

TABLE 68

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: 2020

(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	25.4	18.5	56.1	15.5	21.2	63.3	33.6	29.0	37.3	23.0	27.3	49.7	44.7	23.3	32.1	4.6	8.9	86.5
Manufacturing industries	31-33	29.2	18.9	51.9	17.8	23.3	58.9	35.1	26.8	38.0	20.5	27.2	52.3	48.8	23.4	27.8	5.4	9.6	85.0
Food	311	12.9	20.0	67.1	22.4	14.1	63.5	47.7	18.6	33.7	33.3	17.3	49.4	53.6	20.2	26.2	8.3	6.0	85.7
Beverage and tobacco products	312	8.3	8.3	83.3	8.3	8.3	83.3	37.5	25.0	37.5	16.7	16.7	66.7	29.2	41.7	29.2	4.2	4.2	91.7
Textile, apparel, and leather products	313-316	23.8	33.3	42.9	23.8	33.3	42.9	47.8	26.1	26.1	22.7	31.8	45.5	47.6	23.8	28.6	4.5	13.6	81.8
Wood products	321	15.4	30.8	53.8	14.3	28.6	57.1	38.5	23.1	38.5	15.4	38.5	46.2	35.7	35.7	28.6	7.1	7.1	85.7
Paper	322	18.2	18.2	63.6	20.0	20.0	60.0	20.0	30.0	50.0	9.1	27.3	63.6	30.0	30.0	40.0	9.1	9.1	81.8
Printing and related support activities	323	15.0	20.0	65.0	15.0	25.0	60.0	20.0	30.0	50.0	15.8	21.1	63.2	26.3	31.6	42.1	5.3	10.5	84.2
Petroleum and coal products	324	27.3	18.2	54.5	18.2	18.2	63.6	45.5	27.3	27.3	20.0	30.0	50.0	70.0	10.0	20.0	0.0	10.0	90.0
Chemicals	325	42.9	19.5	37.6	14.7	21.9	63.4	44.9	31.7	23.3	22.7	31.6	45.8	63.4	20.5	16.1	4.9	9.7	85.4
Basic chemicals	3251	42.9	21.4	35.7	17.9	17.9	64.3	42.9	28.6	28.6	25.0	25.0	50.0	62.1	20.7	17.2	14.3	10.7	75.0
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	33.3	16.7	50.0	18.2	27.3	54.5	38.5	30.8	30.8	16.7	33.3	50.0	58.3	16.7	25.0	8.3	8.3	83.3
Pesticide, fertilizer, and other agricultural chemicals	3253	21.4	21.4	57.1	14.3	21.4	64.3	28.6	42.9	28.6	15.4	23.1	61.5	57.1	21.4	21.4	7.1	7.1	85.7
Pharmaceuticals and medicines	3254	55.8	21.2	23.0	14.3	22.3	63.4	45.9	33.3	20.7	21.4	38.4	40.2	61.6	24.1	14.3	4.5	11.7	83.8
Soap, cleaning compound, and toilet preparation	3256	22.2	18.5	59.3	17.9	25.0	57.1	40.7	37.0	22.2	33.3	18.5	48.1	63.0	11.1	25.9	3.7	11.1	85.2
Paint, coating, adhesive, and other chemicals	3255, 3259	27.5	17.5	55.0	15.8	21.1	63.2	48.8	24.4	26.8	22.5	30.0	47.5	68.4	18.4	13.2	2.6	5.1	92.3
Plastics and rubber products	326	29.5	17.9	52.6	17.7	22.9	59.4	29.5	27.4	43.2	15.2	29.3	55.4	43.8	22.9	33.3	4.3	10.6	85.1
Nonmetallic mineral products	327	31.8	18.2	50.0	18.2	22.7	59.1	31.8	27.3	40.9	22.7	27.3	50.0	40.9	22.7	36.4	9.1	9.1	81.8
Primary metals	331	20.0	16.0	64.0	12.5	16.7	70.8	16.7	25.0	58.3	8.7	17.4	73.9	33.3	29.2	37.5	4.3	4.3	91.3
Fabricated metal products	332	12.6	15.3	72.1	11.2	18.2	70.6	19.9	15.3	64.8	10.7	19.1	70.2	34.4	20.0	45.6	1.4	7.6	91.0
Machinery	333	34.7	16.6	48.7	20.6	23.6	55.8	38.2	27.1	34.7	21.2	27.8	51.0	44.3	27.4	28.4	3.6	9.3	87.0
Agricultural implement	33311	46.7	20.0	33.3	20.0	33.3	46.7	46.7	26.7	26.7	33.3	26.7	40.0	37.5	31.3	31.3	6.7	13.3	80.0
Semiconductor machinery	333242	33.3	33.3	33.3	16.7	33.3	50.0	33.3	33.3	33.3	33.3	33.3	33.3	42.9	28.6	28.6	16.7	33.3	50.0
Engine, turbine, and power transmission equipment	3336	44.4	11.1	44.4	33.3	33.3	33.3	37.5	25.0	37.5	22.2	22.2	55.6	44.4	22.2	33.3	11.1	11.1	77.8
Other machinery	other 333	32.6	16.3	51.2	20.2	22.5	57.2	37.6	27.2	35.3	19.9	28.1	52.0	44.3	27.6	28.2	3.0	8.9	88.1
Computer and electronic products	334	33.2	21.6	45.2	19.2	24.7	56.1	38.2	30.7	31.2	28.1	29.6	42.3	62.2	21.2	16.6	15.0	15.0	69.9
Communications equipment	3342	23.1	28.2	48.7	12.8	23.1	64.1	33.3	33.3	33.3	23.7	28.9	47.4	57.9	23.7	18.4	8.1	18.9	73.0
Semiconductor and other electronic components	3344	33.3	13.0	53.7	18.2	18.2	63.6	30.9	25.5	43.6	21.2	30.8	48.1	59.2	24.5	16.3	28.3	17.0	54.7

