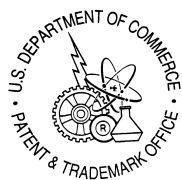


PATENTING BY ORGANIZATIONS

1998



March 1999

U.S. PATENT AND TRADEMARK OFFICE
OFFICE FOR PATENT AND TRADEMARK INFORMATION /
TAF PROGRAM

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A TECHNOLOGY ASSESSMENT AND FORECAST REPORT

Patenting By Organizations 1998

This report, prepared from the Technology Assessment and Forecast (TAF) data base, profiles utility patents (i.e., patents for inventions) granted during **calendar year 1998**.

Part A1

Part A1 presents patent counts by origin, U.S. and foreign. Individual counts are also presented for each of the top 36 patenting countries. Patent origin is determined by the residence of the first-named inventor listed on a patent.

Patent ownership-category information reflects ownership at the time of patent grant and does not reflect subsequent changes in ownership. If more than one assignee (the entity, if any, to which the patent rights have been legally assigned) was declared at the time of grant, a patent is attributed to the ownership-category of the first-named assignee. The "U.S. Corporations" and "Foreign Corporations" ownership categories count predominantly corporate patents; however, patents assigned to other organizations such as small businesses, nonprofit organizations, universities, etc. are also included in these categories. While the "U.S. Government" ownership category includes only patents granted to the Federal Government, no such distinction is made for the "Foreign Government" ownership category. The "U.S. Individuals" and "Foreign Individuals" ownership categories include patents for which ownership was assigned to an individual as well as patents for which no assignment of ownership was made at the time of grant.

Part B1

Part B1 presents organizations which received 40 or more patents during the calendar year. Organizations are ranked based on their patent count.

Please note that because of the large number of organizations appearing in this report, the minimum number of annual patents received by a listed organization has been raised to 40 patents (the 1997 report listed organizations receiving 30 or more patents for the year).

Patent information included in **Part B1** of the report reflects patent ownership at the time of patent grant and does not reflect changes in ownership which may occur after the patent grant. Where more than one assignee exists, patents are attributed to the first-named assignee.

No attempt has been made to combine data based on subsidiary relationships. However, where possible, spelling variations and variations based on name changes (e.g., ESSO to EXXON) have been merged into a single name. While every effort is made to accurately identify all organizational entities and report data by a single organizational name, achievement of a totally clean record is not expected, particularly in view of the many variations which may occur in corporate identifications.

Patenting By The U.S. Government 1998

In **calendar year 1998**, the U.S. Government received 1,018 utility patents.

Under the section labeled "Ownership", **Part A1** presents the total count of patents received by the U.S. Government during the calendar year. Each of the separate U.S. Government agencies receiving 40 or more patents during the calendar year is listed in **Part B1**.

Part A1

(Patent Grants as Distributed By Year of Patent Grant)

Patents Granted By Date Of Patent Grant
 (Granted: Jan 01, 1998 - Dec 31, 1998)

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>Total</u>
Total	147520	147520
U.S. Origin	80294	80294
Foreign Origin	67226	67226
JAPAN	30841	30841
GERMANY	9095	9095
FRANCE	3674	3674
UNITED KINGDOM	3464	3464
SOUTH KOREA	3259	3259
TAIWAN	3100	3100
CANADA	2974	2974
ITALY	1582	1582
SWITZERLAND	1278	1278
NETHERLANDS	1226	1226
SWEDEN	1225	1225
ISRAEL	754	754
AUSTRALIA	720	720
BELGIUM	693	693
FINLAND	595	595
DENMARK	391	391
AUSTRIA	387	387
SPAIN	248	248
NORWAY	198	198
RUSSIAN FEDERATION	189	189
HONG KONG,S.A.R.-PEOP	160	160
SINGAPORE	120	120
SOUTH AFRICA	115	115
NEW ZEALAND	114	114
INDIA	85	85
IRELAND	74	74
BRAZIL	74	74
CHINA P.REP.	72	72
MEXICO	57	57
HUNGARY	50	50
ARGENTINA	43	43
VENEZUELA	27	27
MALAYSIA	23	23
LUXEMBOURG	20	20
SLOVENIA	18	18
UKRAINE	17	17
Others (57)	264	264
Ownership:		
U.S. Corporations	66062	66062
U.S. Government	1018	1018
U.S. Individuals	16407	16407
Foreign Corporations	57668	57668
Foreign Government	256	256
Foreign Individuals	6109	6109

Patents Granted By Date Of Patent Grant
 (Granted: Jan 01, 1998 - Dec 31, 1998)

