

**Table INV-B****USPTO utility patents granted in critical technology categories: 2022**

(Number)

Category	Worldwide	U.S. inventors
All critical technology categories	192,754	85,739
Artificial intelligence, machine learning, autonomy, and related advances	16,288	8,245
High-performance computing, semiconductors, and advanced computer hardware and software	42,064	19,529
Quantum information science and technology	2,019	907
Robotics, automation, and advanced manufacturing	4,450	2,356
Natural and anthropogenic disaster prevention or mitigation	15,402	6,146
Advanced communications technology and immersive technology	28,056	13,384
Biotechnology, medical technology, genomics, and synthetic biology	21,853	11,366
Data storage, data management, distributed ledger technologies, and cybersecurity, including biometrics	18,246	9,551
Advanced energy and industrial efficiency technologies, including (but not limited to) the purposes of electric generation	29,150	8,968
Advanced materials science, including composites 2D materials, other next-generation materials, and related manufacturing technologies	15,226	5,287

USPTO = Patent and Trademark Office.

**Note(s):**

Patents are allocated according to patent inventorship information. Patents are credited on a fractional-count basis (i.e., for patents with collaborating institutions, each institution receives fractional credit on the basis of the proportion of inventors from participating institutions). See File USPTO environmental and critical technology patent data.

**Source(s):**

National Center for Science and Engineering Statistics; Science-Metrix; PatentsView, USPTO, accessed June 2023.

*Science and Engineering Indicators*