

Table SINV-61

USPTO utility patents granted in macromolecular chemistry, polymers, 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	2,746	2,782	2,791	3,034	3,118	2,957	2,667	1,933	2,095	1,768	1,494	1,661	2,549	2,482	2,583	2,993	3,197	3,166	3,157	3,180	2,919	3,088	3,235
North America	na	1,272	1,320	1,313	1,391	1,458	1,315	1,122	887	938	810	697	751	1,098	1,047	1,040	1,181	1,240	1,206	1,194	1,186	1,086	1,102	1,129
Canada	High	32	32	37	49	61	36	42	28	30	31	28	26	47	30	36	40	47	59	53	71	53	39	48
Mexico	Upper middle	1	1	1	0	1	2	1	0	0	0	2	3	1	3	2	5	3	3	3	6	7	2	4
United States	High	1,240	1,287	1,275	1,342	1,396	1,277	1,079	859	907	779	667	721	1,050	1,014	1,002	1,136	1,191	1,145	1,138	1,110	1,026	1,061	1,077
Central America and Caribbean	na	0	1	0	1	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0
Puerto Rico	High	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
South America	na	3	2	4	1	2	1	3	2	3	1	2	3	4	4	4	3	11	7	9	7	10	6	5
Argentina	Upper middle	0	1	1	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Brazil	Upper middle	1	2	3	1	2	1	2	1	1	0	1	3	3	2	3	2	9	6	8	7	7	4	3
Europe	na	762	716	714	794	780	821	740	485	540	441	343	365	623	571	647	779	814	783	739	735	687	733	714
EU-27 + UK ^a	na	710	659	671	747	737	775	704	456	519	410	324	339	583	526	595	715	766	735	677	665	631	683	667
United Kingdom	High	53	47	53	42	52	44	48	35	31	30	18	22	42	40	38	48	42	51	52	48	58	57	50
EU-27 ^b	na	657	612	618	704	686	731	656	421	487	379	306	317	540	486	557	668	724	683	625	617	573	626	616
Austria	High	6	12	12	13	13	7	6	5	8	5	5	7	11	6	18	18	28	21	29	25	26	32	35
Belgium	High	45	47	51	73	63	53	39	33	34	29	22	23	56	39	49	68	60	58	47	43	39	40	37
Denmark	High	1	2	1	2	3	2	2	3	1	1	1	2	2	3	2	5	6	6	7	6	4	5	5
Finland	High	10	11	12	17	16	17	11	9	5	7	9	7	13	8	9	19	15	18	17	16	18	21	18
France	High	90	72	81	90	82	92	86	62	67	58	42	47	71	70	81	105	108	100	100	96	103	101	110
Germany	High	385	354	341	375	358	409	390	239	275	197	164	146	260	258	276	314	362	319	274	272	226	266	240
Hungary	High	0	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0	1	1	0	1	1	1	2
Ireland	High	1	1	1	1	0	1	1	3	0	1	2	1	3	4	5	4	6	2	2	3	2	2	2
Italy	High	56	54	57	67	70	57	58	31	54	36	34	45	51	44	52	53	52	55	60	64	60	60	61
Netherlands	High	50	47	43	51	62	65	51	21	26	34	16	26	49	37	42	47	55	62	55	65	61	63	67
Spain	High	4	5	5	3	3	5	4	4	4	3	1	3	5	6	5	6	8	13	7	5	9	10	10
Sweden	High	6	5	5	9	6	9	4	5	8	5	4	5	10	3	12	20	15	18	19	14	12	16	18
Other Europe	na	52	57	43	48	43	47	36	28	21	31	19	25	40	45	52	64	48	48	62	70	57	50	47
Other Europe-2020 ^b	na	105	104	96	90	95	91	84	63	52	61	37	48	82	85	90	112	90	99	114	118	114	107	97
Belarus	Upper middle	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	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	1	2	2	4	4	10	6	5	5	2	2	4	3	6	4	7	4	3	4	4	3	2	4
Russia	Upper middle	5	6	5	6	2	3	2	1	1	4	3	4	4	2	2	3	4	4	5	8	8	5	3
Switzerland	High	45	46	32	37	36	33	27	22	14	23	14	17	31	36	44	53	38	41	49	54	41	40	35

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Ukraine	Lower middle	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
Asia	na	698	728	746	823	852	794	783	545	598	506	443	524	809	841	870	1,004	1,089	1,125	1,175	1,202	1,084	1,199	1,332
China	Upper middle	2	3	8	5	10	12	10	2	8	14	13	15	22	24	39	55	63	79	89	106	98	127	145
India	Lower middle	6	5	7	9	9	8	12	10	11	14	10	14	21	14	15	15	30	24	24	37	38	30	20
Japan	High	650	660	661	745	755	684	657	457	500	413	353	425	632	652	649	737	774	737	776	766	684	742	796
Malaysia	Upper middle	1	2	1	0	0	1	2	2	0	0	0	1	1	2	2	3	6	1	3	4	2	5	3
Singapore	High	1	2	1	1	3	1	2	3	4	4	1	0	4	3	5	7	8	11	9	9	7	11	12
South Korea	High	24	31	47	42	53	65	76	55	60	46	53	54	95	105	118	140	157	207	221	230	208	231	283
Taiwan	High	15	23	21	21	21	22	22	17	14	14	11	15	31	42	41	46	50	59	53	46	46	51	62
Middle East	na	4	5	7	7	9	13	7	7	9	4	2	11	5	10	12	14	30	29	28	32	35	35	44
Israel	High	3	4	5	6	4	9	3	5	4	3	2	9	3	8	6	6	12	13	12	9	10	12	15
Africa	na	1	1	1	3	5	1	0	1	0	2	1	2	0	1	1	2	0	1	1	3	1	1	3
South Africa	Upper middle	1	1	1	3	5	1	0	0	0	2	0	2	0	1	1	1	0	0	0	1	1	0	3
Australia and Oceania	na	7	10	6	13	11	11	12	5	8	3	5	5	11	6	10	10	12	15	10	14	13	10	9
Australia	High	6	10	5	12	10	11	12	5	7	2	4	5	10	5	7	9	11	14	8	14	12	9	7
New Zealand	High	1	0	0	1	0	0	0	0	1	1	1	0	2	1	3	0	1	1	2	0	1	1	1
Unclassified	na	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2	3	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.