

Appendix table 6-46

## U.S. patent applications and grants, by industry: 2009

(Number)

Industry and company size	NAICS code	Patent applications	Patents issued
All industries	21-23, 31-33, 42-81	116,972	60,583
Manufacturing industries	31-33	85,423	43,391
Food	311	2,698	917
Beverage and tobacco products	312	155	91
Textile, apparel and leather	313-316	302	221
Wood products	321	125	78
Paper	322	1,079	707
Printing and related support activities	323	44	40
Petroleum and coal products	324	353	146
Chemicals	325	12,305	6,485
Basic chemicals	3251	1,901	922
Resin, synthetic rubber, fibers, and filament	3252	598	489
Pesticide, fertilizer, and other agricultural chemicals	3253	768	513
Pharmaceuticals and medicines	3254	6,194	2,921
Soap, cleaning compound, and toilet preparations	3256	1,176	802
Paint, coating, adhesive, and other chemicals	3255, 3259	1,667	838
Plastics and rubber products	326	2,925	1,508
Nonmetallic mineral products	327	895	371
Primary metals	331	349	208
Fabricated metal products	332	1,678	916
Machinery	333	6,881	3,911
Agricultural implements	33311	479	348
Semiconductor machinery	333295	924	689
Engine, turbine, and power transmission equipment	3336	445	313
Other machinery	other 333	5,033	2,560
Computer and electronic products	334	35,012	16,850
Communications equipment	3342	4,338	2,855
Semiconductor and other electronic components	3344	9,372	7,117
Navigational, measuring, electromedical, and control instruments	3345	16,741	3,146
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	1,171	728
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	D	D
Other measuring and controlling devices	other 3345	D	D
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	4,561	3,733
Electrical equipment, appliances, and components	335	3,523	1,962
Transportation equipment	336	9,362	4,856
Automobiles, bodies, trailers, and parts	3361, 3362, 3363	3,620	2,030
Aerospace products and parts	3364	5,565	2,733
Aircraft, aircraft engine, and aircraft parts	336411-336413	4,788	2,375
Guided missile, space vehicle, and related parts	336414, 336415, 336419	777	358
Military armored vehicle, tank, and tank components	336992	17	11
Other transportation equipment	other 336	159	81
Furniture and related products	337	503	394
Miscellaneous manufacturing	339	7,235	3,729
Medical equipment and supplies	3391	4,647	2,620
Other miscellaneous manufacturing	3399	2,587	1,109
Nonmanufacturing industries	21-23, 42-81	31,549	17,192
Mining, extraction, and support activities	21	2,285	1,084
Utilities	22	158	36
Construction	23	42	14
Wholesale trade	42	670	329
Retail trade	44-45	382	113
Electronic shopping and mail-order houses	4541	344	102
Other retail trade	other 44-45	38	11
Transportation and warehousing	48-49	73	42
Information	51	13,041	10,263

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Industry and company size	NAICS code	Patent applications	Patents issued
Publishing	511	9,888	9,094
Newspaper, periodical, book, and directory publishers	5111	37	27
Software publishers	5112	9,851	9,066
Telecommunications	517	1,265	434
Internet service providers, web search portals, and data processing services	518	567	327
Other information	other 51	1,321	408
Finance and insurance	52	801	318
Real estate and rental and leasing	53	148	92
Professional, scientific, and technical services	54	13,611	4,714
Architectural, engineering, and related services	5413	1,247	393
Computer systems design and related services	5415	3,121	1,121
Scientific research and development services	5417	7,814	2,594
Biotechnology research and development	541711	3,800	1,304
Physical, engineering, and life sciences (except biotechnology) research and development	541712	3,958	1,257
Social sciences and humanities research and development	541720	56	33
Other professional, scientific, and technical services	other 54	1,430	606
Health care services	621–623	187	53
Other nonmanufacturing	55–56, 61, 624, 71–72, 81	151	134

D = data withheld to avoid disclosing operations of individual companies

NAICS = 2002 North American Industry Classification System

NOTES: Data are representative of companies where (worldwide R&D expense + worldwide R&D costs funded by others) > 0. Detail may not add to total because of rounding. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics and Census Bureau, Business R&amp;D and Innovation Survey (2009, preliminary).

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