

TABLE S8-11

USPTO patents and patent families granted in IT methods for management, 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	0	0	0	1	0	1	1	0	0	2	9	1	4	3	4	15	41	29	41	76	23	80	36	114	49	177	65	173	82	235	56	485	72	1,312	115	1,850	111	2,296						
India	0	0	0	0	0	0	0	0	0	0	2	2	4	4	9	8	10	3	9	4	17	5	24	6	46	11	61	140	92	27	140	43	153	42	113	43	133	53	158	71	187	79		
Japan	72	281	111	277	102	242	88	250	102	267	125	309	137	368	175	476	294	531	260	890	286	930	248	1,234	316	1,333	278	1,673	319	2,000	262	2,222	254	2,209	190	1,452	183	1,855	209	1,898	221	2,070		
Malaysia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	1	0	0	2	1	4	3	2	2	2	2	4	0	3	1	3	1	1	1	8	2	4			
Singapore	0	0	1	0	0	0	0	0	2	2	1	1	3	2	2	0	3	2	3	1	4	2	4	1	3	9	2	5	4	10	2	16	2	10	4	10	3	8	7	12	5			
South Korea	1	38	1	62	4	50	6	29	2	49	9	167	10	204	4	282	11	604	10	1,211	18	1,183	18	652	41	909	57	1,380	66	1,707	70	1,696	73	1,909	82	1,726	75	2,573	95	2,585	102	2,442		
Taiwan	3	3	3	3	0	1	3	5	6	20	11	27	14	27	23	21	33	22	24	41	18	42	19	51	21	64	34	90	33	115	32	201	20	330	17	411	27	342	23	310				
All others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	1	0	1	0	2	1	3	1	4	2	6	1	3	2	3	2	4	3	6	3	4	3	4	3			
Middle East	4	0	5	1	8	3	7	2	8	2	9	3	7	2	12	3	18	4	14	3	23	4	31	8	45	7	57	11	72	16	79	18	82	24	76	26	68	19	90	25	81	20		
Israel	4	0	5	1	8	3	7	1	8	2	9	3	7	2	12	3	18	4	14	3	21	4	30	7	40	6	52	10	68	13	73	16	75	21	70	23	65	18	80	21	73	18		
All others	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	1	0	1	5	1	6	1	4	3	6	2	7	3	6	3	2	3	6	4	7	2	3		
Africa	1	1	0	0	1	0	3	2	1	0	2	1	0	0	1	1	0	1	0	3	3	2	7	5	7	8	5	12	5	7	4	9	10	7	10	5	7	4	6	3	6	3		
South Africa	1	1	0	0	1	0	3	1	1	0	2	1	0	0	1	1	2	2	0	2	2	2	6	4	8	4	11	3	7	1	7	3	4	4	0	4	4	1	4	1	4	1		
All others	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	3	0	1	2	2	2	3	3	7	0	0	3	3	2	2	3	2	2	3	2
Australia and Oceania	2	2	4	4	8	6	5	5	5	1	10	3	15	7	19	7	21	67	35	63	33	70	38	62	72	74	80	100	54	112	55	99	54	118	33	136	31	138	42	138	46	123		
Australia	1	2	4	4	8	5	3	5	3	14	6	7	14	6	16	3	21	67	33	63	32	70	36	62	67	74	99	50	112	49	98	47	116	26	135	28	137	35	137	41	121			
New Zealand	1	0	1	1	0	0	1	0	2	0	2	0	0	0	3	0	1	0	0	0	0	3	0	5	0	6	1	4	0	6	0	7	0	6	1	3	0	7	1	5	1	1		
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	1	0	0	0	0	0	0	0	0	0	
Unclassified	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0

EU = European Union; IT = Information Technology; 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.