



APPENDIX TABLE 8-22

USPTO patents granted in materials and metallurgy, by region, country, or economy: 2000–16

(Number)

Region, country, or economy	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
World	2,093	2,373	2,401	2,315	2,043	1,584	1,607	1,458	1,364	1,682	2,341	2,333	2,524	2,654	2,778	2,805	2,752
North America	938	1,031	1,017	1,008	886	697	735	663	608	744	1,012	965	997	1,081	1,109	1,045	1,010
Canada	52	57	70	62	50	39	44	33	33	39	52	49	50	55	57	48	52
Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Puerto Rico	10	2	6	4	2	0	4	3	2	5	6	7	6	8	8	4	5
United States	0	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0	1
All others	877	972	941	941	833	657	687	626	573	700	953	909	941	1,019	1,043	993	952
Central and South America	9	10	9	10	6	2	6	7	6	9	9	15	13	10	21	18	16
Argentina	0	1	0	1	0	0	0	0	0	0	0	1	2	0	3	2	1
Brazil	2	3	2	4	2	0	3	3	2	5	5	8	5	6	11	13	11
All others	7	5	7	4	4	2	3	4	4	4	5	7	5	3	6	4	4
Europe	553	626	616	547	488	384	359	322	301	347	499	491	550	569	605	627	610
EU	507	583	564	498	445	359	331	300	277	322	466	454	501	528	559	579	552
Austria	19	34	30	29	19	17	16	17	8	14	21	20	23	22	26	25	29
Belgium	15	17	23	13	20	12	14	8	10	15	23	15	16	18	28	26	26
Denmark	11	12	14	8	12	10	10	4	4	7	8	7	7	7	9	8	6



Region, country, or economy	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Finland	5	11	8	9	15	9	6	5	4	10	17	6	8	12	9	16	13
France	110	120	96	85	66	65	52	56	55	63	90	87	127	110	116	126	111
Germany	226	235	228	208	199	158	136	122	102	132	182	190	203	223	224	205	204
Hungary	1	1	1	1	1	0	0	1	1	0	1	1	0	2	1	1	1
Ireland	0	0	1	1	1	0	0	1	1	2	1	2	1	3	1	3	1
Italy	29	30	35	28	20	19	21	14	16	10	26	24	19	22	29	33	34
Netherlands	15	15	16	16	19	15	11	10	17	18	17	23	15	21	23	17	16
Spain	6	4	8	9	4	4	6	2	4	4	4	7	7	7	10	7	10
Sweden	24	45	48	33	26	19	20	29	26	21	29	25	24	27	25	36	26
United Kingdom	42	47	45	53	39	25	34	27	24	22	36	41	40	42	45	60	58
All others	4	11	11	6	3	7	3	6	6	3	10	7	10	11	13	16	16
Other Europe	46	43	52	48	43	25	27	22	24	25	33	37	49	41	45	48	58
Former Soviet Union	1	2	3	4	0	3	1	0	0	1	1	2	1	0	2	2	2
Norway	8	5	6	6	10	5	4	4	7	2	7	5	8	8	9	9	9
Russia	6	9	11	9	12	7	7	5	4	7	9	6	3	8	8	7	10
Switzerland	29	26	31	26	20	10	14	12	10	14	14	21	33	23	26	27	30
All others	1	1	1	3	0	0	2	1	3	1	1	3	3	2	1	3	6
Asia	558	664	721	712	624	475	468	438	422	541	761	805	909	933	975	1,043	1,053
China	5	4	7	2	8	3	6	11	9	20	32	32	57	63	87	91	96



Region, country, or economy	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
India	5	4	8	8	15	9	11	11	10	6	10	8	16	17	19	22	19
Japan	499	580	639	634	534	415	395	362	357	435	611	632	683	680	695	720	712
Malaysia	0	0	0	0	3	1	2	1	1	0	1	1	1	1	2	0	0
Singapore	1	1	3	4	4	2	2	1	1	3	2	2	2	3	3	6	11
South Korea	34	56	41	44	37	33	33	32	26	52	72	99	101	120	127	156	171
Taiwan	14	17	22	19	22	12	18	21	17	26	32	30	46	46	39	45	40
All others	0	2	0	1	1	1	0	1	1	0	1	2	3	4	3	4	3
Middle East	9	7	6	6	6	5	9	6	8	9	11	14	20	23	29	29	36
Israel	8	6	5	5	6	5	8	5	7	6	7	8	8	8	12	6	10
All others	1	2	1	1	0	0	1	1	1	3	4	6	13	15	16	23	26
Africa	4	10	6	6	8	6	10	3	3	6	9	9	8	12	8	11	5
South Africa	3	10	6	6	7	6	9	3	3	6	9	8	8	12	8	10	5
All others	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0
Australia and Oceania	21	25	26	27	24	15	21	19	16	25	40	35	27	25	31	32	23
Australia	20	23	26	26	23	15	20	18	16	24	38	33	24	24	30	30	21
New Zealand	2	2	0	2	1	1	0	1	1	1	1	2	3	0	1	2	2
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unclassified	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0



EU = European Union; USPTO = U.S. Patent and Trademark Office.

Note(s)

Patents are allocated according to patent inventorship information. Patents are fractionally allocated among regions, countries, or economies based on the proportion of residences of all named inventors. The EU includes 28 member countries. China includes Hong Kong. Patents are classified under the World Intellectual Property Organization (WIPO) classification of patents, which classifies International Patent Classification (IPC) codes under 35 technical fields. IPC reformed codes take into account changes that were made to the WIPO classification in 2006 under the eighth version of the classification and were used to prepare these data. However, because PatentsView only provides the original IPC codes as they appeared on patents and not the IPC reformed codes, current Cooperative Patent Classification codes on patents were converted back to the most recent IPC classification to prepare these statistics. Fractional counts of patents were assigned to each technological field on patents to assign the proper weight of a patent to the corresponding technological fields under the classification.

Source(s)

Science-Metrix; PatentsView and USPTO patent data, accessed April 2017.

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