

TABLE 65
Importance of types of intellectual property protections to companies located in the United States that performed or funded R&D, by industry and company size: 2018
 (Percent)

Industry and company size	NAICS code	Utility patents			Design patents			Trademarks			Copyrights			Trade secrets			Mask works		
		Very important	Somewhat important	Not important	Very important	Somewhat important	Not important	Very important	Somewhat important	Not important	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	31.3	18.1	50.5	20.3	23.1	56.6	39.8	29.4	30.8	27.8	29.5	42.7	51.7	24.5	23.8	7.2	10.1	82.7
Manufacturing industries	31-33	34.8	19.2	46.1	22.6	23.9	53.4	41.3	29.5	29.2	25.1	29.2	45.7	54.0	24.5	21.4	8.1	10.3	81.6
Food	311	11.1	13.6	75.3	9.1	12.1	78.8	45.7	27.4	26.9	22.3	23.5	54.1	52.6	28.0	19.3	6.4	3.2	90.4
Beverage and tobacco products	312	5.9	10.2	83.9	5.6	8.1	86.3	48.0	31.3	20.7	17.4	14.6	68.1	57.7	36.0	6.3	D	D	96.1
Textile, apparel, and leather products	313-316	40.2	18.5	41.2	34.7	29.6	35.7	55.8	26.3	17.9	26.8	34.6	38.7	44.5	35.5	20.0	3.4	5.5	91.1
Wood products	321	7.3	41.9	50.8	4.9	49.6	45.5	13.8	71.7	14.5	40.1	33.4	26.4	71.9	18.2	9.8	D	D	61.9
Paper	322	25.0	27.4	47.6	14.1	33.8	52.1	31.9	30.5	37.5	12.8	30.0	57.2	48.9	27.1	24.0	D	D	87.4
Printing and related support activities	323	19.0	22.3	58.7	13.3	26.2	60.4	23.6	36.5	39.9	20.0	30.9	49.1	37.9	37.3	24.8	D	D	87.2
Petroleum and coal products	324	25.4	17.7	56.9	20.5	18.1	61.4	50.8	22.7	26.6	32.1	24.0	43.9	65.2	23.4	11.4	D	D	83.0
Chemicals	325	36.6	18.9	44.4	12.9	19.5	67.5	40.0	32.5	27.6	22.6	29.4	48.1	63.3	17.1	19.6	3.5	7.3	89.2
Basic chemicals	3251	33.4	16.6	50.0	18.1	13.2	68.7	47.6	32.4	20.1	20.8	30.4	48.9	64.7	26.1	9.2	3.5	4.4	92.1
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	19.1	6.4	74.6	4.5	7.2	88.3	24.2	31.8	44.1	7.8	23.6	68.7	51.1	24.9	24.0	D	D	82.8
Pesticide, fertilizer, and other agricultural chemicals	3253	55.4	10.2	34.4	7.3	18.9	73.9	73.4	17.4	9.1	39.3	19.2	41.5	79.9	16.1	4.0	D	D	95.4
Pharmaceuticals and medicines	3254	47.1	21.2	31.8	13.3	25.8	60.8	37.9	39.3	22.8	23.5	30.9	45.6	62.6	16.6	20.8	3.4	6.8	89.8
Soap, cleaning compound, and toilet preparation	3256	26.2	28.8	45.0	15.5	20.2	64.3	47.1	22.5	30.3	28.4	22.3	49.3	63.3	13.1	23.6	6.2	13.7	80.1
Paint, coating, adhesive, and other chemicals	3255, 3259	18.9	14.8	66.3	10.9	11.1	78.0	34.7	23.3	42.1	19.3	32.7	48.0	65.1	12.2	22.7	3.2	5.1	91.7