<u>PERCENT OF PATENTS</u>	<u>1998</u>	<u>Total</u>
Total	100	100
U.S. Origin	54	54
Foreign Origin	46	46
JAPAN	21	21
GERMANY	6	6
FRANCE	2	2
UNITED KINGDOM	2	2
SOUTH KOREA	2	2
TAIWAN	2	2
CANADA	2	2
ITALY	1	1
SWITZERLAND	1	1
NETHERLANDS	1	1
SWEDEN	1	1
ISRAEL	1	1
AUSTRALIA		0
BELGIUM		0
FINLAND		0
DENMARK		0
AUSTRIA		0
SPAIN		0
NORWAY		0
RUSSIAN FEDERATION		0
HONG KONG,S.A.R.-PEOP		0
SINGAPORE		0
SOUTH AFRICA		0
NEW ZEALAND		0
INDIA		0
IRELAND		0
BRAZIL		0
CHINA P.REP.		0
MEXICO		0
HUNGARY		0
ARGENTINA		0
VENEZUELA		0
MALAYSIA		0
LUXEMBOURG		0
SLOVENIA		0
UKRAINE		0
Others (57)		0
Ownership:		
U.S. Corporations	45	45
U.S. Government	1	1
U.S. Individuals	11	11
Foreign Corporations	39	39
Foreign Government		0
Foreign Individuals	4	4

Part B1

**(Ranked Listing of Organizations with
Patent Grants Distributed By Year of Patent Grant)**

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
INTERNATIONAL BUSINESS MACHINES CORPORATION Patents By Year of Grant :	2657	2657
CANON KABUSHIKI KAISHA Patents By Year of Grant :	1928	1928
NEC CORPORATION Patents By Year of Grant :	1627	1627
MOTOROLA, INC. Patents By Year of Grant :	1406	1406
SONY CORPORATION Patents By Year of Grant :	1316	1316
SAMSUNG ELECTRONICS CO., LTD. Patents By Year of Grant :	1304	1304
FUJITSU LIMITED Patents By Year of Grant :	1189	1189
TOSHIBA CORPORATION Patents By Year of Grant :	1170	1170
EASTMAN KODAK COMPANY Patents By Year of Grant :	1124	1124
HITACHI, LTD Patents By Year of Grant :	1094	1094
mitsubishi denki kabushiki kaisha Patents By Year of Grant :	1080	1080
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. Patents By Year of Grant :	1034	1034
LUCENT TECHNOLOGIES INC. Patents By Year of Grant :	928	928
HEWLETT-PACKARD COMPANY Patents By Year of Grant :	805	805
XEROX CORPORATION Patents By Year of Grant :	769	769
GENERAL ELECTRIC COMPANY Patents By Year of Grant :	729	729
U.S. PHILIPS CORPORATION Patents By Year of Grant :	725	725
INTEL CORPORATION Patents By Year of Grant :	701	701
SIEMENS AKTIENGESELLSCHAFT Patents By Year of Grant :	626	626
TEXAS INSTRUMENTS, INCORPORATED Patents By Year of Grant :	611	611
MICRON TECHNOLOGY, INC. Patents By Year of Grant :	579	579
NIKON CORPORATION Patents By Year of Grant :	575	575
SHARP KABUSHIKI KAISHA (SHARP CORPORATION) Patents By Year of Grant :	560	560

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
ADVANCED MICRO DEVICES, INC. Patents By Year of Grant :	556	556
MINNESOTA MINING AND MANUFACTURING COMPANY Patents By Year of Grant :	554	554
FUJI PHOTO FILM CO., LTD Patents By Year of Grant :	547	547
PROCTER + GAMBLE COMPANY Patents By Year of Grant :	454	454
SUN MICROSYSTEMS, INC. Patents By Year of Grant :	423	423
RICOH COMPANY, LTD. Patents By Year of Grant :	406	406
BASF AKTIENGESELLSCHAFT Patents By Year of Grant :	399	399
UNIVERSITY OF CALIFORNIA, THE REGENTS OF Patents By Year of Grant :	395	395
E. I. DU PONT DE NEMOURS AND COMPANY Patents By Year of Grant :	393	393
HONDA GIKEN KOGYO KABUSHIKI KAISHA (HONDA MOTOR CO., LTD.) Patents By Year of Grant :	389	389
TOYOTA JIDOSHA K.K. Patents By Year of Grant :	387	387
BAYER AKTIENGESELLSCHAFT Patents By Year of Grant :	381	381
ROBERT BOSCH GMBH Patents By Year of Grant :	348	348
UNITED STATES OF AMERICA, NAVY Patents By Year of Grant :	341	341
MICROSOFT CORPORATION Patents By Year of Grant :	334	334
HOECHST AKTIENGESELLSCHAFT Patents By Year of Grant :	327	327
DAEWOO ELECTRONICS COMPANY, LTD. Patents By Year of Grant :	316	316
FORD GLOBAL TECHNOLOGIES, INC. Patents By Year of Grant :	314	314
SEIKO EPSON CORPORATION Patents By Year of Grant :	312	312
NIPPONDENSO CO., LTD. Patents By Year of Grant :	308	308
GENERAL MOTORS CORPORATION Patents By Year of Grant :	305	305
MINOLTA CAMERA CO., LTD. Patents By Year of Grant :	304	304
YAZAKI CORP. Patents By Year of Grant :	290	290

