



## APPENDIX TABLE 8-6

## USPTO patents granted in semiconductors, 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	8,557	10,174	10,564	10,653	10,778	9,330	10,043	9,570	9,205	10,354	14,136	14,400	13,858	15,812	17,929	18,402	19,006
North America	3,808	4,469	4,603	4,623	4,492	3,901	3,996	3,728	3,379	3,472	4,642	4,491	4,308	4,887	5,620	5,570	5,816
Canada	25	25	25	35	40	29	32	31	31	40	54	64	57	67	80	73	76
Mexico	0	1	1	0	0	2	0	1	2	0	0	1	2	0	1	1	0
Puerto Rico	1	0	0	0	0	0	1	0	0	0	1	0	0	1	1	0	0
United States	3,782	4,443	4,576	4,587	4,452	3,871	3,962	3,696	3,346	3,433	4,588	4,426	4,249	4,820	5,539	5,495	5,739
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Central and South America	0	1	0	0	0	0	0	0	0	0	1	1	0	3	2	2	2
Argentina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Brazil	0	1	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Europe	473	647	708	780	801	725	761	719	675	780	1,152	1,181	1,220	1,427	1,607	1,676	1,712
EU	453	615	673	755	776	701	735	696	657	749	1,120	1,144	1,181	1,367	1,544	1,616	1,646
Austria	12	13	9	16	14	11	13	23	18	29	42	57	65	79	105	127	164
Belgium	11	18	19	37	35	22	29	23	31	39	62	56	64	70	69	84	110
Denmark	0	2	2	3	4	2	5	1	2	3	7	4	3	5	5	1	2



Region, country, or economy	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Finland	5	5	6	4	10	12	10	9	7	11	14	14	14	12	16	17	25
France	64	96	93	101	112	99	123	116	95	129	169	185	193	241	256	267	253
Germany	196	253	302	347	403	396	386	379	352	366	613	592	603	668	787	773	741
Hungary	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1
Ireland	1	7	3	4	4	3	6	4	8	6	6	11	10	14	14	7	17
Italy	64	97	87	80	54	37	39	29	34	38	40	51	47	74	96	107	94
Netherlands	26	42	55	65	44	35	42	36	33	32	60	68	70	75	68	73	98
Spain	2	1	3	2	0	2	2	1	3	1	1	2	4	5	5	6	5
Sweden	35	33	28	20	8	14	14	7	9	13	12	16	17	15	22	25	24
United Kingdom	36	47	62	76	85	67	61	65	62	78	86	83	82	103	93	118	97
All others	1	2	3	1	2	0	4	1	3	3	6	4	9	7	8	11	17
Other Europe	20	31	35	25	25	24	26	24	18	31	32	37	39	60	63	60	66
Former Soviet Union	1	0	1	1	0	0	0	0	0	0	0	0	1	0	1	1	0
Norway	0	0	2	0	4	2	2	2	1	1	1	2	1	3	8	4	5
Russia	6	10	6	3	2	3	3	2	3	2	3	4	3	3	6	3	4
Switzerland	12	20	26	20	20	18	20	19	14	27	27	30	32	53	47	49	53
All others	0	1	0	0	0	0	1	0	0	0	0	2	1	1	2	3	4
Asia	4,254	5,026	5,224	5,212	5,446	4,669	5,258	5,092	5,122	6,068	8,294	8,678	8,278	9,449	10,631	11,093	11,402
China	5	12	26	32	48	57	69	105	109	121	177	188	237	364	499	628	817



Region, country, or economy	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
India	2	2	2	5	4	1	3	5	4	3	6	5	14	22	18	15	37
Japan	2,386	2,727	3,103	3,255	3,357	2,826	3,062	2,830	2,682	3,199	4,400	4,532	4,290	4,763	5,008	4,922	4,557
Malaysia	4	11	17	11	24	27	32	48	32	34	53	53	47	40	63	81	54
Singapore	70	128	169	148	135	103	123	119	104	103	202	246	253	269	275	257	249
South Korea	548	626	707	690	751	734	951	1,050	1,218	1,642	2,220	2,323	1,993	2,175	2,547	2,745	2,840
Taiwan	1,233	1,516	1,187	1,055	1,109	906	1,001	922	963	953	1,211	1,309	1,424	1,797	2,204	2,416	2,821
All others	5	5	12	17	17	14	18	13	11	12	26	21	20	19	17	28	27
Middle East	16	30	24	27	26	24	18	22	19	21	29	23	34	33	46	44	55
Israel	16	30	23	26	25	22	18	21	18	20	29	20	31	29	43	36	45
All others	0	1	1	1	1	2	1	1	1	1	0	3	4	4	3	8	10
Africa	2	0	1	1	1	0	0	0	1	1	2	2	0	3	7	3	4
South Africa	2	0	0	0	0	0	0	0	0	0	2	2	0	1	5	2	4
All others	1	0	1	1	1	0	0	0	1	1	0	1	0	2	2	1	0
Australia and Oceania	3	2	5	9	12	11	9	8	8	12	16	23	16	9	16	15	15
Australia	2	2	3	8	11	11	9	8	8	11	16	23	15	8	14	14	15
New Zealand	1	0	1	1	1	0	0	0	0	1	0	0	1	1	2	1	0
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Unclassified	0	0	0	1	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)**

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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)**

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

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