

TABLE 66

U.S. patent applications and patents issued to companies located in the United States that performed or funded R&D, by industry and company size: 2020

(Number)

Industry and company size	NAICS code	Applications					Patents issued ^c
		Total	Nonprovisional utility patents				
			Total	To foreign jurisdictions ^a	From within organized R&D activity ^b		
All industries	21-23, 31-33, 42-81	163,300	112,959	53,553	89,324	116,651	
Manufacturing industries	31-33	117,387	76,360	41,719	63,873	74,404	
Food	311	2,212	1,585	564	1,523	1,045	
Beverage and tobacco products	312	544	431	406	429	554	
Textile, apparel, and leather products	313-16	480	236	166	220	160	
Wood products	321	60	52	23	45	17	
Paper	322	422	193	155	172	154	
Printing and related support activities	323	138	69	49	63	71	
Petroleum and coal products	324	1,003	478	360	460	532	
Chemicals	325	19,525	10,006	7,207	9,123	9,921	
Basic chemicals	3251	1,540	937	726	823	962	
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	948	369	255	359	573	
Pesticide, fertilizer, and other agricultural chemicals	3253	538	331	201	310	184	
Pharmaceuticals and medicines	3254	13,353	6,586	4,857	6,148	6,150	
Soap, cleaning compound, and toilet preparation	3256	1,992	1,065	643	784	1,252	
Paint, coating, adhesive, and other chemicals	3255, 3259	1,154	718	525	699	800	
Plastics and rubber products	326	1,564	844	516	790	788	
Nonmetallic mineral products	327	1,773	1,472	1,076	1,440	1,023	
Primary metals	331	193	115	52	112	201	
Fabricated metal products	332	2,196	1,167	774	1,120	692	
Machinery	333	11,872	8,157	4,758	7,063	7,563	
Agricultural implement	33311	1,498	1,045	715	946	626	
Semiconductor machinery	333242	2,429	1,427	829	1,217	1,361	
Engine, turbine, and power transmission equipment	3336	677	448	162	285	436	
Other machinery	other 333	7,267	5,238	3,052	4,615	5,140	
Computer and electronic products	334	44,467	32,774	13,746	27,192	30,421	
Communications equipment	3342	6,213	3,431	1,392	3,248	3,607	
Semiconductor and other electronic components	3344	20,256	15,597	6,707	11,406	14,132	
Navigational, measuring, electromedical, and control instruments	3345	6,985	5,316	3,493	4,392	4,196	
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	1,151	809	594	768	466	
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	3,451	2,824	1,818	2,384	2,159	

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Other measuring and controlling device	other 3345	2,383	1,683	1,081	1,240	1,571	
Other computer and electronic products	other 334	11,013	8,430	2,154	8,146	8,487	
Electrical equipment, appliances, and components	335	4,715	3,370	2,434	3,164	3,168	
Transportation equipment	336	8,238	5,787	3,902	3,465	7,865	
Motor vehicles, bodies, trailers, and parts	3361-63	5,215	3,625	2,907	2,200	4,794	
Aerospace products and parts	3364	2,610	1,855	746	965	2,844	
Aircraft, aircraft engine, and aircraft parts	336411-13	2,554	1,808	739	934	2,797	
Guided missile, space vehicle, and related parts	336414-15, 336419	56	47	7	31	47	
Military armored vehicle, tank, and tank component	336992	5	1	0	0	0	
Other transportation	other 336	408	305	249	299	228	
Furniture and related products	337	520	315	168	196	209	
Miscellaneous	339	17,462	9,309	5,361	7,295	10,019	
Medical equipment and supplies	3391	14,636	8,091	4,866	6,130	8,800	
Other miscellaneous manufacturing	3399	2,826	1,219	495	1,166	1,218	
Nonmanufacturing industries	21-23, 42-81	45,913	36,599	11,834	25,451	42,247	
Mining, quarrying, oil and gas extraction, and support activities	21	1,230	510	293	472	698	
Utilities	22	56	30	11	17	20	
Wholesale trade	42	1,655	941	228	519	436	
Electronic shopping and electronic auctions	454111-12	2,098	1,961	139	1,955	2,343	
Transportation and warehousing	48-49	162	98	25	96	328	
Information	51	21,584	17,355	7,014	11,906	21,021	
Publishing	511	5,694	4,326	2,588	2,771	7,692	
Newspaper, periodical, book, and directory publishers	5111	0	0	0	0	0	
Software publishers	5112	5,694	4,326	2,588	2,771	7,692	
Telecommunications	517	2,928	2,654	365	1,096	3,204	
Data processing, hosting, and related services	518	6,669	5,692	1,319	4,472	5,212	
Other information	other 51	6,293	4,683	2,743	3,567	4,914	
Finance and insurance	52	4,080	3,613	504	2,446	2,907	
Real estate and rental and leasing	53	268	258	214	258	103	
Lessors of nonfinancial intangible assets (except copyrighted works)	533	207	203	201	203	71	
Other real estate and rental and leasing	other 53	61	55	13	55	32	

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Professional, scientific, and technical services	54	14,406	11,579	3,311	7,607	14,155	
Architectural, engineering, and related services	5413	506	238	112	192	149	
Computer systems design and related services	5415	9,111	8,438	1,939	4,874	12,239	
Scientific research and development services	5417	3,954	2,332	1,124	2,015	1,474	
Research and development in nanotechnology	541713	122	110	66	107	21	
Research and development in biotechnology (except nanobiotechnology)	541714	779	434	261	330	261	
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	3,039	1,774	797	1,562	1,192	
Research and development in the social sciences and humanities	541720	14	14	0	14	0	
Other professional, scientific, and technical services	other 54	835	570	135	526	294	
Health care services	621-23	141	94	46	48	69	
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	232	160	48	127	167	
All companies (number of domestic employees)	-	163,300	112,959	53,553	89,324	116,651	
Small companies							
10-19 ^d	-	3,448	1,814	795	1,519	1,255	
20-49	-	6,345	3,708	1,741	3,133	2,309	
Medium companies							
50-99	-	5,924	3,354	1,727	2,892	1,992	
100-249	-	7,482	4,075	2,262	3,674	3,747	
Large companies							
250-499	-	5,127	3,472	1,727	3,098	2,974	
500-999	-	6,402	3,856	2,537	3,547	3,574	
1,000-4,999	-	24,107	16,319	8,004	13,602	14,994	
5,000-9,999	-	14,908	9,992	5,666	8,019	11,362	
10,000-24,999	-	34,978	23,467	13,844	21,708	22,471	
25,000 or more	-	54,579	42,904	15,250	28,132	51,975	

i = more than 50% of the estimate is imputation to account for nonresponse.

NAICS = 2017 North American Industry Classification System.

^a Also includes patent applications for which company planned to apply in foreign jurisdictions.

^b Includes patent applications in which the named inventor(s) were R&D employees.

^c For a small number of companies issued more than 100 patents by the U.S. Patent and Trademark Office (USPTO), counts from USPTO.gov were used to supplement survey data.

^d The Business Enterprise Research and Development Survey does not include companies with fewer than 10 domestic employees.

Note(s):

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D and are not comparable with estimates published for years prior to 2018. Statistics are based on companies in the United States that reported to the survey. No systematic item imputation was applied. These statistics include an adjustment to the weight to account for unit nonresponse.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2020.