



APPENDIX TABLE 6-63

USPTO patents granted in solar energy technology, by region, country, or economy: 1998–2016

(Number)

Region, country, or economy	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
World	165	212	304	308	303	289	207	160	163	173	163	241	502	813	1,169	1,352	1,755	1,674	1,551
North America	77	96	138	128	112	117	94	79	83	91	92	145	283	463	673	775	937	845	770
Canada	1	2	4	2	2	3	1	1	2	3	3	4	4	11	14	13	16	26	32
Mexico	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2	1	0
Puerto Rico	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
United States	76	94	134	126	110	113	92	77	81	88	89	141	279	451	659	761	918	818	739
Central and South America	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2
Argentina	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All others	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2
Europe	27	40	45	42	49	46	23	27	29	27	26	31	75	93	155	166	236	232	230
EU	26	35	40	34	47	41	22	23	27	25	22	27	71	84	142	148	208	216	209
Austria	0	2	2	1	0	0	1	1	0	2	1	2	2	3	4	3	5	5	4
Belgium	1	0	0	1	4	2	0	2	3	1	2	1	3	4	2	4	6	7	11
Denmark	0	0	0	0	1	0	0	0	0	0	0	0	2	2	2	1	2	1	1
Finland	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3	4



Region, country, or economy	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
France	2	5	5	1	4	3	3	2	3	3	4	3	9	9	15	22	30	28	42
Germany	21	21	22	20	30	23	14	9	15	10	10	16	35	44	66	66	92	93	84
Hungary	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0
Ireland	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	1
Italy	0	1	1	2	1	2	0	1	2	1	2	0	3	8	9	8	18	18	11
Netherlands	1	0	3	5	1	3	2	2	0	3	2	2	3	1	8	9	15	16	7
Spain	0	0	2	0	1	3	0	1	1	2	0	0	1	2	12	11	7	22	16
Sweden	0	1	1	2	1	1	0	1	0	0	1	0	3	5	1	2	7	4	4
United Kingdom	2	3	3	1	3	4	2	1	3	2	0	4	6	3	14	13	16	15	19
All others	0	0	0	2	0	0	0	1	0	0	1	0	3	3	7	8	3	4	6
Other Europe	1	6	5	7	2	4	1	5	2	2	4	3	3	9	14	18	28	16	21
Former Soviet Union	0	0	0	0	0	1	0	1	0	0	0	1	0	0	1	0	0	1	0
Norway	0	0	2	0	0	0	0	0	0	0	2	0	0	3	0	2	3	1	1
Russia	0	0	0	1	0	0	0	0	0	0	0	1	1	0	1	1	3	1	1
Switzerland	1	6	3	6	2	4	1	4	2	2	2	2	2	5	10	14	20	13	17
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	1	2
Asia	56	62	111	132	137	120	84	52	43	49	41	62	134	240	324	383	541	553	490
China	0	0	0	1	1	1	0	0	1	2	2	3	7	9	24	31	38	41	44
India	0	0	0	0	1	0	0	1	0	1	1	1	0	1	5	0	4	7	6



Region, country, or economy	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Japan	56	53	103	128	126	111	75	44	35	39	32	37	74	134	142	174	244	261	221
Malaysia	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	3	0	2
Singapore	0	0	0	1	2	0	0	0	0	0	0	3	2	2	1	0	0	2	3
South Korea	0	3	2	0	1	5	2	1	0	3	1	7	18	38	66	82	152	159	149
Taiwan	0	5	4	3	7	1	6	6	6	5	5	10	27	56	86	94	96	78	62
All others	0	1	1	0	0	1	0	0	1	0	0	1	7	1	1	3	3	5	2
Middle East	1	3	3	4	1	1	5	1	2	3	2	1	6	6	11	22	33	30	44
Israel	1	3	3	4	0	1	5	1	2	3	2	1	4	6	6	15	25	24	27
All others	0	0	0	0	1	0	0	0	0	0	0	0	2	0	4	7	8	5	17
Africa	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1
South Africa	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Australia and Oceania	3	8	4	2	3	6	1	1	5	2	1	2	5	9	5	5	6	13	15
Australia	3	7	3	2	3	6	1	1	5	2	1	2	5	9	4	5	6	12	14
New Zealand	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1
Unclassified	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Note(s)



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. Technologies are based on a classification developed by The Patent Board.

Source(s)

Science-Metrix; PatentsView and USPTO patent data.

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