

TABLE 60

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: 2017

(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	151,928	100,485	50,572	79,011	101,607
Manufacturing industries	31-33	104,878	73,183	40,793	58,410	68,598
Food	311	1,383	866	435	66 - 867	775
Beverage and tobacco products	312	676	521	304	436	282
Textile, apparel, and leather products	313-16	769	500	226	372	246
Wood products	321	72	44	17	39	28
Paper	322	1,041	637	351	0 - 638	539
Printing and related support activities	323	173	110	48	90	113
Petroleum and coal products	324	220	166	81	127	86
Chemicals	325	16,229	9,047	6,739	8,169	8,775
Basic chemicals	3251	989	544	466	534	747
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	378	134	108	124	171
Pesticide, fertilizer, and other agricultural chemicals	3253	1,191	695	359	670	804
Pharmaceuticals and medicines	3254	10,799	5,726	4,611	5,212	5,350
Soap, cleaning compound, and toilet preparation	3256	1,677	1,088	584	766 - 1,089	1,044
Paint, coating, adhesive, and other chemicals	3255, 3259	1,195	860	611	538 - 861	658
Plastics and rubber products	326	3,858	2,486	1,838	2,274	1,707
Nonmetallic mineral products	327	1,506	1,259	904	1,231	801
Primary metals	331	778	168	117	141	179
Fabricated metal products	332	1,831	974	601	845	577
Machinery	333	8,641	5,572	2,739	4,604	5,281
Agricultural implement	33311	1,238	1,033	540	872	830
Semiconductor machinery	333242	2,007	1,210	0 - 1,211	462 - 1,211	1,097
Engine, turbine, and power transmission equipment	3336	1,001	723	326	662	1,111
Other machinery	other 333	4,394	2,606	661 - 1,875	1,858 - 2,607	2,243
Computer and electronic products	334	38,082	29,109	11,813	22,881	29,824
Communications equipment	3342	5,034	3,637	1,586	3,286	3,890
Semiconductor and other electronic components	3344	17,146	13,095	5,076	8,650	13,815
Navigational, measuring, electromedical, and control instruments	3345	5,494	4,236	2,937	3,391	4,365
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	612	345	242	307	347
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	2,728	2,426	1,669	2,128	2,230

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Other measuring and controlling device	other 3345	2,154	1,465	1,026	956	1,787
Other computer and electronic products	other 334	10,409	8,140	2,214	7,553	7,754
Electrical equipment, appliances, and components	335	4,172	2,873	1,547	2,783	2,308
Transportation equipment	336	14,630	12,444	8,772	7,712	9,299
Automobiles, bodies, trailers, and parts	3361-63	7,602	6,409	5,218	4,350	4,834
Aerospace products and parts	3364	6,357	5,661	3,295	2,985 - 3,039	4,047
Aircraft, aircraft engine, and aircraft parts	336411-13	6,218	5,574	3,255	2,951	3,977
Guided missile, space vehicle, and related parts	336414-15, 336419	139	87	40	34 - 88	70
Military armored vehicle, tank, and tank component	336992	0 - 414	0 - 117	0	0 - 117	0
Other transportation	other 336	258 - 673	258 - 376	259	205 - 376	419
Furniture and related products	337	496	264	143	189	195
Miscellaneous manufacturing	339	10,322	6,144	4,117	5,005 - 5,805	7,583
Medical equipment and supplies	3391	7,965	5,265	3,831	4,925	6,774
Other miscellaneous manufacturing	3399	2,357	879	286	79 - 880	809
Nonmanufacturing industries	21-23, 42-81	47,050	27,301	9,779	20,601	33,009
Mining, extraction, and support activities	21	3,043	2,542	1,937	2,475	2,578
Utilities	22	30	19	0 - 20	4	30
Wholesale trade	42	1,795	467	158	352	535
Electronic shopping and electronic auctions	454111-12	2,524	1,387 - 1,781	0 - 226	1,260 - 1,746	0 - 2,239
Transportation and warehousing	48-49	135	92	35	0 - 93	60
Information	51	19,522	15,380	5,737	11,066	14,522
Publishing	511	8,277	6,604	2,681	5,274	6,052
Newspaper, periodical, book, and directory publishers	5111	6	6	0	0 - 7	4
Software publishers	5112	8,271	6,598	2,681	5,267 - 5,275	6,048
Telecommunications	517	3,231	2,345	377	1,379	3,379
Data processing, hosting, and related services	518	2,501	1,965	253	1,783	967
Other information	other 51	5,513	4,466	2,425	2,630	4,124
Finance and insurance	52	2,109	1,404	200	942	889
Real estate and rental and leasing	53	83	0 - 84	0 - 84	0 - 84	37

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Lessors of nonfinancial intangible assets (except copyrighted works)	533	0	0	0	0	0
Other real estate and rental and leasing	other 53	83	0 - 84	0 - 84	0 - 84	37
Professional, scientific, and technical services	54	17,317	5,492	1,405	3,898	12,044
Architectural, engineering, and related services	5413	715 - 1,539	716	94	674	187
Computer systems design and related services	5415	12,981	1,851 - 3,011	333	740 - 1,680	10,305
Scientific research and development services	5417	2,686	1,654 - 1,990	865	1,546	1,110
Biotechnology research and development	541711	387 - 722	388	0 - 283	27 - 364	0 - 167
Physical, engineering, and life sciences (except biotechnology) research and development	541712	1,965	1,267	583	1,183	944
Social sciences and humanities research and development	541720	0 - 335	0 - 335	0 - 283	0 - 335	0 - 167
Other professional, scientific, and technical services	other 54	112 - 936	112 - 936	113	0 - 936	441
Health care services	621-23	191	129	85	122	80
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	301	0 - 302	0 - 226	0 - 302	0 - 2,239
All companies (number of domestic employees)	-	151,928	100,485	50,572	79,011	101,607
Small companies						
10-19 ^d	-	2,661	1,403	509	1,233	960
20-49	-	7,489	4,798	2,499	4,363	2,412
Medium companies						
50-99	-	4,921	2,084	1,112	1,747	1,551
100-249	-	5,278	2,989	1,346	2,669	2,361
Large companies						
250-499	-	5,314	3,110	1,523	2,742	3,452
500-999	-	7,222	3,980	2,201	3,440	3,778
1,000-4,999	-	18,785	12,912	6,487	11,209	13,382
5,000-9,999	-	14,215	10,692	4,570	8,218	10,122
10,000-24,999	-	28,211	20,628	11,155	16,842	18,226
25,000 or more	-	57,831	37,889	19,169	26,548	45,363

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. Statistics are representative of companies located in the United States that performed or funded R&D. Statistics are based on companies in the United States that reported to the survey. These statistics do not 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, 2017.