

Table SINV-70

## USPTO utility patents granted in machine tools, 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	3,780	4,251	4,447	4,566	4,111	4,296	3,987	3,492	4,078	3,274	2,690	2,494	3,164	3,321	3,658	4,080	4,165	4,330	4,263	4,645	4,410	5,064	4,830
North America	na	2,095	2,348	2,352	2,388	2,113	2,153	1,994	1,782	2,073	1,624	1,244	1,195	1,501	1,575	1,632	1,848	1,924	1,914	1,905	2,076	1,913	2,167	2,050
Canada	High	90	113	122	100	102	98	91	79	99	78	63	58	77	72	87	80	90	78	86	82	79	96	79
Mexico	Upper middle	2	4	1	5	2	1	2	1	2	1	1	1	1	2	4	2	6	2	3	4	5	3	2
United States	High	2,003	2,231	2,229	2,283	2,009	2,054	1,902	1,702	1,972	1,545	1,180	1,137	1,423	1,501	1,542	1,766	1,829	1,834	1,816	1,990	1,830	2,068	1,969
Central America and Caribbean	na	1	0	2	0	2	1	1	2	1	0	0	1	0	0	1	0	1	1	1	2	1	1	1
Puerto Rico	High	1	0	1	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	1	1	1	1	0
South America	na	1	7	6	3	4	4	7	4	4	5	4	3	6	4	4	8	2	6	5	9	8	10	7
Argentina	Upper middle	0	1	1	0	0	0	2	1	0	0	1	1	0	1	0	2	0	1	1	1	1	1	0
Brazil	Upper middle	0	6	2	2	4	2	5	2	4	3	2	2	5	2	4	3	2	4	3	7	7	7	4
Europe	na	820	892	962	966	870	944	840	688	795	672	607	539	699	720	865	963	941	1,020	991	1,102	1,032	1,150	1,151
EU-27 + UK <sup>a</sup>	na	752	826	882	891	801	854	757	631	716	625	562	498	652	677	797	903	874	956	927	1,036	947	1,070	1,066
United Kingdom	High	85	62	76	87	72	57	65	47	71	51	46	39	57	56	79	87	71	83	62	73	77	82	73
EU-27 <sup>b</sup>	na	667	765	806	805	729	798	691	583	645	574	516	459	596	621	718	816	803	874	864	963	870	989	993
Austria	High	18	22	28	41	27	26	27	25	29	21	23	20	20	27	27	31	44	42	44	58	38	42	42
Belgium	High	11	8	5	5	7	10	7	7	5	4	5	4	15	7	7	11	11	11	13	10	13	14	13
Denmark	High	4	3	5	11	6	11	14	6	5	5	6	5	3	7	3	6	7	8	9	12	7	10	8
Finland	High	18	19	20	28	19	17	15	13	15	10	8	8	13	7	12	4	11	18	9	15	9	13	13
France	High	61	71	72	79	78	76	61	54	70	54	53	44	55	57	70	78	93	85	83	96	86	107	88
Germany	High	379	422	463	436	409	479	403	356	390	363	309	262	371	377	452	512	475	520	516	561	509	578	565
Hungary	High	1	1	0	0	1	1	2	0	1	3	1	1	1	1	2	2	1	2	3	4	1	1	1
Ireland	High	1	2	4	2	2	6	2	2	1	0	1	1	3	3	3	1	2	4	9	6	2	3	4
Italy	High	75	98	97	77	77	72	64	38	58	43	37	41	32	49	57	54	57	61	64	78	72	76	93
Netherlands	High	30	22	21	25	23	21	21	16	13	15	10	11	16	15	27	21	18	27	29	29	34	36	36
Spain	High	5	6	12	7	7	2	5	1	4	3	2	5	7	6	10	18	6	8	8	17	10	17	26
Sweden	High	61	89	75	87	69	69	66	59	51	51	54	53	54	55	46	68	64	74	62	60	65	58	70
Other Europe	na	68	66	80	74	69	90	83	58	79	47	45	41	47	43	68	60	67	64	64	66	85	80	85
Other Europe-2020 <sup>b</sup>	na	154	127	156	161	142	146	148	105	150	98	91	80	103	99	147	147	139	147	126	139	162	162	158
Belarus	Upper middle	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
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	2	4	3	4	3	0	2	5	1	1	0	4	2	2	6	5	6	4	7	4	4	4
Russia	Upper middle	4	2	5	9	3	6	5	7	6	1	3	3	2	2	1	2	4	2	2	2	4	4	3
Switzerland	High	56	58	68	58	59	77	72	47	63	43	38	35	36	35	63	47	54	52	53	55	71	68	71

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Ukraine	Lower middle	0	1	1	2	1	1	0	0	0	0	1	0	2	0	0	1	1	1	2	0	1	1	1
Asia	na	805	956	1,081	1,146	1,073	1,136	1,085	976	1,145	930	798	723	909	979	1,090	1,173	1,205	1,312	1,295	1,383	1,381	1,654	1,551
China	Upper middle	5	7	9	15	17	27	22	29	34	25	22	39	47	57	77	74	103	116	140	174	157	219	232
India	Lower middle	1	2	0	1	4	0	1	0	0	2	2	2	2	4	5	7	3	11	13	20	18	12	15
Japan	High	622	676	738	758	692	744	677	576	668	528	485	437	600	636	682	720	759	780	785	831	864	1,078	980
Malaysia	Upper middle	0	1	1	0	3	1	2	2	2	5	2	1	2	3	4	7	4	3	5	4	2	3	3
Singapore	High	1	4	7	15	8	10	9	7	7	16	6	8	6	5	6	8	5	7	11	4	4	8	2
South Korea	High	28	35	39	40	40	49	41	40	52	40	43	47	50	43	57	64	96	97	98	110	102	115	101
Taiwan	High	148	230	287	314	306	304	331	320	379	314	236	187	203	229	255	289	231	294	237	236	232	216	217
Middle East	na	30	20	24	30	22	31	24	12	32	26	17	20	16	24	32	59	64	48	39	38	46	49	40
Israel	High	29	20	22	28	20	30	23	12	31	25	16	18	15	23	28	52	59	43	37	32	40	40	32
Africa	na	3	4	4	4	5	2	2	2	3	2	3	0	3	1	5	3	2	3	4	3	2	5	3
South Africa	Upper middle	3	4	4	4	5	2	2	2	3	2	3	0	3	1	5	3	2	3	4	2	2	5	3
Australia and Oceania	na	25	24	16	29	21	27	34	26	26	14	17	13	30	18	29	27	26	24	21	31	24	25	26
Australia	High	21	19	16	26	17	24	28	24	23	12	16	9	28	14	24	23	22	20	15	26	17	21	21
New Zealand	High	5	5	0	3	5	3	6	2	2	3	1	4	2	4	5	4	5	4	6	6	7	4	5
Unclassified	na	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	2	2	0

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.