

TABLE 17

Importance of utility patents, design patents, and trademarks for companies with 1–4 employees, by industry: 2016

(Percent)

| Industry | 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 | 14.3 | 9.4 | 76.3 | 6.8 | 11.3 | 81.9 | 16.7 | 21.4 | 61.8 |
| Manufacturing industries | 31–33 | 22.9 | 13.2 | 63.8 | 10.3 | 13.4 | 76.3 | 23.1 | 19.4 | 57.5 |
| Food | 311 | D | D | D | D | D | D | D | D | D |
| Beverages and tobacco products | 312 | D | D | D | D | D | D | D | D | D |
| Textiles, apparel, and leather products | 313–16 | D | D | D | D | D | D | D | D | D |
| Wood products | 321 | D | D | D | D | D | D | D | D | D |
| Paper | 322 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Printing and related support activities | 323 | D | D | D | D | D | D | D | D | D |
| Petroleum and coal products | 324 | D | D | D | D | D | D | D | D | D |
| Chemicals | 325 | 24.6 | 14.3 | 61.0 | 5.5 | 5.9 | 88.6 | 30.0 | 21.0 | 49.0 |
| Basic chemicals | 3251 | D | D | D | D | D | D | D | D | D |
| Resins, synthetic rubber, and artificial synthetic fibers and filaments | 3252 | D | D | 68.8 | D | D | 75.0 | 17.6 | 35.3 | 47.1 |
| Pesticides, fertilizers, and other agricultural chemicals | 3253 | D | D | D | D | D | D | D | D | D |
| Pharmaceuticals and medicines | 3254 | 49.3 | 12.4 | 38.3 | 7.5 | 11.8 | 80.6 | 47.3 | 20.0 | 32.7 |
| Soaps, cleaning compounds, and toilet preparations | 3256 | D | D | D | D | D | D | D | D | D |
| Paints, coatings, adhesives, and other chemicals | 3255, 3259 | D | D | D | D | 10.1 | D | D | D | 41.8 |
| Plastics and rubber products | 326 | D | D | D | D | D | D | D | D | D |
| Nonmetallic mineral products | 327 | D | D | D | D | D | D | D | D | D |
| Primary metals | 331 | D | D | D | D | D | D | D | D | D |
| Fabricated metal products | 332 | 12.3 | 16.4 | 71.3 | 12.8 | 12.9 | 74.3 | 20.7 | 12.3 | 67.0 |
| Machinery | 333 | 28.1 | 20.3 | 51.6 | 14.1 | 19.5 | 66.4 | 24.5 | 13.9 | 61.6 |
| Agricultural implements | 33311 | D | D | D | D | D | D | D | D | D |
| Semiconductor machinery | 333242 | 93.5 | D | D | D | D | D | D | D | D |
| Engines, turbines, and power transmission equipment | 3336 | D | D | D | D | D | D | D | D | D |
| Other machinery | other 333 | D | D | 55.9 | D | D | 70.9 | D | D | 68.0 |
| Computer and electronic products | 334 | 26.6 | 13.4 | 60.0 | 11.2 | 19.3 | 69.4 | 24.3 | 32.5 | 43.2 |
| Communications equipment | 3342 | 29.1 | 18.2 | 52.7 | 9.4 | 17.1 | 73.5 | 22.3 | 25.9 | 51.8 |
| Semiconductors and other electronic components | 3344 | 20.2 | 13.5 | 66.3 | 4.7 | 14.2 | 81.1 | 12.2 | 39.4 | 48.3 |

TABLE 17

Importance of utility patents, design patents, and trademarks for companies with 1–4 employees, by industry: 2016

(Percent)

| Industry | 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 |
| Software publishers | 5112 | 11.0 | 10.1 | 78.9 | 4.3 | 8.9 | 86.7 | 29.7 | 34.7 | 35.6 |
| Telecommunications | 517 | D | D | D | D | D | D | D | D | D |
| Data processing, hosting, and related services | 518 | D | D | 76.5 | D | D | D | 29.7 | 17.6 | 52.7 |
| Other information | other 51 | D | D | 91.7 | D | D | D | 20.8 | 29.1 | 50.1 |
| Finance and insurance | 52 | D | D | D | D | D | D | D | D | D |
| Real estate and rental and leasing | 53 | D | D | D | D | D | D | D | 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 | D | D | D | D | D | D | D | D |
| Professional, scientific, and technical services | 54 | 12.3 | 8.3 | 79.4 | 5.2 | 9.7 | 85.1 | 12.9 | 20.5 | 66.6 |
| Architectural, engineering, and related services | 5413 | 17.1 | 7.5 | 75.4 | 5.4 | 10.5 | 84.1 | 8.6 | 10.8 | 80.6 |
| Computer systems design and related services | 5415 | 7.9 | 9.8 | 82.3 | 5.3 | 9.9 | 84.8 | 14.9 | 24.4 | 60.7 |
| Scientific research and development services | 5417 | 39.8 | 14.2 | 46.0 | 9.8 | 13.6 | 76.6 | 14.3 | 23.6 | 62.0 |
| Biotechnology research and development | 541711 | 55.2 | 18.0 | 26.7 | 12.0 | 18.2 | 69.8 | 19.4 | 28.4 | 52.2 |
| Physical, engineering, and life sciences (except biotechnology) research and development | 541712 | 35.8 | 13.3 | 50.8 | 9.5 | 12.4 | 78.1 | 12.1 | 22.7 | 65.3 |
| Social sciences and humanities research and development | 541720 | 5.3 | 4.5 | 90.2 | 2.3 | 3.1 | 94.7 | 12.0 | 10.5 | 77.4 |
| Other professional, scientific, and technical services | other 54 | 8.8 | 5.8 | 85.4 | 4.0 | 8.5 | 87.5 | 12.5 | 19.8 | 67.7 |
| Health care services | 621–23 | D | D | 75.7 | D | D | D | D | D | 65.0 |
| Other nonmanufacturing | 23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81 | D | D | D | D | D | D | D | D | D |

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

NAICS = 2012 North American Industry Classification System.

Note(s)

Detail may not add to total because of rounding. Industry classification based on sample NAICS code. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Microbusiness R&D and Innovation Survey, 2016.