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
OLYMPUS OPTICAL CO., LTD. Patents By Year of Grant :	278	278
FUJI XEROX CO., LTD. Patents By Year of Grant :	277	277
ASAHI KOGAKU KOGYO KABUSHIKI KAISHA Patents By Year of Grant :	270	270
APPLE COMPUTER, INC. Patents By Year of Grant :	256	256
SANYO ELECTRIC CO., LTD. Patents By Year of Grant :	251	251
COMPAQ COMPUTER CORPORATION Patents By Year of Grant :	245	245
MEDTRONIC INC. Patents By Year of Grant :	243	243
DAIMLER-BENZ AKTIENGESELLSCHAFT Patents By Year of Grant :	241	241
LG SEMICON CO., LTD. Patents By Year of Grant :	234	234
LSI LOGIC CORPORATION Patents By Year of Grant :	229	229
INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE, TAIWAN Patents By Year of Grant :	218	218
TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD. Patents By Year of Grant :	218	218
MURATA MANUFACTURING CO., LTD. Patents By Year of Grant :	217	217
WHITAKER CORPORATION Patents By Year of Grant :	216	216
LG ELECTRONICS INC. Patents By Year of Grant :	215	215
HYUNDAI ELECTRONICS INDUSTRIES CO., LTD. Patents By Year of Grant :	212	212
ERICSSON, INC. Patents By Year of Grant :	210	210
BROTHER KOGYO KABUSHIKI KAISHA Patents By Year of Grant :	209	209
TELEFONAKTIEBOLAGET LM ERICSSON Patents By Year of Grant :	204	204
NORTHERN TELECOM LIMITED Patents By Year of Grant :	199	199
YAMAHA CORPORATION Patents By Year of Grant :	198	198
CATERPILLAR INC. Patents By Year of Grant :	197	197
NORTHROP GRUMMAN CORPORATION Patents By Year of Grant :	197	197

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
L'OREAL S.A. Patents By Year of Grant :	182	182
ELI LILLY AND COMPANY Patents By Year of Grant :	180	180
MERCK + CO., INC. Patents By Year of Grant :	178	178
NATIONAL SEMICONDUCTOR CORPORATION Patents By Year of Grant :	178	178
APPLIED MATERIALS, INC. Patents By Year of Grant :	176	176
DOW CHEMICAL COMPANY Patents By Year of Grant :	174	174
SGS-THOMSON MICROELECTRONICS S.R.L. Patents By Year of Grant :	174	174
UNITED MICROELECTRONICS CORPORATION Patents By Year of Grant :	174	174
UNITED STATES OF AMERICA, HEALTH & HUMAN SERVICES Patents By Year of Grant :	169	169
NCR CORPORATION Patents By Year of Grant :	167	167
CHRYSLER MOTORS CORPORATION Patents By Year of Grant :	166	166
KONICA CORPORATION Patents By Year of Grant :	166	166
UNITED STATES OF AMERICA, ARMY Patents By Year of Grant :	165	165
ABBOTT LABORATORIES Patents By Year of Grant :	164	164
CIBA SPECIALTY CHEMICALS CORPORATION Patents By Year of Grant :	164	164
DIGITAL EQUIPMENT CORPORATION Patents By Year of Grant :	164	164
EATON CORPORATION Patents By Year of Grant :	164	164
NISSAN MOTOR COMPANY, LIMITED Patents By Year of Grant :	164	164
SEAGATE TECHNOLOGY Patents By Year of Grant :	163	163
KIMBERLY-CLARK WORLDWIDE, INC. Patents By Year of Grant :	161	161
SUMITOMO ELECTRIC INDUSTRIES CO., LTD. Patents By Year of Grant :	158	158
BECTON, DICKINSON AND COMPANY Patents By Year of Grant :	157	157
BOEING COMPANY Patents By Year of Grant :	157	157

