
2020's Statistical Review of Top Countries in Holding Nanotechnology Patents

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According to the data gathered by StatNano throughout 2020, a total of 22462 and 5292 nanotechnology patents were issued by the United States Patent and Trademark Office (USPTO) and the European Patent Office (EPO), respectively, half of which accounts for the US as the first spot on the list, followed by South Korea, China, Japan, and Taiwan. The share of nanotechnology patents in the EPO has also shown growth in the last few years.

The [ISO/TS 18110](#) standard defines nanotechnology patents as the patents containing at least one nano-related claim sought to be protected or having a nano related code from the IPC classification codes.

According to the statistical data collected by StatNano from the Orbit patent database in 2020, a total of 22462 nanotechnology patents were issued by the USPTO, 9561 of which were granted patents, and 12901 were published patent applications. 5292 nanotechnology patents were also issued by the EPO, among which 3138 granted patents and 2154 published patent applications were enumerated.

The nanotechnology EPO's patents account for about 23.6% of the USPTO's patents, showing a modest increase compared to 2019 (i.e., 23.4%). Given this share in 2016, 2017, 2018, 2019, and 2020, being 18%, 20%, 23.6%, 23.4%, and 23.6%, respectively, the growing trend has become steady in the last three years, revealing the considerable attention of countries and companies all over the world to the EU's nanotechnology markets compared to the US ones.

Table 1 illustrates the top 10 countries holding the largest number of granted patents and published patent applications in the USPTO and EPO in 2020. The countries are ranked based on the total number of patents issued by the USPTO office, which is unique among federal agencies in filing the most share of patents every year.

Table 1- Top 10 countries in holding nanotechnology patents in the USPTO and EPO in 2020. The ranking is based on the number of the USPTO's patents.

Rank	Country	USPTO	EPO	2020' growth in USPTO compared to 2019	2020' growth in EPO compared to 2019
1	USA	4913	952	1.57%	-1.04%
2	South Korea	941	301	1.07%	27.54%
3	China	736	135	-1.34%	31.07%
4	Japan	661	279	-6.51%	-9.71%
5	Taiwan	513	33	1.58%	10.00%
6	Germany	310	325	-10.92%	-19.95%
7	France	214	238	-8.15%	-16.20%
8	Saudi Arabia	168	25	-4.55%	108.33%
9	UK	154	144	3.36%	3.60%
10	Canada	151	38	4.14%	-29.63%

The US achieves the first rank in holding the USPTO's nanotechnology patents with a share of 51.4%, showing slight growth in comparison to 2019 (i.e., 50.8%). Chasing the US, the next spots on the list are taken by [South Korea](#) and [China](#), respectively.

It is worth mentioning that the EPO's nanotechnology patents of [Saudi Arabia](#), [China](#), [South Korea](#), and [Taiwan](#) grew by about 108%, 31%, 27%, and 10%, respectively, compared to the previous year, demonstrating that these Asian countries concentrated more particular attention to thrive the EU's nanotechnology markets than those of American and even European countries in 2020.

Source

[Nanotechnology patents in USPTO](#)

[Nanotechnology patents in EPO](#)