

TABLE S8-33

USPTO patents and patent families granted in other special machines, by region, country, or economy: 1998–2018

(Number)

Region, country, or economy	1998		1999		2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018	
	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families	USPTO patents	Patent families		
China	9	71	10	90	10	201	12	219	13	212	14	334	10	548	14	567	16	735	16	919	19	1,186	16	1,705	36	2,293	44	3,699	44	4,606	65	5,638	69	6,408	93	10,346	102	12,626	124	12,681	157	12,128
India	1	2	1	0	2	2	2	3	2	2	2	2	5	4	6	2	4	5	3	3	2	2	3	2	4	6	3	7	3	5	17	5	15	4	17	19	6	25	9			
Japan	731	4,257	615	5,063	629	3,914	597	4,093	605	4,018	631	3,994	573	4,330	395	4,130	511	4,335	424	4,676	430	4,339	393	4,302	628	4,584	627	5,049	680	5,435	637	5,141	660	4,854	671	3,761	740	3,747	735	3,304	764	3,229
Malaysia	2	2	2	1	2	1	1	0	1	1	1	2	4	3	0	1	3	11	2	13	3	4	1	3	4	5	20	7	8	23	6	13	6	13	6	8	10	17	9	19		
Singapore	3	2	2	1	2	1	4	1	7	5	9	2	12	5	9	3	4	1	2	3	2	6	3	6	4	10	3	7	2	10	3	13	4	13	3	15	3	10	1	11	3	
South Korea	27	434	28	932	24	543	36	404	46	517	37	778	35	1,057	38	1,775	40	2,553	41	2,422	40	1,883	49	1,457	64	1,683	84	2,185	93	3,039	127	3,690	133	2,374	130	2,758	170	3,359	163	3,662		
Taiwan	74	147	76	137	77	165	72	218	113	184	99	219	98	241	72	240	106	331	73	327	76	184	88	259	115	250	132	281	138	297	125	330	124	370	130	390	146	528	128	395		
All others	1	6	1	7	1	5	2	4	2	5	1	4	2	1	2	7	2	1	4	1	2	3	5	3	2	2	2	4	7	5	4	8	8	9	4	7	6	5	10			
Middle East	26	15	20	14	26	24	29	28	32	25	39	30	29	15	29	17	27	14	24	18	27	26	27	10	39	12	44	20	64	30	61	79	15	63	26	63	36	71	26	80	25	
Israel	26	13	19	9	25	6	27	9	32	15	37	9	29	8	26	8	24	8	24	6	27	9	24	4	38	4	55	8	66	4	53	6	66	4	51	9	47	10	54	9	58	13
All others	0	2	1	5	2	17	2	19	0	10	2	20	0	7	3	11	0	6	0	12	0	17	3	6	0	8	6	16	9	22	9	15	14	11	11	18	16	26	17	22	12	
Africa	5	21	5	34	7	19	7	21	8	18	9	26	4	22	4	20	7	19	2	20	9	23	8	13	9	18	5	14	7	20	6	10	7	11	10	4	10	12	11	10	6	
South Africa	5	14	5	20	6	10	7	11	6	7	8	11	3	11	4	16	7	9	14	9	13	8	13	8	11	5	3	7	6	7	3	6	3	9	2	9	1	10	0	5	0	
All others	0	6	0	15	1	9	0	11	1	10	1	16	1	11	0	4	0	10	0	6	0	10	1	1	7	0	11	0	13	0	8	0	8	2	2	1	10	1	9	1	1	
Australia and Oceania	44	46	57	44	57	59	54	82	44	67	53	54	45	74	36	57	41	61	49	61	36	69	39	76	53	67	60	80	77	77	50	74	69	78	47	95	56	94	65	47	61	68
Australia	38	45	47	44	46	56	45	80	36	66	41	50	36	74	30	57	34	61	41	59	30	66	35	76	48	65	51	77	60	76	72	51	76	36	94	40	90	50	45	43	66	
New Zealand	6	2	9	1	11	3	10	2	8	1	12	3	9	0	6	1	7	0	8	2	6	2	4	0	5	2	9	4	15	1	12	1	18	2	11	1	16	4	15	3	19	3
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Unclassified	0	51	1	58	2	64	0	3	0	4	0	4	0	4	0	39	0	12	0	0	0	4	1	1	0	1	1	1	1	0	0	0	0	1	0	2	3	0	1	1	0	

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

Note(s)

USPTO patents are allocated according to patent inventorship information. USPTO patents are fractionally allocated among regions, countries, or economies based on the proportion of residences of all named inventors. 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. International Patent Documentation (INPADOC) patent families across all patent offices covered in the Worldwide Patent Statistical Database (PATSTAT) are counted according to the year of the first granted patent in the patent family. Patent families are allocated according to patent inventorship information found on the priority patent of the INPADOC patent families. To account for missing ownership information in PATSTAT for some offices, a method designed by de Rassenfosse et al. (2012) is used to fill in missing information on priority patents using information in successive filings within the patent families (see technical documentation for details). Patent families are fractionally allocated among regions, countries, or economies based on the proportion of residences of all named inventors. Because of data coverage issues for some patent offices in PATSTAT, statistics for some countries may be underestimated partially for some years or across the whole trend. Countries with identified issues include India (missing data) and South Africa (no data for 2018). For Italy, because of data gaps regarding information on granted patents, patent applications are used instead, which slightly overestimates Italy's output and creates a small shift in the year for which its output is accounted. The EU includes 28 member countries. China includes Hong Kong.

Source(s)

Science-Metrix; PATSTAT, accessed April 2019; PatentsView, USPTO, accessed June 2019.