

TABLE 56. Importance of utility patent, design patent, and trademark intellectual property protections to companies located in the United States that performed or funded R&D, by industry and company size: 2014  
(Percent)

Industry and company size	NAICS code	Utility patents			Design patents			Trademarks		
		Very important	Somewhat important	Not important	Very important	Somewhat important	Not important	Very important	Somewhat important	Not important
All industries	21-23, 31-33, 42-81	45.8	17.6	36.6	21.0	24.5	54.6	44.5	31.0	24.5
Manufacturing industries	31-33	54.4	16.8	28.8	27.7	28.3	43.9	52.1	27.9	19.9
Food	311	45.2	12.8	42.0	17.2	34.8	48.0	68.4	18.9	12.7
Beverages and tobacco products	312	29.0	46.1	24.9	20.7	50.3	29.0	79.3	D	D
Textiles, apparel, and leather products	313-16	46.9	22.4	30.6	38.8	30.6	30.6	67.3	26.5	6.1
Wood products	321	37.5	37.5	25.0	25.0	37.5	37.5	68.7	D	D
Paper	322	39.4	24.2	36.4	21.2	18.2	60.6	50.0	34.4	15.6
Printing and related support activities	323	27.7	25.2	47.0	15.1	32.7	52.2	32.7	30.3	37.1
Petroleum and coal products	324	63.2	D	D	21.1	26.3	52.6	68.4	15.8	15.8
Chemicals	325	66.5	12.9	20.5	17.3	23.8	58.9	50.6	27.5	21.9
Basic chemicals	3251	67.1	18.4	14.5	12.1	17.8	70.1	53.8	31.7	14.5
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	58.5	21.3	20.2	18.1	31.9	50.0	60.6	23.4	16.0
Pesticides, fertilizers, and other agricultural chemicals	3253	82.4	D	D	72.4	D	D	D	D	0.0
Pharmaceuticals and medicines	3254	71.2	11.9	16.9	11.7	27.3	61.0	44.1	29.3	26.7
Soaps, cleaning compounds, and toilet preparations	3256	S	8.2	22.8	S	26.8	17.6	S	S	S
Paints, coatings, adhesives, and other chemicals	3255, 3259	34.8	13.1	52.0	10.1	9.1	80.8	42.5	34.3	23.2
Plastics and rubber products	326	44.8	16.1	39.1	28.0	26.8	45.3	47.0	22.9	30.1
Nonmetallic mineral products	327	66.5	19.1	14.4	26.6	22.3	51.1	68.4	24.4	7.2
Primary metals	331	41.7	29.7	28.6	17.4	36.1	46.5	51.7	32.6	15.6
Fabricated metal products	332	30.9	26.4	42.7	21.0	36.4	42.7	30.5	34.0	35.5
Machinery	333	42.6	20.1	37.3	27.4	26.8	45.8	52.6	25.9	21.5
Agricultural implements	33311	44.2	36.3	19.5	33.9	47.0	19.1	48.8	31.1	20.1
Semiconductor machinery	333295	81.6	D	D	31.6	32.7	35.8	54.0	D	D
Engines, turbines, and power transmission equipment	3336	50.0	23.7	26.3	43.4	21.8	34.9	48.6	28.1	23.3
Other machinery	other 333	39.2	19.7	41.0	25.4	25.3	49.4	53.2	24.8	22.1
Computer and electronic products	334	60.3	16.4	23.3	26.9	33.0	40.1	52.5	29.2	18.3
Communications equipment	3342	52.1	11.4	36.6	37.9	28.7	33.3	52.3	13.4	34.3
Semiconductors and other electronic components	3344	64.9	18.1	17.0	21.8	25.9	52.3	40.6	40.8	18.7
Navigational, measuring, electromedical, and control instruments	3345	68.5	14.8	16.6	25.1	34.6	40.3	55.8	32.3	11.9
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	85.1	6.9	8.0	28.0	38.1	33.9	60.3	34.4	5.2
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	60.0	10.6	29.4	30.4	28.3	41.3	62.0	15.2	22.8
Other measuring and controlling devices	other 3345	62.2	19.6	18.2	22.6	34.2	43.2	52.3	34.8	12.9
Other computer and electronic products	other 334	40.4	26.2	33.4	23.6	49.0	27.5	66.2	24.0	9.8
Electrical equipment, appliances, and components	335	59.1	18.0	22.9	47.1	24.2	28.7	51.9	32.0	16.1
Transportation equipment	336	46.4	20.0	33.7	38.6	26.1	35.2	46.0	29.0	25.0