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
MITA INDUSTRIAL COMPANY LTD. Patents By Year of Grant :	154	154
AT&T CORP. Patents By Year of Grant :	150	150
VLSI TECHNOLOGY, INC. Patents By Year of Grant :	150	150
SUMITOMO CHEMICAL COMPANY, LIMITED Patents By Year of Grant :	148	148
FORD MOTOR COMPANY Patents By Year of Grant :	147	147
TRW INC. Patents By Year of Grant :	144	144
SHELL OIL COMPANY Patents By Year of Grant :	143	143
HUGHES ELECTRONIC DEVICES CORPORATION Patents By Year of Grant :	142	142
INSTITUT FRANCAIS DU PETROLE Patents By Year of Grant :	142	142
AGFA-GEVAERT N.V. Patents By Year of Grant :	141	141
PIONEER ELECTRONIC CORPORATION Patents By Year of Grant :	141	141
ALLIED-SIGNAL INC. Patents By Year of Grant :	140	140
BAYER CORPORATION Patents By Year of Grant :	140	140
MASSACHUSETTS INSTITUTE OF TECHNOLOGY Patents By Year of Grant :	138	138
ZENECA LIMITED Patents By Year of Grant :	138	138
BRISTOL-MYERS SQUIBB COMPANY Patents By Year of Grant :	137	137
GENENTECH, INC. Patents By Year of Grant :	133	133
SUMITOMO WIRING SYSTEMS, LTD. Patents By Year of Grant :	132	132
HEIDELBERGER DRUCKMASCHINEN AG Patents By Year of Grant :	129	129
KAO KABUSHIKI KAISHA (KAO CORPORATION) Patents By Year of Grant :	129	129
YAMAHA HATSUDOKI KABUSHIKI KAISHA, YAMAHA MOTOR CO., LTD. Patents By Year of Grant :	129	129
CIRRUS LOGIC, INC. Patents By Year of Grant :	128	128
SEMICONDUCTOR ENERGY LABORATORY CO., LTD. Patents By Year of Grant :	127	127

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
DENSO CORPORATION Patents By Year of Grant :	124	124
HARRIS CORP. Patents By Year of Grant :	124	124
HONEYWELL INC. Patents By Year of Grant :	123	123
NOVO NORDISK A/S Patents By Year of Grant :	122	122
UNISYS CORPORATION Patents By Year of Grant :	122	122
MITSUBISHI CHEMICAL CORPORATION Patents By Year of Grant :	121	121
ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE Patents By Year of Grant :	120	120
ILLINOIS TOOL WORKS INC. Patents By Year of Grant :	120	120
OKI ELECTRIC INDUSTRY CO., LTD. Patents By Year of Grant :	120	120
PITNEY-BOWES, INC. Patents By Year of Grant :	120	120
VANGUARD INTERNATIONAL SEMICONDUCTOR CORPORATION Patents By Year of Grant :	120	120
EXXON CHEMICALS PATENTS INC. Patents By Year of Grant :	119	119
PHILIPS ELECTRONICS NORTH AMERICA CORP. Patents By Year of Grant :	118	118
SGS-THOMSON MICROELECTRONICS S.A. Patents By Year of Grant :	118	118
MCI COMMUNICATIONS CORP. Patents By Year of Grant :	117	117
PFIZER INC. Patents By Year of Grant :	117	117
RAYTHEON COMPANY Patents By Year of Grant :	117	117
AISIN SEIKI KABUSHIKI KAISHA Patents By Year of Grant :	116	116
UNITED TECHNOLOGIES CORPORATION Patents By Year of Grant :	116	116
AMERICAN CYANAMID COMPANY Patents By Year of Grant :	112	112
ROHM COMPANY LIMITED Patents By Year of Grant :	112	112
MCDONNELL DOUGLAS CORP. Patents By Year of Grant :	111	111
COLGATE-PALMOLIVE COMPANY Patents By Year of Grant :	110	110

