



APPENDIX TABLE 6-74

USPTO patents granted in recycling 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	330	288	242	257	235	226	197	133	125	129	111	141	186	204	225	275	282	285	248
North America	199	191	135	151	132	124	108	68	58	55	65	83	100	109	120	147	153	135	132
Canada	17	19	10	12	10	9	11	8	8	5	9	5	4	7	11	8	18	10	6
Mexico	1	0	0	0	2	1	0	0	0	1	0	0	1	1	3	2	0	0	1
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United States	181	172	125	139	119	114	97	60	50	49	55	78	95	100	106	137	135	125	125
Central and South America	0	1	0	1	1	1	1	0	0	1	0	0	2	6	2	4	2	1	4
Argentina	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
Brazil	0	0	0	1	1	0	0	0	0	0	0	0	1	4	0	4	1	1	3
All others	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2	0	1	0	2
Europe	62	55	53	60	51	49	31	22	24	37	16	23	40	42	50	53	56	69	56
EU	53	53	45	55	51	47	28	19	20	34	13	19	37	42	47	49	54	67	51
Austria	2	2	1	0	4	3	1	3	3	8	0	3	0	2	3	3	5	7	9
Belgium	0	1	1	2	1	2	1	0	4	3	0	1	2	2	1	6	5	1	2
Denmark	0	2	0	0	2	1	0	0	0	0	1	0	2	2	0	0	0	0	1
Finland	2	3	1	5	3	5	0	2	1	1	2	1	1	0	5	0	1	3	2



Region, country, or economy	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
France	4	5	9	9	5	1	2	1	0	2	1	3	8	4	4	4	3	8	7
Germany	24	24	21	23	17	18	12	5	4	5	5	5	7	19	18	12	18	27	10
Hungary	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Ireland	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Italy	7	4	5	1	3	5	6	0	3	3	2	2	9	3	5	6	4	6	6
Netherlands	5	5	1	1	4	1	0	1	2	2	0	0	0	4	2	2	3	3	1
Spain	0	0	1	1	0	1	0	0	0	1	1	0	0	1	1	7	2	1	0
Sweden	2	2	3	3	3	2	1	2	2	2	0	1	1	0	0	4	1	0	1
United Kingdom	7	5	2	8	6	6	3	2	1	7	1	2	3	2	5	2	9	6	9
All others	0	0	0	1	2	2	2	2	0	1	1	1	3	2	2	2	2	6	1
Other Europe	9	2	8	5	0	2	2	3	4	3	3	4	3	0	3	4	2	2	5
Former Soviet Union	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1
Norway	0	1	0	1	0	0	2	0	1	0	0	0	0	0	0	1	0	0	1
Russia	1	0	0	0	0	1	0	1	1	2	2	1	1	0	1	0	0	1	1
Switzerland	6	1	8	4	0	1	1	2	2	0	1	2	2	0	2	2	0	1	3
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Asia	62	40	50	42	50	46	53	41	41	33	25	30	42	44	45	63	56	66	49
China	3	0	0	0	2	2	2	1	3	1	0	2	0	2	5	5	10	12	11
India	0	0	1	2	3	0	2	2	1	2	0	3	1	2	1	0	3	0	3



Region, country, or economy	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Japan	48	31	46	29	34	36	40	31	32	21	19	21	32	30	26	34	27	30	25
Malaysia	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Singapore	0	0	0	0	0	0	1	0	1	3	0	0	1	0	1	0	0	0	0
South Korea	3	5	2	10	7	0	3	4	1	1	3	4	5	6	7	14	12	18	6
Taiwan	6	3	1	1	3	8	5	3	3	5	3	0	3	5	5	8	5	6	4
All others	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Middle East	3	0	1	1	1	3	1	0	1	0	2	1	1	0	5	8	8	11	5
Israel	3	0	1	1	1	3	1	0	1	0	2	1	1	0	2	3	4	4	2
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	5	7	3
Africa	0	0	1	1	0	0	1	1	1	0	1	0	0	1	1	0	2	0	0
South Africa	0	0	1	1	0	0	1	1	1	0	1	0	0	1	1	0	2	0	0
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Australia and Oceania	3	1	1	0	1	2	2	1	0	3	2	2	1	2	2	0	5	3	1
Australia	3	1	1	0	1	2	2	1	0	3	2	1	1	2	2	0	4	3	1
New Zealand	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Unclassified	0	0	0	1	0	0	0	0	0	0	0	1	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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