

Table SINV-50

## USPTO utility patents granted in computer technology, by region, country, or economy: 1998–2020

(Number)

Region, country, or economy	Economy by income status	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
World	na	11,797	12,143	11,872	12,697	12,883	13,625	14,645	13,613	19,072	17,533	19,061	20,843	26,489	27,115	32,527	36,536	40,524	41,102	42,763	42,369	40,182	49,393	51,572
North America	na	7,416	7,717	7,556	8,068	8,101	8,659	9,201	8,490	11,914	10,547	11,324	12,549	15,843	15,786	18,278	20,445	23,067	22,916	23,906	23,255	21,728	26,956	27,529
Canada	High	116	128	144	164	184	193	212	179	317	326	379	459	708	733	887	1,027	1,109	1,029	1,010	950	902	1,090	1,033
Mexico	Upper middle	0	1	2	3	0	1	3	5	3	1	0	2	3	4	7	3	5	7	15	12	20	20	25
United States	High	7,299	7,588	7,409	7,902	7,917	8,464	8,986	8,305	11,594	10,220	10,944	12,089	15,133	15,049	17,385	19,416	21,954	21,880	22,880	22,294	20,806	25,846	26,471
Central America and Caribbean	na	1	1	1	0	1	1	1	0	1	1	3	2	3	2	3	3	8	7	13	9	11	12	25
Puerto Rico	High	1	0	0	0	0	0	0	0	1	0	1	1	1	1	2	1	4	3	3	0	2	4	6
South America	na	3	4	1	4	2	3	4	5	8	7	6	8	14	16	16	22	28	48	41	57	58	83	113
Argentina	Upper middle	1	0	0	0	0	0	1	0	2	2	0	2	1	3	4	6	4	10	8	6	6	15	16
Brazil	Upper middle	2	4	1	2	1	2	1	1	3	4	4	6	12	12	10	15	21	33	31	46	47	64	89
Europe	na	812	846	869	1,030	1,097	1,091	1,334	1,248	1,722	1,723	1,856	2,065	2,693	2,598	3,245	3,670	4,152	4,382	4,595	4,622	4,609	5,572	5,732
EU-27 + UK <sup>a</sup>	na	769	796	837	976	1,039	1,024	1,258	1,186	1,633	1,633	1,754	1,947	2,532	2,404	2,978	3,353	3,769	3,914	4,108	4,107	4,049	4,916	5,060
United Kingdom	High	200	208	197	225	240	242	291	309	400	391	388	458	536	541	701	791	904	874	941	937	882	1,192	1,243
EU-27 <sup>b</sup>	na	569	588	640	751	799	782	967	877	1,233	1,242	1,367	1,489	1,996	1,863	2,277	2,562	2,865	3,040	3,167	3,169	3,168	3,724	3,817
Austria	High	7	11	13	19	8	25	25	18	26	22	21	26	41	32	40	41	58	63	66	78	60	80	71
Belgium	High	10	11	21	23	13	14	24	14	31	27	25	32	45	43	54	64	65	58	65	72	73	90	80
Denmark	High	2	9	8	12	15	14	13	11	17	16	18	21	29	34	41	40	33	47	45	52	51	60	46
Finland	High	15	14	17	21	25	32	44	37	73	78	71	93	103	97	100	129	166	190	196	198	163	166	174
France	High	173	171	169	175	215	211	246	199	313	244	287	297	421	360	480	568	613	587	598	541	570	663	636
Germany	High	191	197	224	258	309	289	392	376	480	556	634	655	901	783	916	984	1,100	1,183	1,177	1,169	1,171	1,457	1,463
Hungary	High	1	0	1	2	0	2	1	1	1	3	2	2	4	11	6	9	8	15	13	12	18	18	22
Ireland	High	4	6	11	20	10	15	20	18	20	18	15	30	41	44	64	76	75	103	100	107	138	188	233
Italy	High	99	77	83	101	91	80	77	95	98	100	111	106	119	133	170	198	202	208	224	213	218	225	278
Netherlands	High	40	49	44	54	53	43	61	43	78	84	76	101	111	115	116	136	160	141	143	143	156	165	176
Spain	High	4	4	5	4	3	7	9	12	19	12	22	27	31	37	56	55	51	56	73	72	70	77	88
Sweden	High	23	37	42	61	52	46	46	44	66	72	62	60	88	112	155	171	191	235	277	302	273	282	275
Other Europe	na	43	51	32	54	58	66	77	62	89	90	101	119	162	193	267	317	383	468	487	515	559	656	672
Other Europe-2020 <sup>b</sup>	na	243	258	229	279	298	309	368	371	489	481	489	576	697	734	968	1,108	1,287	1,342	1,428	1,452	1,441	1,848	1,915

