
Nanotechnology Accounts for 2.5 Percent of USPTO's Patents in 2019



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Only 2.5 percent of the total patents filed at the United States Patent and Trademark Office (USPTO) in 2019 were in the field of nanotechnology, while the share of nanotechnology publications indexed by the Web of Science during the past year reached 10 percent.

According to StatNano, the [United States](#) Patent and Trademark Office (USPTO) granted over 392,000 patents in 2019, 9515 of which (around 2.5 percent) were related to nanotechnology. This meager share - compared to the share of nanotechnology publications in the total scientific publications of the world - reveals that a significant percentage of scientific advances relating to nanotechnology still have a long way to go before they can be transferred from academia to industry. Along with the [USA](#) and Europe, [China](#) and [South Korea](#)'s patent offices are also among nanotechnology innovators' first choices, but considering the limitation of their offices' search engines, it is not possible to search and collect information about different countries' patents in these offices.

Reportedly, only 30 countries could annually file more than 10 nanotechnology patents at the USPTO so far, not including [Russia](#), [Poland](#), [Portugal](#), and [Czech Republic](#). The table below lists the numbers and shares of different countries' nanotechnology patents in their total patents granted by the USPTO in the past year; following the [USA](#) at the first rank with 4,837 nanotechnology patents, [South Korea](#), [China](#), [Japan](#), and [Taiwan](#), respectively, took the next places of the list with 931, 746, 707, and 505 patents relating to nanotechnology, suggesting that Asian countries, especially East Asians, were as successful in nanotechnology patents as they were in nanotechnology publications in 2019, due mainly to their special focus on this area.

Accordingly, the numbers of nanotechnology patents of some scientifically developed countries such as [Germany](#), [France](#), [Switzerland](#), and [Japan](#) were below the global average last year. Figure 1 draws a clear comparison between different countries' shares of nanotechnology patents in their total patents published at the USPTO in 2019.

Table 1. The numbers and shares of different countries' nanotechnology patents in their total patents filed at the USPTO in 2019

Rank	Country	Nanotechnology Patents	Share of nano-patents in the total (%)
1	USA	4837	2.4
2	South Korea	931	3.8
3	China	746	3.3
4	Japan	707	1.2
5	Taiwan	505	4.1
6	Germany	348	1.9
7	France	233	3.3
8	Saudi Arabia	176	16.8
9	UK	149	2.3
10	Canada	145	2.4
11	Switzerland	87	1.7
12	Netherlands	86	1.7
13	Singapore	78	3.8
14	Finland	65	3.9
15	India	60	4.9
16	Italy	56	2.0
17	Sweden	43	1.1
18	Belgium	42	3.2
19	Australia	37	2.1
20	Spain	33	4.5
21	Austria	25	1.9
22	Denmark	21	1.5
23	Ireland	21	1.3
24	Luxembourg	16	3.0
25	Iran	16	18.4



Figure 1. Different countries' shares of nanotechnology patents in their total patents published at the USPTO in 2019.

Source

[Statnano Nanotechnology patents in USPTO \(Patent\) Indicator](#)