition of the fields is based on the WIPO IPC technology concordance. The table is available at: https://www.wipo.int/ipstats/en/statistics/patents/xls/ipc_technology.xlsx
- The geographic origin is based on the country of residence of the first applicant listed applies.

 The properties of population figures: United Nations, Department of Economic and Social Affairs, Population Division.

 This is the ranking of the main consolidated applicants at the EPO in 2021 (first-named applicant principle). It is based on European patent 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 first applicant listed applicant listed applicant at the EPO in 2021 (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 applications1

Ranking according to number of applications per mio inhabitants

| Rank | Country5 | Applications | Population6 | Applications per mio. |
|------|-----------------------|--------------|-------------|-----------------------|
| 1 | Switzerland | 8,442 | 8.715 | 968.6 |
| 2 | Sweden | 4,954 | 10.160 | 487.6 |
| 3 | Denmark | 2,642 | 5.813 | 454.5 |
| 4 | Netherlands | 6,581 | 17.173 | 383.2 |
| 5 | Finland | 2,111 | 5.548 | 380.5 |
| 6 | Germany | 25,969 | 83.900 | 309.5 |
| 7 | Austria | 2,317 | 9.043 | 256.2 |
| 8 | Belgium | 2,485 | 11.632 | 213.6 |
| 9 | Israel | 1,717 | 8.790 | 195.3 |
| 10 | Ireland | 956 | 4.983 | 191.9 |
| 11 | Korea, Republic of | 9,394 | 51.305 | 183.1 |
| 12 | Japan | 21,681 | 126.051 | 172.0 |
| 13 | France | 10,537 | 65.426 | 161.1 |
| 14 | United States | 46,533 | 332.915 | 139.8 |
| 15 | Singapore | 711 | 5.897 | 120.6 |
| 16 | Norway | 640 | 5.466 | 117.1 |
| 17 | United Kingdom | 5,627 | 68.207 | 82.5 |
| 18 | Italy | 4,919 | 60.367 | 81.5 |
| 19 | Chinese Taipei | 1,472 | 23.855 | 61.7 |
| 20 | Slovenia | 116 | 2.079 | 55.8 |
| 21 | Canada | 2,083 | 38.068 | 54.7 |
| 22 | Estonia | 69 | 1.325 | 52.1 |
| 23 | New Zealand | 226 | 4.861 | 46.5 |
| 24 | Spain | 1,954 | 46.745 | 41.8 |
| 25 | Australia | 1,019 | 25.788 | 39.5 |
| 26 | Cyprus | 44 | 1.216 | 36.2 |
| 27 | Portugal | 286 | 10.168 | 28.1 |
| 28 | Puerto Rico | 78 | 2.828 | 27.6 |
| 29 | Lithuania | 73 | | 27.1 |
| 30 | Hong Kong SAR (China) | 180 | | 23.8 |