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
DELL USA, L.P. Patents By Year of Grant :	109	109
DOW CORNING CORPORATION Patents By Year of Grant :	108	108
GOODYEAR TIRE + RUBBER COMPANY Patents By Year of Grant :	108	108
LOCKHEED MARTIN CORPORATION Patents By Year of Grant :	108	108
PIONEER HI-BRED INTERNATIONAL, INC. Patents By Year of Grant :	108	108
HUGHES ELECTRONICS CORP. Patents By Year of Grant :	107	107
INCYTE PHARMACEUTICALS, INC. Patents By Year of Grant :	107	107
AKZO NOBEL NV Patents By Year of Grant :	105	105
CYPRESS SEMICONDUCTOR CORP. Patents By Year of Grant :	105	105
EXXON RESEARCH + ENGINEERING CO. Patents By Year of Grant :	105	105
DAI NIPPON PRINTING CO. LTD Patents By Year of Grant :	103	103
FUJI PHOTO OPTICAL CO. LTD. Patents By Year of Grant :	102	102
TOKYO ELECTRON LIMITED Patents By Year of Grant :	101	101
ALCATEL N. V. Patents By Year of Grant :	99	99
ALPS ELECTRIC CO., LTD. Patents By Year of Grant :	99	99
MERCK PATENT GESELLSCHAFT MIT BESCHRANKTER HAFTUNG Patents By Year of Grant :	99	99
BAKER HUGHES INCORPORATED Patents By Year of Grant :	97	97
FMC CORPORATION Patents By Year of Grant :	97	97
PPG INDUSTRIES INC. Patents By Year of Grant :	97	97
BAXTER INTERNATIONAL INC. Patents By Year of Grant :	96	96
SHIN ETSU CHEMICAL CO., LTD. Patents By Year of Grant :	96	96
UNIVERSITY OF TEXAS Patents By Year of Grant :	96	96
BASF CORP. Patents By Year of Grant :	95	95

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
UNITED STATES OF AMERICA, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Patents By Year of Grant :	95	95
ASEA BROWN BOVERI AKTIENGESELLSCHAFT Patents By Year of Grant :	94	94
DELCO ELECTRONICS CORPORATION Patents By Year of Grant :	94	94
NIPPON STEEL CORP. Patents By Year of Grant :	94	94
SMITHKLINE BEECHAM CORPORATION Patents By Year of Grant :	94	94
CALIFORNIA INSTITUTE OF TECHNOLOGY Patents By Year of Grant :	93	93
NOKIA TELECOMMUNICATIONS OY Patents By Year of Grant :	93	93
HYUNDAI MOTOR CO., LTD. Patents By Year of Grant :	92	92
NGK INSULATORS LTD. Patents By Year of Grant :	92	92
UNITED STATES SURGICAL CORPORATION Patents By Year of Grant :	92	92
SILICON GRAPHICS, INC. Patents By Year of Grant :	90	90
SOUTHPAC TRUST INTERNATIONAL, INC. Patents By Year of Grant :	89	89
COMMISSARIAT A L'ENERGIE ATOMIQUE Patents By Year of Grant :	88	88
NIPPON TELEGRAPH & TELEPHONE CORP. Patents By Year of Grant :	88	88
UOP Patents By Year of Grant :	88	88
FUJI ELECTRIC CO., LTD. Patents By Year of Grant :	87	87
PACESETTER, INC. Patents By Year of Grant :	87	87
TETRA LAVAL HOLDINGS & FINANCE S.A. Patents By Year of Grant :	87	87
OTIS ELEVATOR COMPANY Patents By Year of Grant :	86	86
BRIDGESTONE CORPORATION Patents By Year of Grant :	85	85
HENKEL KOMMANDITGESELLSCHAFT AUF AKTIEN(HENKEL KGAA) Patents By Year of Grant :	85	85
SAMSUNG DISPLAY DEVICES CO., LTD. Patents By Year of Grant :	84	84
MORTON INTERNATIONAL, INC. Patents By Year of Grant :	83	83

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
SANSHIN KOGYO KABUSHIKI KAISHA Patents By Year of Grant :	83	83
TDK CORPORATION Patents By Year of Grant :	83	83
W. L. GORE ASSOCIATES, INC. Patents By Year of Grant :	83	83
WISCONSIN ALUMNI RESEARCH FOUNDATION Patents By Year of Grant :	83	83
DANA CORPORATION Patents By Year of Grant :	82	82
QUALCOMM, INC. Patents By Year of Grant :	82	82
CHIRON CORPORATION Patents By Year of Grant :	81	81
SGS-THOMSON MICROELECTRONICS, INC. Patents By Year of Grant :	81	81
WESTINGHOUSE ELECTRIC CORP. Patents By Year of Grant :	81	81
ADVANTEST CORP. Patents By Year of Grant :	80	80
AIR PRODUCTS AND CHEMICALS, INC. Patents By Year of Grant :	80	80
BOEHRINGER MANNHEIM G.M.B.H. Patents By Year of Grant :	80	80
RHONE-POULENC CHIMIE Patents By Year of Grant :	80	80
MOLEX INCORPORATED Patents By Year of Grant :	79	79
NORITSU KOKI CO., LTD. Patents By Year of Grant :	79	79
STANFORD UNIVERSITY, LELAND JUNIOR, THE BOARD OF TRUSTEES OF Patents By Year of Grant :	79	79
UNITED STATES OF AMERICA, AIR FORCE Patents By Year of Grant :	79	79
JOHNS HOPKINS UNIVERSITY Patents By Year of Grant :	78	78
NOVARTIS CORPORATION Patents By Year of Grant :	78	78
SCHERING CORP. Patents By Year of Grant :	78	78
TOYODA JIDOSHOKKI SEISAKUSHO KABUSHIKI KAISHA Patents By Year of Grant :	78	78
XILINX, INC. Patents By Year of Grant :	78	78
AISIN AW CO., LTD. Patents By Year of Grant :	77	77