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Automobiles, bodies, trailers, and parts	3361-63	53.2	17.8	29.0	41.1	28.4	30.6	52.8	24.6	22.6
Aerospace products and parts	3364	31.2	23.2	45.6	32.7	17.4	49.9	29.8	37.9	32.3
Aircraft, aircraft engines, and aircraft parts	336411-13	32.6	23.6	43.8	34.2	17.1	48.6	32.2	40.2	27.6
Guided missiles, space vehicles, and related parts	336414-15, 336419	D	D	60.1	D	D	60.1	D	D	70.0
Military armored vehicles, tanks, and tank components	336992	42.9	D	D	D	42.9	D	D	D	42.9
Other transportation	other 336	48.1	22.1	29.8	41.6	33.1	25.4	52.4	29.8	17.7
Furniture and related products	337	41.4	13.8	44.8	48.3	27.6	24.1	55.2	27.6	17.2
Miscellaneous manufacturing	339	63.3	10.2	26.5	40.1	27.7	32.2	60.2	30.5	9.3
Medical equipment and supplies	3391	65.9	8.0	26.2	39.9	27.3	32.9	56.9	34.5	8.6
Other miscellaneous manufacturing	3399	56.9	15.9	27.2	40.5	28.9	30.6	68.6	20.5	10.9
Nonmanufacturing industries	21-23, 42-81	35.3	18.5	46.2	12.7	19.7	67.6	35.2	34.8	30.0
Mining, extraction, and support activities	21	46.8	6.7	46.5	8.8	33.2	58.0	18.4	18.7	62.9
Utilities	22	33.3	36.4	30.3	9.1	39.4	51.5	45.5	39.4	15.2
Wholesale trade	42	S	S	S	S	S	S	S	S	S
Electronic shopping and electronic auctions	454111-12	S	S	S	D	D	D	D	S	D
Transportation and warehousing	48-49	30.0	D	D	D	D	60.0	30.0	40.0	30.0
Information	51	33.4	21.0	45.7	12.9	23.0	64.1	48.6	37.6	13.7
Publishing	511	29.4	16.6	54.1	8.4	17.2	74.3	46.7	39.5	13.8
Newspaper, periodical, book, and directory publishers	5111	D	S	D	D	D	D	D	D	D
Software publishers	5112	29.4	16.8	53.7	8.1	17.1	74.8	46.2	40.0	13.9
Telecommunications	517	52.5	20.6	26.9	22.5	23.2	54.3	61.2	25.3	13.5
Data processing, hosting, and related services	518	36.0	27.2	36.8	16.4	29.9	53.7	46.8	39.2	14.0
Other information	other 51	32.7	16.4	50.9	17.5	23.5	58.9	63.3	24.3	12.4
Finance and insurance	52	22.2	23.7	54.1	D	D	85.8	49.1	16.6	34.3
Real estate and rental and leasing	53	D	0.0	D	62.5	D	D	37.5	D	D
Lessors of nonfinancial intangible assets (except copyrighted works)	533	D	D	D	D	D	D	D	D	D
Other real estate and rental and leasing	other 53	D	0.0	D	D	D	D	50.0	D	D
Professional, scientific, and technical services	54	35.4	17.6	47.0	11.3	17.0	71.7	26.9	35.8	37.3
Architectural, engineering, and related services	5413	22.0	24.3	53.6	13.9	13.2	72.9	17.0	33.0	50.0
Computer systems design and related services	5415	13.1	25.2	61.7	4.7	16.8	78.5	26.5	40.5	33.0
Scientific R&D services	5417	60.7	12.0	27.3	15.1	20.5	64.4	26.8	39.5	33.7
Biotechnology R&D	541711	75.5	5.3	19.2	18.7	10.0	71.3	28.4	40.1	31.5
Physical, engineering, and life sciences (except biotechnology) R&D	541712	56.9	14.3	28.9	14.1	24.2	61.6	26.6	39.8	33.6
Social sciences and humanities R&D	541720	24.2	12.1	63.6	D	D	76.1	16.2	24.2	59.6
Other professional, scientific, and technical services	other 54	21.7	11.6	66.7	12.6	9.9	77.4	36.0	17.0	47.0
Health care services	621-23	58.0	8.6	33.4	D	D	48.9	52.8	20.1	27.0

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Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	24.6	24.7	50.7	10.8	32.0	57.2	38.1	25.7	36.3
All companies (number of domestic employees)	-	45.8	17.6	36.6	21.0	24.5	54.6	44.5	31.0	24.5
Small companies <sup>a</sup>										
5-499	-	42.7	16.9	40.3	19.8	22.1	58.1	39.7	32.7	27.6
5-99	-	43.2	16.2	40.6	17.9	20.0	62.2	36.3	33.8	29.9
5-49	-	46.7	14.9	38.4	17.1	20.4	62.5	34.2	34.5	31.3
5-9	-	62.3	11.0	26.6	11.1	30.6	58.3	29.3	41.5	29.2
10-24	-	47.4	16.9	35.7	21.4	17.4	61.2	35.4	34.4	30.2
25-49	-	38.4	14.5	47.1	14.9	19.0	66.1	35.2	31.2	33.6
50-99	-	35.0	19.3	45.7	19.7	18.9	61.3	41.1	32.3	26.6
100-249	-	38.5	18.1	43.4	21.0	26.0	53.0	42.3	31.2	26.5
250-499	-	47.5	18.6	33.8	27.7	26.3	46.0	52.5	29.3	18.2
Medium and large companies										
500-999	-	49.2	24.9	25.9	23.2	32.7	44.1	54.4	29.8	15.8
1,000-4,999	-	57.8	18.7	23.6	24.9	34.2	40.9	63.5	25.1	11.4
5,000-9,999	-	66.7	17.4	15.9	32.6	27.5	39.9	72.0	16.4	11.5
10,000-24,999	-	77.2	8.5	14.4	24.9	44.1	30.9	78.6	17.6	3.8
25,000 or more	-	70.2	18.5	11.2	30.6	31.8	37.6	82.0	11.7	6.3

D = data withheld to avoid disclosing operations of individual companies; S = data withheld as more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

<sup>a</sup> Upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: Statistics are representative of companies in the United States that were eligible to receive Form BIRDF-1 and performed or funded R&D. These statistics are not comparable to estimates prior to 2012 because those estimates are representative of all companies in the United States. 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.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2014.