Plastics and rubber products	326	33.1	14.7	52.2	19.9	22.7	57.4	39.0	25.6	35.4	23.7	24.5	51.8	50.5	23.8	25.7	3.0	5.1	91.9
Nonmetallic mineral products	327	19.5	13.8	66.7	8.7	15.3	76.0	26.7	49.4	23.9	8.9	19.9	71.2	66.8	14.8	18.4	2.0	5.5	92.6
Primary metals	331	21.0	23.2	55.8	10.9	26.1	63.0	19.9	29.9	50.2	10.9	24.0	65.1	44.9	31.4	23.8	3.1	7.1	89.8
Fabricated metal products	332	29.5	9.7	60.8	24.3	15.8	59.9	32.4	19.6	48.0	19.5	19.2	61.2	40.3	22.9	36.8	9.8	5.0	85.2
Machinery	333	37.2	22.7	40.1	27.2	24.9	47.9	43.0	27.0	30.1	23.9	28.5	47.5	49.6	28.1	22.3	6.0	9.7	84.3
Agricultural implement	33311	47.7	22.0	30.3	38.3	27.4	34.3	49.7	24.6	25.7	28.2	38.5	33.3	42.3	29.7	28.0	6.0	9.3	84.7
Semiconductor machinery	333242	60.7	12.3	27.0	19.7	23.8	56.6	45.8	32.8	21.4	37.5	32.8	29.6	59.0	D	D	29.5	21.4	49.1
Engine, turbine, and power transmission equipment	3336	49.8	20.5	29.6	15.7	27.9	56.4	54.7	27.6	17.7	25.1	25.7	49.2	60.5	16.7	22.8	6.1	6.0	87.9
Other machinery	other 333	34.6	23.2	42.2	26.3	24.4	49.2	41.4	27.2	31.4	22.9	27.1	49.9	49.9	28.1	22.0	5.4	9.6	85.0
Computer and electronic products	334	42.5	18.6	39.0	27.3	26.5	46.2	42.8	31.5	25.7	32.7	32.3	35.1	63.2	21.4	15.5	18.7	19.0	62.3
Communications equipment	3342	38.8	24.8	36.5	28.4	30.8	40.8	43.8	30.0	26.2	32.9	29.3	37.8	53.6	22.0	24.4	18.2	21.3	60.5
Semiconductor and other electronic components	3344	49.3	10.6	40.1	27.4	24.6	48.0	39.9	22.8	37.2	28.1	21.1	50.8	56.9	19.3	23.8	36.6	21.3	42.1
Navigational, measuring, electromedical, and control instruments	3345	38.4	23.4	38.2	23.8	28.3	47.9	40.8	39.7	19.5	32.3	42.3	25.4	69.9	21.4	8.7	7.6	17.1	75.3
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	47.9	27.2	24.9	34.5	35.9	29.6	43.3	32.2	24.5	31.6	39.1	29.4	74.6	19.6	5.8	6.6	22.9	70.5
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	45.4	23.4	31.2	26.9	38.7	34.4	49.0	25.1	26.0	50.4	20.2	29.3	83.0	6.8	10.2	13.3	14.1	72.7
Other measuring and controlling device	other 3345	34.4	22.2	43.3	20.1	24.5	55.4	38.9	44.0	17.1	30.2	46.1	23.7	66.9	23.7	9.4	7.2	15.8	77.0
Other computer and electronic products	other 334	48.4	9.1	42.5	41.6	18.8	39.7	58.0	17.1	24.9	45.8	16.9	37.3	57.9	25.6	16.6	24.3	18.9	56.8
Electrical equipment, appliances, and components	335	45.2	21.8	32.9	33.0	24.8	42.3	49.9	25.2	24.9	31.0	24.2	44.8	50.4	26.4	23.2	16.1	10.2	73.7