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
MONSANTO CO. Patents By Year of Grant :	77	77
ROCKWELL INTERNATIONAL CORPORATION Patents By Year of Grant :	77	77
VICTOR COMPANY OF JAPAN, LIMITED Patents By Year of Grant :	77	77
SANDIA CORPORATION Patents By Year of Grant :	76	76
SUMITOMO RUBBER INDUSTRIES, LTD. Patents By Year of Grant :	76	76
EBARA CORPORATION Patents By Year of Grant :	75	75
HALLIBURTON ENERGY SERVICES Patents By Year of Grant :	75	75
NATIONAL SCIENCE COUNCIL Patents By Year of Grant :	75	75
PHILLIPS PETROLEUM COMPANY Patents By Year of Grant :	75	75
TOYODA GOSEI KABUSHIKI KAISHA Patents By Year of Grant :	75	75
UNITED STATES OF AMERICA, DEPARTMENT OF AGRICULTURE Patents By Year of Grant :	75	75
CASIO COMPUTER CO. LTD. Patents By Year of Grant :	74	74
FICHTEL + SACHS AG Patents By Year of Grant :	74	74
KOMATSU LTD. Patents By Year of Grant :	74	74
BLACK & DECKER INC. Patents By Year of Grant :	73	73
BRITISH TELECOMMUNICATION, PLC Patents By Year of Grant :	73	73
VOITH SULZER PAPIERMASCHINEN GMBH Patents By Year of Grant :	73	73
CORNING INCORPORATED Patents By Year of Grant :	72	72
HOFFMANN-LA ROCHE INC. Patents By Year of Grant :	72	72
TAKEDA CHEMICAL INDUSTRIES LTD. Patents By Year of Grant :	72	72
AGENCY OF INDUSTRIAL SCIENCE & TECHNOLOGY Patents By Year of Grant :	71	71
FANUC LTD. Patents By Year of Grant :	71	71
ROHM AND HAAS COMPANY Patents By Year of Grant :	71	71

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
THOMSON CONSUMER ELECTRONICS, INC. Patents By Year of Grant:	71	71
ALLERGAN, INC. Patents By Year of Grant:	70	70
DEERE + COMPANY Patents By Year of Grant:	70	70
ANALOG DEVICES, INC. Patents By Year of Grant:	69	69
TRIMBLE NAVIGATION, LTD. Patents By Year of Grant:	69	69
UNIVERSITY OF PENNSYLVANIA Patents By Year of Grant:	69	69
HENKEL CORPORATION Patents By Year of Grant:	68	68
HOECHST CELANESE CORPORATION Patents By Year of Grant:	68	68
OWENS-CORNING FIBERGLAS TECHNOLOGY, INC. Patents By Year of Grant:	68	68
AMOCO CORPORATION Patents By Year of Grant:	67	67
MOBIL OIL CORP. Patents By Year of Grant:	67	67
NESTEC, S.A. Patents By Year of Grant:	67	67
INTEGRATED DEVICE TECHNOLOGY, INC. Patents By Year of Grant:	66	66
KOBE STEEL LTD. Patents By Year of Grant:	66	66
MAZDA MOTOR CORPORATION Patents By Year of Grant:	66	66
TEKTRONIX INC. Patents By Year of Grant:	66	66
THOMSON-CSF Patents By Year of Grant:	66	66
BELL ATLANTIC NETWORK SERVICES, INC. Patents By Year of Grant:	65	65
CARRIER CORPORATION Patents By Year of Grant:	65	65
mitsubishi JIDOSHA KOGYO KABUSHIKI KAISHA Patents By Year of Grant:	65	65
SHIN-ETSU HANDOTAI CO., LTD. Patents By Year of Grant:	65	65
ASAHI GLASS COMPANY, LTD. Patents By Year of Grant:	64	64
CORNELL RESEARCH FOUNDATION INC. Patents By Year of Grant:	64	64

