



2004



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1950 National Foundation Act
Science Engineering

NSF가

NSF 1972 ' Science Indicators 1972 '
2004 15

' Science and Engineering Indicators

2004'

Elementary and Secondary Education
Higher Education in Science and Engineering
Science and Engineering Labor Force
U.S. and International Research and Development
Academic Research and Development
Industry, Technology, and the Global Marketplace
Science and Technology : Public Attitudes and
Understanding
State Indicators

S&E Indicators Industry,
Technology, and the Global Marketplace

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S&E Indicators NSF(National Science Foundation,
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Science Engineering Technology
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USPTO()

Indicators 가

Incompleteness
- 가

2004 S&E Indicators

1) 1950 National Science Foundation Act , Science Engineering

[Http://www.nsf.gov](http://www.nsf.gov)



Table 6-4
Top 15 most employed U.S. patent classes for corporations from the United States, Japan, and Germany, 2001

Rank	United States	Japan	Germany
1	Systems (machine, data processing)	Photocopying	Cables and power-line control
2	Images, light, thermal, and optical applications	Information storage and retrieval	Foley (golf)
3	Computers and data processing systems	Television signal processing	Diode systems
4	Support apparatus	Photography	Printing
5	Data processing, file management	Disc topography	Printing, handwriting, or guiding devices
6	Dictating systems	Liquid crystal cells	Machines and methods for text entry
7	Computer memory	Facsimile	Laser vehicles, tractors and toys
8	Data processing, software	Informational display of picture information	Magnetically operated switches
9	Support apparatus and computers	Car-like toys and like toys devices	Material forming
10	Processes	Input devices	Books
11	Web	Disc (music)	Laser vehicles
12	IO signal processing systems	Handheld display terminals	Arms and components
13	Printing or other print using apparatus	Graphic composition	Internal communication systems
14	Method for flying apparatus	Video transmission lines and related to	Fluid sprayers
15	Digital processing, support	Control systems, including communication	Electrical communication systems

NOTE: Rank is based on primary activity of respondents U.S. based corporations, which are primary corporations. Ranking by industry is not shown. Source: U.S. Patent and Trademark Office, International Patent Office, Technology Assessment and Research Center, 2002.

2001 motor vehicles, printing, switches material - handling (Activity Index)가

가 (Appendix Table 6 - 12)

가 (aeronautics) (Appendix Table 6 - 13)

photocopy photography office electronics technology

Appendix Table 6-12
Patent classes most employed (top 10) by U.S. based corporations producing in United States, 1980 and 1990

Technology	Patents granted in United States					Index 1990/1980
	1980	1985	1990	1995	2000	
All classes	151	10,776	10,238	2,019	1,822	1,400
Over 100 patent applications	505	304	250	9	10	1,590
Aeronautics	244	216	322	39	29	1,870
Automotive	560	339	293	10	19	1,554
Chemical	732	476	419	66	40	1,447
Communications	191	123	320	2	21	1,438
Construction	408	187	295	8	17	1,400
Electric, electronic, and optical	403	550	444	35	34	1,374
Energy	440	440	388	20	20	1,374
Food, beverage, and tobacco	414	138	120	174	140	1,352
Health, medicine, and dentistry	144	40	204	7	12	1,348
Instrumentation	362	444	242	33	40	1,338
Machinery	305	295	270	7	19	1,373
Metals	393	333	225	8	11	1,336
Nonferrous metal	210	440	1,040	66	33	1,274
Textiles	240	185	150	7	18	1,358
Transportation	240	185	150	7	18	1,358
Wood and paper	240	185	150	7	18	1,358
Other	240	185	150	7	18	1,358

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1980, 1990

2001