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		Very important	Somewhat important	Not important	Very important	Somewhat important	Not important	Very important	Somewhat important	Not important	Very important	Somewhat important	Not important	Very important	Somewhat important	Not important	Very important	Somewhat important	Not important
Transportation equipment	336	32.2	29.0	38.8	24.8	32.2	43.0	36.1	31.7	32.3	22.3	38.9	38.8	45.8	30.6	23.7	5.5	19.6	74.9
Motor vehicles, bodies, trailers, and parts	3361, 3362, 3363	27.1	33.2	39.7	22.0	33.6	44.3	34.0	32.1	33.9	17.5	43.5	39.0	39.1	33.3	27.6	5.8	24.8	69.4
Aerospace products and parts	3364	30.5	24.4	45.1	16.1	32.4	51.5	24.6	35.4	39.9	17.6	35.5	46.9	46.8	33.3	19.9	3.5	17.8	78.7
Aircraft, aircraft engine, and aircraft parts	336411-13	31.6	19.8	48.7	18.1	32.3	49.5	25.3	37.0	37.7	18.0	38.9	43.1	47.6	35.3	17.2	2.9	20.8	76.3
Guided missile, space vehicle, and related parts	336414-15, 336419	25.2	47.2	27.6	D	D	61.2	21.4	28.0	50.6	15.9	18.9	65.3	42.9	23.5	33.5	D	D	90.3
Military armored vehicle, tank, and tank component	336992	D	D	D	D	D	D	0.0	D	D	0.0	D	D	D	D	D	0.0	D	D
Other transportation	other 336	54.1	20.8	25.1	48.3	27.2	24.5	62.4	24.3	13.3	48.8	26.4	24.8	68.7	16.1	15.2	7.6	2.7	89.8
Furniture and related products	337	30.8	18.8	50.4	25.1	44.6	30.4	29.6	43.3	27.1	18.4	44.6	37.0	24.5	38.4	37.1	6.8	11.8	81.3
Miscellaneous	339	49.4	20.2	30.4	38.0	30.6	31.4	60.0	27.0	13.0	34.3	37.7	28.0	60.8	26.5	12.7	10.8	6.3	82.8
Medical equipment and supplies	3391	58.5	19.8	21.8	41.1	29.2	29.7	60.7	27.9	11.3	35.5	42.8	21.7	62.6	27.6	9.9	12.3	5.7	82.0
Other miscellaneous manufacturing	3399	37.7	20.8	41.5	34.2	32.4	33.5	59.1	25.8	15.1	32.7	31.1	36.1	58.5	25.2	16.4	8.8	7.2	84.0
Nonmanufacturing industries	21-23, 42-81	26.5	16.7	56.8	17.1	21.9	61.0	37.6	29.3	33.1	31.5	30.1	38.4	48.4	24.3	27.3	6.0	9.8	84.2
Mining, quarrying, oil and gas extraction, and support activities	21	61.9	13.8	24.3	34.4	20.2	45.4	36.0	24.4	39.7	30.3	18.6	51.1	62.3	21.0	16.7	D	D	76.7
Utilities	22	27.0	49.8	23.2	13.1	54.3	32.6	41.1	43.4	15.5	16.5	65.9	17.6	33.5	47.1	19.4	9.3	47.1	43.7
Wholesale trade	42	20.3	21.1	58.7	23.1	25.3	51.6	45.9	23.5	30.6	31.0	29.3	39.7	47.9	23.9	28.2	3.8	12.7	83.6
Electronic shopping and electronic auctions	454111-12	12.5	28.1	59.4	16.3	14.7	69.0	47.5	D	D	25.1	68.6	6.3	31.5	57.3	11.2	D	D	94.0
Transportation and warehousing	48-49	17.8	20.4	61.8	35.0	22.0	43.1	32.8	18.5	48.7	15.7	24.7	59.6	29.8	49.7	20.5	D	D	87.6
Information	51	31.0	16.7	52.2	18.0	20.5	61.5	50.1	29.7	20.1	44.4	29.2	26.4	53.8	23.0	23.2	7.2	8.6	84.2
Publishing	511	24.7	14.9	60.4	16.0	18.8	65.2	47.8	27.3	25.0	45.3	22.5	32.2	53.1	16.1	30.8	2.2	11.2	86.6
Newspaper, periodical, book, and directory publishers	5111	D	D	85.9	D	D	62.9	35.9	D	D	60.2	20.8	19.0	30.9	23.4	45.7	D	D	D
Software publishers	5112	25.5	15.1	59.5	16.3	18.4	65.3	48.2	26.3	25.5	44.8	22.5	32.7	54.0	15.8	30.2	2.1	11.4	86.4
Telecommunications	517	43.2	16.3	40.6	30.4	24.2	45.4	35.6	43.7	20.7	27.5	45.6	26.9	56.0	24.4	19.7	27.8	9.6	62.6
Data processing, hosting, and related services	518	32.5	17.8	49.7	20.0	20.5	59.5	50.6	33.5	15.9	43.6	34.6	21.8	53.3	30.7	15.9	8.8	7.4	83.8
Other information	other 51	39.5	19.3	41.3	8.5	24.4	67.1	66.4	12.5	21.1	55.8	19.8	24.5	56.6	13.6	29.8	4.0	4.0	92.1
Finance and insurance	52	7.3	11.3	81.4	2.7	12.9	84.4	31.3	42.1	26.6	21.6	42.4	36.0	57.9	11.7	30.4	D	D	94.0
Real estate and rental and leasing	53	30.5	14.4	55.1	33.6	19.0	47.3	62.3	D	D	39.4	20.7	39.9	61.8	13.3	24.9	D	0.0	D
Lessors of nonfinancial intangible assets (except copyrighted works)	533	D	0.0	D	D	D	D	D	0.0	D	D	0.0	D	D	0.0	D	0.0	0.0	100.0
Other real estate and rental and leasing	other 53	33.2	18.4	48.4	29.9	17.0	53.1	59.1	D	D	29.9	26.5	43.6	58.5	17.0	24.5	D	0.0	D
Professional, scientific, and technical services	54	26.6	16.7	56.7	16.1	23.2	60.6	31.6	30.1	38.3	28.3	30.2	41.5	47.8	24.3	27.9	6.0	10.6	83.4
Architectural, engineering, and related services	5413	14.8	19.8	65.4	11.6	23.5	64.9	19.6	29.5	50.9	17.3	31.9	50.8	36.7	27.3	36.0	4.0	11.1	84.9
Computer systems design and related services	5415	26.6	18.4	55.1	18.4	22.9	58.7	34.7	34.3	31.0	32.6	32.7	34.7	49.3	21.6	29.1	7.4	12.4	80.1
Scientific research and development services	5417	41.3	14.4	44.2	15.4	25.7	58.9	31.9	30.9	37.2	27.2	26.6	46.2	60.4	17.3	22.3	7.2	8.2	84.6
Research and development in biotechnology	541711	51.2	17.1	31.8	17.0	20.1	63.0	27.5	37.0	35.5	19.1	28.5	52.3	59.1	18.9	22.0	4.9	5.1	90.0
Research and development in the physical, engineering, and life sciences (except biotechnology)	541712	38.9	13.7	47.4	15.2	27.5	57.3	33.4	29.2	37.4	29.8	25.8	44.5	61.6	16.7	21.7	8.0	9.0	83.0