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Belarus	Upper middle	0	0	1	1	0	0	0	0	2	1	2	2	2	1	1	2	3	2	3	2	3	5	4
Moldova	Lower middle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	High	5	6	6	6	7	6	11	9	10	19	21	18	18	31	43	40	32	58	55	63	72	81	77
Russia	Upper middle	20	25	9	16	15	30	18	12	31	22	27	39	58	72	87	93	116	130	142	138	170	206	239
Switzerland	High	16	18	15	27	33	28	44	40	44	43	47	56	77	80	111	157	194	231	236	258	263	311	284
Ukraine	Lower middle	1	0	1	1	0	0	0	0	0	0	0	1	1	4	9	10	24	29	28	27	18	30	31
Asia	na	3,444	3,446	3,294	3,422	3,500	3,630	3,848	3,632	5,055	4,903	5,498	5,818	7,406	8,036	10,117	11,360	12,015	12,355	12,756	12,927	12,343	15,067	16,433
China	Upper middle	9	11	13	26	33	35	49	55	119	158	250	347	444	522	838	1,107	1,122	1,308	1,760	2,091	2,261	3,069	3,772
India	Lower middle	2	6	10	18	15	39	41	57	100	123	172	215	371	442	567	854	1,096	1,269	1,290	1,416	1,384	1,887	2,088
Japan	High	2,857	2,738	2,526	2,625	2,694	2,793	2,825	2,587	3,508	3,210	3,416	3,382	4,167	4,489	5,408	5,766	5,790	5,384	4,963	4,854	4,334	5,298	5,316
Malaysia	Upper middle	1	1	2	1	2	4	3	10	12	20	22	28	30	21	36	34	35	35	46	45	45	62	45
Singapore	High	12	21	15	18	29	28	31	22	42	27	44	45	49	55	80	81	98	101	121	108	118	153	152
South Korea	High	374	434	472	443	376	353	392	440	644	722	829	1,004	1,428	1,475	1,705	1,874	2,182	2,469	2,937	2,897	2,787	3,022	3,315
Taiwan	High	186	233	255	291	350	378	507	461	630	640	763	791	911	1,017	1,472	1,628	1,675	1,771	1,614	1,488	1,371	1,533	1,704
Middle East	na	99	101	111	119	128	173	177	159	219	197	238	255	336	442	654	822	1,014	1,146	1,165	1,225	1,185	1,403	1,434
Israel	High	98	100	109	118	126	172	175	158	213	194	234	251	327	436	627	786	981	1,109	1,107	1,165	1,131	1,331	1,355
Africa	na	0	2	3	4	6	3	5	7	6	6	6	6	8	10	17	19	33	33	38	36	33	44	43
South Africa	Upper middle	0	1	3	3	4	3	3	7	4	3	4	3	5	4	4	5	12	15	22	23	15	29	24
Australia and Oceania	na	22	25	35	50	47	65	75	72	147	148	131	139	185	224	195	193	205	210	244	232	212	252	259
Australia	High	20	23	32	48	46	57	71	69	138	139	120	126	170	212	173	173	187	189	220	214	194	232	228
New Zealand	High	2	3	4	3	1	7	4	4	9	9	11	13	16	13	22	20	17	21	24	18	17	20	30
Unclassified	na	1	1	2	0	0	1	0	0	1	1	0	1	1	1	2	2	3	4	6	6	4	4	5

na = not applicable, metric not calculated at this level.

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

<sup>a</sup> The United Kingdom was a part of the EU for data purposes from 1973 to 2019.

<sup>b</sup> Beginning in 2020, the United Kingdom was no longer a member of the EU.

**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. China includes Hong Kong.

**Source(s):**

National Center for Science and Engineering Statistics; Science-Metrix; PatentsView, USPTO, accessed June 2021.

*Science and Engineering Indicators*