

TABLE 62

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: 2018

(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	163,866	117,393	53,969	86,635	105,854
Manufacturing industries	31-33	115,551	78,960	42,077	60,820	67,608
Food	311	2,330	1,231	257	1,174	1,050
Beverage and tobacco products	312	485	356	290	324	349
Textile, apparel, and leather products	313-16	971	669	355	415	286
Wood products	321	86	47	14	45	18
Paper	322	572	450	155	292	265
Printing and related support activities	323	363	191	69	174	107
Petroleum and coal products	324	707	622	441	573	516
Chemicals	325	20,067	11,512	8,484	10,439	9,303
Basic chemicals	3251	1,745	1,070	771	958	790
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	2,568	1,730	1,394	1,632 - 1,731	1,242
Pesticide, fertilizer, and other agricultural chemicals	3253	494	378	163	366	303
Pharmaceuticals and medicines	3254	12,080	6,293	4,854	5,749	5,190
Soap, cleaning compound, and toilet preparation	3256	1,935	1,197	725	888	1,154
Paint, coating, adhesive, and other chemicals	3255, 3259	1,245	843	578	745 - 844	625
Plastics and rubber products	326	2,006	1,227	748	1,161	952
Nonmetallic mineral products	327	1,788	1,542	1,130	1,521	898
Primary metals	331	538	296	176	237	273
Fabricated metal products	332	1,788	899	387	785	794
Machinery	333	9,890	6,007	3,716	5,185	5,817
Agricultural implement	33311	1,170	670	449	635	632
Semiconductor machinery	333242	2,210	1,239	860	1,070	1,188
Engine, turbine, and power transmission equipment	3336	958	673	438	650	993
Other machinery	other 333	5,551	3,424	1,970	2,830	3,004
Computer and electronic products	334	40,447	29,853	12,793	24,103	27,969
Communications equipment	3342	4,530	3,205	1,270	2,845	3,283
Semiconductor and other electronic components	3344	19,178	14,046	6,462	10,024	13,261
Navigational, measuring, electromedical, and control instruments	3345	6,132	4,306	2,808	3,631	4,131
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	1,379	725	481	687	629
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	2,467	1,969	1,146	1,727	1,871
Other measuring and controlling device	other 3345	2,285	1,612	1,180	1,216	1,631
Other computer and electronic products	other 334	10,608	8,295	2,253	7,603	7,294
Electrical equipment, appliances, and components	335	5,086	3,650	2,087	3,272	2,719
Transportation equipment	336	15,826	13,285	5,725	4,961	8,199
Motor vehicles, bodies, trailers, and parts	3361-63	11,508	9,643	4,127	2,891	5,180
Aerospace products and parts	3364	3,706	3,244	1,299	1,685	2,788
Aircraft, aircraft engine, and aircraft parts	336411-13	3,567	3,160	1,252	1,605	2,733
Guided missile, space vehicle, and related parts	336414-15, 336419	139	85	47	81	56
Military armored vehicle, tank, and tank component	336992	0 - 217	0	0	0	0

TABLE 62

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: 2018

(Number)

Industry and company size	NAICS code	Applications					Patents issued ^c
		Total	Nonprovisional utility patents			From within organized R&D activity ^b	
			Total	To foreign jurisdictions ^a			
Other transportation	other 336	396 - 614	397	299	i	384	231
Furniture and related products	337	492	279	147		177	240
Miscellaneous	339	12,109	6,845	5,103		5,983	7,854
Medical equipment and supplies	3391	9,430	5,448	4,346		4,923	6,638
Other miscellaneous manufacturing	3399	2,680	1,397	757		1,060	1,216
Nonmanufacturing industries	21-23, 42-81	48,315	38,433	11,892		25,815	38,246
Mining, quarrying, oil and gas extraction, and support activities	21	1,957	1,397	1,149		1,343	2,331
Utilities	22	75	32	14		24	17
Wholesale trade	42	1,107	525	227		435	398
Electronic shopping and electronic auctions	454111-12	0 - 2,679	0 - 1,788	0 - 381		0 - 1,788	0 - 2,526
Transportation and warehousing	48-49	140	82	27		78	61
Information	51	21,376	16,920	6,031		12,071	16,911
Publishing	511	9,501	8,050	4,019		4,809	7,804
Newspaper, periodical, book, and directory publishers	5111	3	2	i	0	0	0
Software publishers	5112	9,497	8,048	4,019		4,809	7,804
Telecommunications	517	2,922	1,870	260		971	3,060
Data processing, hosting, and related services	518	3,825	3,086	473		2,749	2,067
Other information	other 51	5,128	3,914	1,279		3,543	3,980
Finance and insurance	52	3,025	2,101	259		1,105	1,526
Real estate and rental and leasing	53	309	180	0 - 181		171	0 - 2,526
Lessors of nonfinancial intangible assets (except copyrighted works)	533	1	0	0		0	0
Other real estate and rental and leasing	other 53	308	180	0 - 181		171	0 - 2,526
Professional, scientific, and technical services	54	17,203	15,124	3,670		8,558	14,201
Architectural, engineering, and related services	5413	599	269	119		237	203
Computer systems design and related services	5415	13,402	12,879	2,670		6,607	12,641
Scientific research and development services	5417	2,766	1,680	777		1,471	1,077
Research and development in biotechnology	541711	334 - 739	334 - 397	292		335	241
Research and development in the physical, engineering, and life sciences (except biotechnology)	541712	2,028	1,284	485		1,136	832
Research and development in the social sciences and humanities	541720	0 - 405	0 - 63	0		0	4
Other professional, scientific, and technical services	other 54	436	296	105		243	280
Health care services	621-23	449	i 279	i 139	i	247	i 280
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	0 - 2,679	0 - 1,798	0 - 381		0 - 1,788	0 - 2,526
All companies (number of domestic employees)	-	163,866	117,393	53,969		86,635	105,854
Small companies							

TABLE 62

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: 2018

(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	
10–19 ^d	–	2,756	1,680	670	1,491	991
20–49	–	5,647	3,143	1,780	2,860	1,943
Medium companies						
50–99	–	6,092	3,923	1,679	3,284	2,650
100–249	–	7,396	4,455	2,390	3,737	3,535
Large companies						
250–499	–	7,692	4,799	2,389	4,110	3,718
500–999	–	6,780	4,191	2,171	3,807	3,897
1,000–4,999	–	21,860	14,712	7,960	12,828	13,316
5,000–9,999	–	17,159	13,088	7,208	9,051	11,441
10,000–24,999	–	36,970	27,140	13,968	20,659	19,077
25,000 or more	–	51,514	40,260	13,754	24,806	45,287

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

NAICS = 2012 North American Industry Classification System.

^a Also includes patent applications that company planned to apply for 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 Business 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. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates 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. Beginning in survey year 2018, these statistics include an adjustment to the weight to account for unit nonresponse. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2018.