

Table SINV-64

USPTO utility patents granted in materials, metallurgy, 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	2,146	2,319	2,094	2,371	2,402	2,311	2,038	1,585	1,602	1,454	1,356	1,676	2,330	2,326	2,522	2,647	2,771	2,804	2,760	3,029	2,981	3,452	3,399
North America	na	1,010	1,055	939	1,028	1,014	1,004	881	696	730	661	602	739	1,001	962	999	1,078	1,103	1,043	1,014	1,149	1,126	1,320	1,285
Canada	High	58	75	52	57	70	62	50	39	44	33	32	39	52	49	52	54	57	48	51	51	51	59	57
Mexico	Upper middle	5	8	10	3	6	4	3	0	4	3	2	6	6	7	6	8	8	4	5	5	4	4	7
United States	High	947	972	877	969	938	938	829	657	682	625	568	695	943	907	941	1,016	1,038	991	958	1,093	1,071	1,257	1,222
Central America and Caribbean	na	1	0	0	1	1	2	1	0	0	1	0	0	1	0	0	1	2	0	2	0	0	1	1
Puerto Rico	High	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	0	1	0	1	0	0	0	1
South America	na	6	5	9	9	8	8	6	2	6	7	6	9	9	14	13	10	20	18	15	15	10	18	13
Argentina	Upper middle	1	0	0	1	0	1	0	0	0	0	0	0	0	1	2	0	2	2	1	1	0	2	0
Brazil	Upper middle	1	1	2	4	3	4	2	0	3	3	2	5	5	8	5	7	12	12	11	11	4	11	9
Europe	na	513	553	553	626	618	547	488	382	358	321	300	348	497	490	548	569	608	628	609	610	614	697	690
EU-27 + UK ^a	na	460	497	507	583	566	498	445	358	331	299	276	322	465	453	499	528	562	579	551	558	560	647	636
United Kingdom	High	58	65	42	48	45	53	39	24	33	26	23	20	36	41	40	42	46	60	58	48	66	76	67
EU-27 ^b	na	402	432	465	535	521	446	406	333	298	272	252	302	429	412	460	486	516	519	493	511	494	571	569
Austria	High	17	29	19	34	30	29	19	17	16	17	8	14	21	20	23	22	25	25	29	33	34	32	26
Belgium	High	13	14	15	17	23	12	20	12	14	7	10	15	23	15	15	18	28	26	26	24	19	26	31
Denmark	High	9	13	11	11	14	8	12	10	11	5	4	7	8	7	7	7	9	8	6	6	10	6	12
Finland	High	8	5	5	11	8	9	15	9	6	5	4	10	16	6	8	12	9	16	14	21	12	17	13
France	High	102	110	110	121	97	85	66	65	53	56	55	63	90	87	127	111	116	126	111	109	110	124	122
Germany	High	184	166	226	235	228	208	199	157	137	122	101	133	181	189	203	222	225	205	205	219	216	270	248
Hungary	High	2	3	1	1	1	2	1	0	0	1	1	0	1	1	0	2	1	1	1	1	1	1	2
Ireland	High	1	1	0	0	1	1	1	1	0	1	1	2	1	3	1	3	1	3	1	2	4	1	2
Italy	High	19	26	29	30	35	28	20	19	21	14	16	11	26	25	20	23	29	33	34	27	28	28	31
Netherlands	High	17	20	15	15	16	16	19	15	11	10	17	18	17	23	15	22	24	18	16	18	19	13	15
Spain	High	1	7	6	4	8	9	4	4	6	2	4	3	4	6	7	7	10	7	10	10	6	12	23
Sweden	High	20	35	24	45	49	34	25	19	20	29	26	22	30	25	23	26	25	36	25	31	21	28	33
Other Europe	na	53	56	46	44	52	49	43	25	27	22	24	26	33	37	49	42	46	49	59	52	54	49	55
Other Europe-2020 ^b	na	112	121	88	91	97	101	82	49	60	48	47	46	68	78	88	84	92	109	116	100	120	126	122
Belarus	Upper middle	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	8	5	8	5	6	6	10	5	4	4	7	2	7	5	8	8	9	9	9	8	6	5	5
Russia	Upper middle	12	9	6	9	11	9	12	7	7	5	4	8	9	6	3	8	8	8	10	7	9	6	6
Switzerland	High	33	39	29	27	31	26	20	10	14	12	10	14	14	21	33	23	27	27	30	32	35	34	42

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Ukraine	Lower middle	1	2	1	2	3	4	0	3	1	0	0	1	1	2	1	0	1	1	2	1	1	0	0
Asia	na	593	661	558	664	723	710	625	477	467	438	421	539	763	802	908	928	970	1,042	1,056	1,175	1,162	1,326	1,320
China	Upper middle	4	5	5	4	6	2	8	3	6	11	9	20	32	32	55	61	87	90	98	149	154	186	190
India	Lower middle	3	5	5	4	8	8	15	9	11	11	10	6	10	8	16	17	18	21	19	18	25	20	28
Japan	High	530	586	499	580	643	632	535	416	395	362	358	433	614	629	684	679	689	718	713	769	754	868	827
Malaysia	Upper middle	0	0	0	0	0	0	3	1	2	1	1	0	1	1	1	1	2	0	0	2	1	0	1
Singapore	High	1	0	2	1	3	4	4	2	2	1	1	3	2	2	2	3	3	6	11	8	9	10	7
South Korea	High	35	46	33	56	41	44	37	33	33	31	26	51	73	98	101	119	128	157	172	193	177	199	219
Taiwan	High	20	19	14	17	22	19	22	12	18	21	17	26	31	30	46	45	40	45	40	32	40	39	42
Middle East	na	5	8	9	7	6	6	6	5	9	6	9	10	11	14	21	23	29	29	36	46	42	61	60
Israel	High	5	7	8	6	4	6	6	5	8	5	7	7	7	8	8	8	12	6	11	9	9	11	9
Africa	na	2	6	4	10	6	6	8	6	11	3	3	7	9	9	7	12	8	11	5	9	3	4	3
South Africa	Upper middle	2	5	3	10	6	6	7	6	10	3	3	7	9	9	7	12	8	10	5	7	3	4	1
Australia and Oceania	na	15	30	21	25	26	27	24	16	20	18	16	25	39	35	27	26	30	32	22	23	25	24	26
Australia	High	13	30	20	23	26	26	23	15	20	18	15	24	37	33	24	24	30	30	20	22	23	21	24
New Zealand	High	2	0	2	2	0	2	1	1	0	1	1	1	1	2	3	1	1	3	2	1	1	3	1
Unclassified	na	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0

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

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

^a The United Kingdom was a part of the EU for data purposes from 1973 to 2019.^b 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.