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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
Navigational, measuring, electromedical, and control instruments	3345	37.4	23.1	39.6	20.2	25.8	53.9	38.9	36.7	24.4	27.8	30.0	42.2	64.0	21.3	14.6	11.4	13.6	75.0
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	43.8	25.0	31.3	17.6	35.3	47.1	43.8	43.8	12.5	12.5	56.3	31.3	62.5	25.0	12.5	6.3	18.8	75.0
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	28.6	21.4	50.0	14.3	21.4	64.3	33.3	33.3	33.3	28.6	35.7	35.7	69.2	15.4	15.4	7.1	14.3	78.6
Other measuring and controlling device	other 3345	38.1	22.2	39.7	23.8	25.4	50.8	38.1	36.5	25.4	33.3	22.2	44.4	61.9	22.2	15.9	14.5	12.9	72.6
Other computer and electronic products	other 334	36.8	26.3	36.8	35.0	40.0	25.0	70.0	15.0	15.0	55.0	25.0	20.0	68.4	10.5	21.1	15.8	10.5	73.7
Electrical equipment, appliances, and components	335	25.0	30.0	45.0	18.0	32.8	49.2	24.2	40.3	35.5	16.7	36.7	46.7	39.3	37.7	23.0	6.7	18.3	75.0
Transportation equipment	336	24.4	18.9	56.7	16.5	33.0	50.5	26.7	27.8	45.6	20.2	28.1	51.7	45.5	21.6	33.0	3.3	12.2	84.4
Motor vehicles, bodies, trailers, and parts	3361, 3362, 3363	25.0	18.2	56.8	14.0	34.9	51.2	28.9	28.9	42.2	23.3	27.9	48.8	38.6	22.7	38.6	4.5	13.6	81.8
Aerospace products and parts	3364	25.7	17.1	57.1	17.6	26.5	55.9	25.7	22.9	51.4	20.6	20.6	58.8	57.1	20.0	22.9	3.0	12.1	84.8
Aircraft, aircraft engine, and aircraft parts	336411-13	22.6	16.1	61.3	19.4	25.8	54.8	25.0	21.9	53.1	19.4	22.6	58.1	58.1	19.4	22.6	3.2	12.9	83.9
Guided missile, space vehicle, and related parts	336414-15, 336419	40.0	20.0	40.0	25.0	25.0	50.0	40.0	20.0	40.0	20.0	20.0	60.0	60.0	20.0	20.0	20.0	20.0	60.0
Military armored vehicle, tank, and tank component	336992	33.3	33.3	33.3	0.0	50.0	50.0	33.3	33.3	33.3	0.0	50.0	50.0	33.3	33.3	33.3	0.0	50.0	50.0
Other transportation	other 336	21.4	28.6	50.0	21.4	42.9	35.7	28.6	35.7	35.7	14.3	42.9	42.9	33.3	25.0	41.7	7.1	7.1	85.7
Furniture and related products	337	17.4	26.1	56.5	22.7	27.3	50.0	26.1	39.1	34.8	17.4	30.4	52.2	26.1	30.4	43.5	4.3	8.7	87.0
Miscellaneous	339	47.4	18.0	34.6	30.1	29.3	40.6	45.7	27.9	26.4	26.3	30.8	42.9	55.3	21.2	23.5	6.1	6.9	87.0
Medical equipment and supplies	3391	53.8	12.8	33.3	30.8	24.4	44.9	41.1	31.5	27.4	25.6	29.5	44.9	54.5	23.4	22.1	9.1	7.8	83.1
Other miscellaneous manufacturing	3399	38.6	26.3	35.1	29.8	36.8	33.3	50.0	24.1	25.9	28.1	33.3	38.6	54.4	19.3	26.3	3.6	7.1	89.3
Nonmanufacturing industries	21-23, 42-81	21.2	18.1	60.6	13.0	19.0	68.0	32.0	31.5	36.5	25.7	27.5	46.8	40.2	23.1	36.7	3.8	8.1	88.1
Mining, quarrying, oil and gas extraction, and support activities	21	38.7	9.7	51.6	21.9	18.8	59.4	36.4	12.1	51.5	31.3	12.5	56.3	48.4	19.4	32.3	3.2	6.5	90.3
Utilities	22	40.0	20.0	40.0	20.0	20.0	60.0	40.0	20.0	40.0	16.7	33.3	50.0	40.0	20.0	40.0	16.7	16.7	66.7
Wholesale trade	42	28.7	24.6	46.7	22.0	25.4	52.5	46.8	26.6	26.6	30.3	30.3	39.5	38.5	29.5	32.0	2.7	10.6	86.7
Electronic shopping and electronic auctions	454111-12	20.0	10.0	70.0	11.1	33.3	55.6	50.0	40.0	10.0	22.2	33.3	44.4	20.0	60.0	20.0	10.0	10.0	80.0
Transportation and warehousing	48-49	33.3	16.7	50.0	20.0	20.0	60.0	33.3	33.3	33.3	16.7	50.0	33.3	20.0	40.0	40.0	0.0	20.0	80.0
Information	51	21.7	19.9	58.4	15.2	21.0	63.8	46.1	32.4	21.5	38.9	31.1	30.0	49.0	25.4	25.7	5.4	8.3	86.3
Publishing	511	22.9	17.2	59.9	17.3	16.0	66.7	47.1	35.5	17.4	41.7	33.3	25.0	57.1	23.4	19.5	7.4	6.7	85.9