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
LEVER BROS. CO., DIVISION OF CONOPCO, INC. Patents By Year of Grant :	64	64
PRAXAIR TECHNOLOGY, INC. Patents By Year of Grant :	64	64
SYMBOL TECHNOLOGIES, INC. Patents By Year of Grant :	64	64
VALMET CORP. Patents By Year of Grant :	64	64
AKTIEBOLAGET ASTRA Patents By Year of Grant :	63	63
CORDIS CORPORATION Patents By Year of Grant :	63	63
DEGUSSA AKTIENGESELLSCHAFT Patents By Year of Grant :	63	63
EASTMAN CHEMICAL COMPANY Patents By Year of Grant :	63	63
FRANCE TELECOM Patents By Year of Grant :	63	63
IMPERIAL CHEMICAL INDUSTRIES PLC Patents By Year of Grant :	63	63
UNISIA JECS CORPORATION Patents By Year of Grant :	63	63
GAS RESEARCH INSTITUTE Patents By Year of Grant :	62	62
GENERAL HOSPITAL CORPORATION Patents By Year of Grant :	62	62
SHIMANO INC. Patents By Year of Grant :	62	62
UNION CARBIDE CHEMICALS & PLASTICS TECHNOLOGY CORPORATION Patents By Year of Grant :	62	62
WARNER-LAMBERT COMPANY Patents By Year of Grant :	62	62
ELF ATOCHEM S.A. Patents By Year of Grant :	61	61
LEAR CORPORATION Patents By Year of Grant :	61	61
SOCIETE NATIONALE INDUSTRIELLE AEROSPATIALE Patents By Year of Grant :	61	61
UNITED STATES OF AMERICA, DEPARTMENT OF ENERGY Patents By Year of Grant :	61	61
UNITED TECHNOLOGIES AUTOMOTIVE, INC. Patents By Year of Grant :	61	61
DAIKIN INDUSTRIES LIMITED Patents By Year of Grant :	60	60
G. D. SEARLE & CO. Patents By Year of Grant :	60	60

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
NSK LIMITED		
Patents By Year of Grant :	60	60
POLAROID CORPORATION		
Patents By Year of Grant :	60	60
QUANTUM CORP. (CA)		
Patents By Year of Grant :	60	60
ARCO CHEMICAL TECHNOLOGY, L.P.		
Patents By Year of Grant :	59	59
EMC CORPORATION		
Patents By Year of Grant :	59	59
MANNESMANN AG		
Patents By Year of Grant :	59	59
MICHIGAN STATE UNIVERSITY		
Patents By Year of Grant :	59	59
SEIKO INSTRUMENTS INC.		
Patents By Year of Grant :	59	59
WESTINGHOUSE AIR BRAKE COMPANY		
Patents By Year of Grant :	59	59
WINBOND ELECTRONICS CORP.		
Patents By Year of Grant :	59	59
KAWASAKI STEEL CORPORATION		
Patents By Year of Grant :	58	58
LITTON SYSTEMS INC.		
Patents By Year of Grant :	58	58
LUCAS INDUSTRIES PUBLIC LTD. COMPANY		
Patents By Year of Grant :	58	58
MITSUBISHI JUKOGYO KABUSHIKI KAISHA		
Patents By Year of Grant :	58	58
ORACLE CORPORATION		
Patents By Year of Grant :	58	58
AVERY DENNISON CORPORATION		
Patents By Year of Grant :	57	57
BRIDGESTONE SPORTS CO., LTD.		
Patents By Year of Grant :	57	57
EMERSON ELECTRIC CO.		
Patents By Year of Grant :	57	57
MITSUI PETROCHEMICAL INDUSTRIES LTD.		
Patents By Year of Grant :	57	57
THE SCRIPPS RESEARCH INSTITUTE		
Patents By Year of Grant :	57	57
ELECTRONIC DATA SYSTEMS CORPORATION		
Patents By Year of Grant :	56	56
RESEARCH CORPORATION TECHNOLOGIES, INC.		
Patents By Year of Grant :	56	56
W. R. GRACE & CO.-CONN.		
Patents By Year of Grant :	56	56

