

Nano Science, Technology and Industry Scoreboard

StatNano Releases List of Top 10 Countries in Nanotechnology Patents in 2015

2016-02-19

The statistics published on StatNano database website showed that a sum total of 19,544 nanotechnology patents have been published in US Patent and Trademarks Office (USPTO) in 2015

About half of these patents belong to the US while <u>Japan</u>, <u>South Korea</u> and <u>Taiwan</u> possess the next ranks. A sum total of 2,970 nanotechnology patents have been published in European Patent Office (EPO) in 2015.

USPTO and EPO are known as two important patent offices in the world. Statistics obtained from Orbit Database showed that 19,544 nanotechnology patents have been published in USPTO in 2015, among which 8,588 are granted patents and 10,956 are published patent applications.

According to the new definition of StatNano based on ISO/TS 18110, nanotechnology patents should either have at least one claim related to nanotechnology or have a classification code related to nanotechnology such as B82 according to the International Patent Classification (IPC). Based on this definition, a number of 2,970 patents have been published in the field of nanotechnology in EPO in 2015, about 15% of the total number of nanotechnology patents published in USPTO. A number of 1,415 patents are granted while 1,555 are published patent applications.

Table 1 shows top 10 countries in granted nanotechnology patents in USPTO and EPO in 2015. The countries have been ranked according to the number of USPTO granted patents due to the importance of this office.

Table 1: Top 10 Countries in Nanotechnology Granted Patents in USPTO in 2015

Rank	Country	No. Granted Patents in USPTO	No. Granted Patents in EPO	Ratio of USPTO to EPO Patents	Change in 2014 Ranking	Growth in USPTO Patents comparing to 2014 (%)	Growth in EPO Patents comparing to 2014 (%)
1	<u>USA</u>	4365	421	10.37	-	7.70	16.62
2	<u>Japan</u>	902	131	6.89	-	20.59	-7.09
3	South Korea	839	52	16.13	-	41.25	-28.77
4	<u>Taiwan</u>	500	12	41.67	-	-7.92	50.00
5	<u>China</u>	393	28	14.04	-	14.58	100
6	Germany	307	229	1.34	-	5.86	11.17
7	<u>France</u>	242	152	1.59	-	16.91	8.57
8	<u>Netherlands</u>	156	43	3.63	-	33.33	13.16
9	<u>UK</u>	109	45	2.42	+1	9.00	0
9	<u>Canada</u>	109	14	7.79	-	-3.54	0
10	<u>Singapore</u>	65	2	10.37	+3	51.16	-75.00

The <u>United States</u> possesses the first rank by having a share of 51% of all nanotechnology granted patents in USPTO. <u>Japan</u> and <u>South Korea</u> possess the second and third ranks with a big distance from the <u>United States</u>.

Table 2 lists the number of published nanotechnology patent applications for top 10 countries. The <u>United States</u>, <u>South Korea</u> and <u>Japan</u> possess the three first ranks. The statistics suggest that <u>South Korea</u> will have higher number of granted patents in the field of nanotechnology than <u>Japan</u> in the future.

Table 2: Top 10 Countries in Published Nanotechnology Patent Applications in USPTO in 2015

Rank	Country	No. Published Patents in USPTO	No. Published Patents in EPO	Ratio of USPTO to EPO Patents	Change in 2014 Ranking	Growth in USPTO Patents comparing to 2014 (%)	Growth in EPO Patents comparing to 2014 (%)
1	<u>USA</u>	5321	266	20.00	-	-6.24	2.70
2	South Korea	1253	201	6.23	-	10.11	3.61
3	<u>Japan</u>	873	288	3.03	-	10.65	8.27
4	<u>Taiwan</u>	688	30	22.93	-	-0.43	3.45
5	<u>China</u>	554	95	5.83	-	16.39	13.10

6	Germany	454	190	2.39	-	23.37	18.75
7	<u>France</u>	326	125	2.61	-	27.84	22.55
8	<u>UK</u>	212	33	6.42	-	13.98	13.79
9	<u>Canada</u>	191	11	17.36	-	29.05	22.22
10	<u>Netherlands</u>	166	30	5.53	+1	52.29	36.36

The number of granted patents and published patent applications in USPTO in the field of nanotechnology in 2015 has a growth of 8.8% in comparison with 2014. The growth of this indicator in 2015 in comparison with 2014 is 7.88% in EPO.