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Newspaper, periodical, book, and directory publishers	5111	25.0	0.0	75.0	20.0	20.0	60.0	50.0	25.0	25.0	50.0	25.0	25.0	25.0	25.0	50.0	0.0	0.0	100.0
Software publishers	5112	22.7	17.5	59.7	17.1	15.8	67.1	47.4	35.5	17.1	41.8	33.3	24.8	57.9	23.0	19.1	7.5	6.8	85.6
Telecommunications	517	21.4	21.4	57.1	14.3	21.4	64.3	33.3	26.7	40.0	14.3	35.7	50.0	33.3	40.0	26.7	6.7	13.3	80.0
Data processing, hosting, and related services	518	20.8	22.9	56.3	13.3	26.6	60.1	46.6	30.4	23.0	38.8	29.9	31.3	46.2	28.0	25.9	4.2	9.2	86.6
Other information	other 51	22.9	20.0	57.1	15.2	21.2	63.6	45.7	28.6	25.7	36.1	25.0	38.9	27.8	19.4	52.8	2.9	14.3	82.9
Finance and insurance	52	20.0	15.0	65.0	10.5	10.5	78.9	42.1	21.1	36.8	22.2	22.2	55.6	36.8	15.8	47.4	5.3	5.3	89.5
Real estate and rental and leasing	53	16.7	16.7	66.7	16.7	33.3	50.0	42.9	28.6	28.6	28.6	28.6	42.9	33.3	16.7	50.0	16.7	0.0	83.3
Lessors of nonfinancial intangible assets (except copyrighted works)	533	33.3	0.0	66.7	33.3	33.3	33.3	50.0	25.0	25.0	33.3	33.3	33.3	33.3	33.3	33.3	33.3	0.0	66.7
Other real estate and rental and leasing	other 53	20.0	20.0	60.0	16.7	33.3	50.0	40.0	40.0	20.0	25.0	25.0	50.0	20.0	20.0	60.0	20.0	0.0	80.0
Professional, scientific, and technical services	54	22.6	18.3	59.1	11.9	18.7	69.5	23.7	32.0	44.3	22.3	29.1	48.6	41.7	22.6	35.7	4.4	9.1	86.5
Architectural, engineering, and related services	5413	17.6	16.0	66.4	12.9	18.5	68.5	14.6	25.2	60.2	18.5	24.2	57.3	32.3	28.2	39.5	5.6	9.7	84.7
Computer systems design and related services	5415	14.8	21.8	63.4	9.7	19.4	70.9	30.7	36.1	33.2	28.3	32.5	39.2	42.5	26.7	30.8	3.4	10.9	85.7
Scientific research and development services	5417	46.8	17.9	35.3	18.2	20.8	61.0	26.9	34.6	38.5	24.0	29.2	46.8	58.2	19.6	22.2	6.6	9.9	83.6
Research and development in nanotechnology	541713	63.6	9.1	27.3	50.0	10.0	40.0	50.0	20.0	30.0	45.5	18.2	36.4	63.6	18.2	18.2	30.0	10.0	60.0
Research and development in biotechnology (except nanobiotechnology)	541714	52.9	20.6	26.5	18.2	21.2	60.6	28.1	40.6	31.3	24.2	30.3	45.5	61.8	20.6	17.6	3.1	12.5	84.4
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	43.9	18.4	37.7	16.2	21.6	62.2	24.8	34.5	40.7	22.1	30.1	47.8	56.3	19.6	24.1	5.4	9.9	84.7
Research and development in the social sciences and humanities	541720	0.0	33.3	66.7	25.0	25.0	50.0	33.3	33.3	33.3	33.3	33.3	33.3	25.0	50.0	25.0	0.0	33.3	66.7
Other professional, scientific, and technical services	other 54	11.4	14.3	74.3	7.6	14.3	78.1	14.3	26.7	59.0	10.5	27.6	61.9	25.7	12.4	61.9	2.9	4.8	92.3
Health care services	621-23	8.5	5.1	86.4	3.4	6.8	89.8	8.6	6.9	84.5	6.9	6.9	86.2	12.1	5.2	82.8	1.7	3.4	94.8