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Research and development in the social sciences and humanities	541720	18.7	D	D	D	D	76.6	17.8	30.9	51.4	17.8	37.5	44.8	24.3	24.3	51.4	0.0	16.8	83.2
Other professional, scientific, and technical services	other 54	23.6	11.0	65.4	16.9	20.8	62.3	39.1	18.6	42.2	32.7	26.0	41.3	42.9	36.2	20.9	3.0	8.1	88.9
Health care services	621-23	16.7	11.3	72.0	9.3	13.0	77.7	26.7	18.7	54.6	18.2	18.7	63.2	28.9	14.3	56.8	7.3	3.4	89.3
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	18.5	10.0	71.5	15.0	14.9	70.1	34.4	26.9	38.6	22.3	27.6	50.1	38.4	29.2	32.4	3.8	5.3	90.9
All companies (number of domestic employees)	-	31.3	18.1	50.5	20.3	23.1	56.6	39.8	29.4	30.8	27.8	29.5	42.7	51.7	24.5	23.8	7.2	10.1	82.7
Small companies																			
10-19 ^a	-	29.0	19.2	51.9	17.5	22.0	60.4	38.4	33.0	28.6	29.0	31.0	40.1	51.9	25.8	22.3	7.8	13.4	78.8
20-49	-	27.7	15.0	57.3	17.1	20.4	62.5	34.3	28.0	37.7	24.7	27.8	47.5	53.9	21.7	24.4	6.8	8.5	84.7
Medium companies																			
50-99	-	30.4	18.5	51.1	24.7	20.1	55.3	39.6	28.9	31.5	29.6	26.8	43.6	49.0	27.6	23.4	6.7	9.4	83.9
100-249	-	30.6	20.5	48.9	21.1	26.3	52.6	39.6	31.5	28.9	26.8	30.6	42.6	48.9	23.6	27.5	8.4	9.9	81.7
Large companies																			
250-499	-	35.2	18.4	46.4	21.6	24.7	53.7	41.3	30.7	28.0	26.6	30.3	43.1	48.9	27.8	23.3	8.4	8.4	83.2
500-999	-	34.8	22.6	42.6	20.4	30.9	48.7	47.6	27.6	24.8	31.5	30.5	38.1	48.6	28.0	23.4	5.6	9.8	84.6
1,000-4,999	-	46.8	19.0	34.2	24.7	28.1	47.2	55.1	24.3	20.6	31.6	36.1	32.3	57.3	22.7	20.0	5.2	12.3	82.6
5,000-9,999	-	57.8	19.7	22.5	27.7	30.2	42.1	67.9	20.8	11.2	35.8	38.8	25.4	67.0	18.0	15.0	9.8	10.9	79.3
10,000-24,999	-	67.5	17.2	15.3	34.8	33.9	31.2	78.8	16.3	4.9	48.7	33.5	17.8	82.5	11.8	5.7	8.0	14.2	77.8
25,000 or more	-	60.5	15.2	24.3	28.3	37.5	34.2	86.3	7.3	6.4	48.8	39.5	11.7	69.8	22.8	7.4	5.2	12.6	82.3

D = data withheld to avoid disclosing operations of individual companies.

NAICS = 2012 North American Industry Classification System.

^a 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. These statistics are also not comparable to estimates prior to 2012 as those estimates are representative of all companies in the United States.

Source(s):

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