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Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	8.0	16.1	75.9	6.3	16.2	77.5	24.3	52.3	23.4	9.0	18.9	72.1	22.5	20.7	56.8	1.8	5.4	92.8
All companies (number of domestic employees)	-	25.4	18.5	56.1	15.5	21.2	63.3	33.6	29.0	37.3	23.0	27.3	49.7	44.7	23.3	32.1	4.6	8.9	86.5
Small companies ^a																			
10-19	-	31.2	17.8	51.0	17.2	17.7	65.1	32.7	30.9	36.5	25.4	27.2	47.4	48.2	28.3	23.5	6.6	7.7	85.7
20-49	-	20.3	20.0	59.7	14.3	18.7	66.9	32.3	26.7	41.0	22.7	27.4	49.9	46.6	19.3	34.1	4.5	7.9	87.7
Medium companies																			
50-99	-	20.3	14.6	65.1	11.9	19.1	69.0	23.0	33.0	44.0	15.6	24.7	59.7	36.6	21.1	42.2	2.9	8.2	88.9
100-249	-	24.3	17.9	57.7	15.3	25.5	59.2	36.7	27.3	36.0	24.8	23.5	51.7	42.1	24.8	33.0	5.4	10.3	84.3
Large companies																			
250-499	-	28.1	23.0	49.0	16.4	27.2	56.4	37.4	32.8	29.7	23.7	34.0	42.3	42.8	29.4	27.8	3.1	9.8	87.0
500-999	-	30.6	22.5	46.8	18.0	27.9	54.1	41.4	30.6	27.9	24.3	33.3	42.3	45.9	27.9	26.1	5.5	12.8	81.7
1,000-4,999	-	47.3	19.6	33.0	24.8	27.4	47.8	54.9	26.5	18.6	33.0	33.9	33.0	54.1	25.2	20.7	7.1	14.3	78.6
5,000-9,999	-	56.5	21.7	21.7	30.4	30.4	39.1	63.6	22.7	13.6	30.4	43.5	26.1	56.5	26.1	17.4	8.7	17.4	73.9
10,000-24,999	-	58.8	17.6	23.5	33.3	33.3	33.3	70.6	17.6	11.8	41.2	35.3	23.5	66.7	16.7	16.7	5.9	11.8	82.4
25,000 or more	-	58.3	16.7	25.0	33.3	33.3	33.3	75.0	8.3	16.7	45.5	36.4	18.2	66.7	16.7	16.7	8.3	16.7	75.0

NAICS = 2017 North American Industry Classification System.

^a The Business Enterprise 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 \$50,000 or more of R&D and are not comparable 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; beginning in survey year 2020, the company counts used in the calculation of the percentage estimates reflect a change in rounding methodology. These statistics are also not comparable to estimates prior to 2012 because those estimates are representative of all companies in the United States.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2020.