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
COLUMBIA UNIVERSITY		
Patents By Year of Grant :	55	55
ETHICON, INC.		
Patents By Year of Grant :	55	55
LEXMARK INTERNATIONAL, INC.		
Patents By Year of Grant :	55	55
MATSUSHITA ELECTRONICS CORPORATION		
Patents By Year of Grant :	55	55
NOKIA MOBILE PHONES (U.K.) LIMITED		
Patents By Year of Grant :	55	55
DAICEL CHEMICAL INDUSTRIES LTD.		
Patents By Year of Grant :	54	54
M.A.N. ROLAND DRUCKMASCHINEN AG		
Patents By Year of Grant :	54	54
NOKIA MOBILE PHONES LTD.		
Patents By Year of Grant :	54	54
VALEO S.A.		
Patents By Year of Grant :	54	54
AJINOMOTO COMPANY INCORPORATED		
Patents By Year of Grant :	53	53
ALUMINUM COMPANY OF AMERICA		
Patents By Year of Grant :	53	53
BERG TECHNOLOGY, INC.		
Patents By Year of Grant :	53	53
DAIMLER-BENZ AEROSPACE AIRBUS GMBH		
Patents By Year of Grant :	53	53
HUELS AKTIENGESELLSCHAFT		
Patents By Year of Grant :	53	53
IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC.		
Patents By Year of Grant :	53	53
OMRON CORPORATION		
Patents By Year of Grant :	53	53
SCI-MED LIFE SYSTEMS, INC.		
Patents By Year of Grant :	53	53
DAINIPPON SCREEN MFG. CO., LTD.		
Patents By Year of Grant :	52	52
SCHERING AKTIENGESELLSCHAFT		
Patents By Year of Grant :	52	52
ABB RESEARCH LTD.		
Patents By Year of Grant :	51	51
BRITISH TECHNOLOGY GROUP LIMITED		
Patents By Year of Grant :	51	51
RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK		
Patents By Year of Grant :	51	51
RHONE-POULENC RORER, S.A.		
Patents By Year of Grant :	51	51

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
AGFA-GEVAERT, AG Patents By Year of Grant :	50	50
ALTERA CORPORATION Patents By Year of Grant :	50	50
AMERICAN HOME PRODUCTS CORPORATION Patents By Year of Grant :	50	50
ASAHI KASEI KOGYO KABUSHIKI KAISHA Patents By Year of Grant :	50	50
CYTEC TECHNOLOGY CORP. Patents By Year of Grant :	50	50
HUGHES AIRCRAFT COMPANY Patents By Year of Grant :	50	50
RAYCHEM CORPORATION Patents By Year of Grant :	50	50
SMITHKLINE BEECHAM PLC Patents By Year of Grant :	50	50
UNIVERSITY OF MICHIGAN Patents By Year of Grant :	50	50
BETZDEARBORN INC. Patents By Year of Grant :	49	49
CHISSO CORPORATION Patents By Year of Grant :	49	49
ETHICON ENDO-SURGERY Patents By Year of Grant :	49	49
FRAUNHOFER-GESELLSCHAFT ZUR FORDERUNG DER ANGEWANTEN FORSCHUNG E.V. Patents By Year of Grant :	49	49
HARVARD COLLEGE, PRESIDENT AND FELLOWS Patents By Year of Grant :	49	49
ITT AUTOMOTIVE EUROPE GMBH Patents By Year of Grant :	49	49
NEXSTAR PHARMACEUTICALS, INC. Patents By Year of Grant :	49	49
NTN CORPORATION Patents By Year of Grant :	49	49
NTT MOBILE COMMUNICATIONS NETWORK INC. Patents By Year of Grant :	49	49
SAMSUNG AEROSPACE INDUSTRIES, LTD. Patents By Year of Grant :	49	49
TANDEM COMPUTERS INCORPORATED Patents By Year of Grant :	49	49
BELL COMMUNICATIONS RESEARCH, INC. Patents By Year of Grant :	48	48
L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE Patents By Year of Grant :	48	48
SANDVIK AKTIEBOLAG Patents By Year of Grant :	48	48

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY'S Patents By Year of Grant :	48	48
SQUARE D COMPANY Patents By Year of Grant :	48	48
TORAY INDUSTRIES INC. Patents By Year of Grant :	48	48
KOITO MANUFACTURING COMPANY LIMITED Patents By Year of Grant :	47	47
LUBRIZOL CORPORATION Patents By Year of Grant :	47	47
MITSUBISHI GAS-CHEMICAL COMPANY, INC. Patents By Year of Grant :	47	47
OSRAM SYLVANIA INC. Patents By Year of Grant :	47	47
UNIVERSITY OF WASHINGTON Patents By Year of Grant :	47	47
YKK CORPORATION Patents By Year of Grant :	47	47
NORDSON CORPORATION Patents By Year of Grant :	46	46
SAMSUNG ELECTRO-MECHANICS CO., LTD. Patents By Year of Grant :	46	46
TOKAI RIKI DENKI SEISAKUSHO K.K. Patents By Year of Grant :	46	46
BRUNSWICK CORPORATION Patents By Year of Grant :	45	45
G.D. SOCIETA PER AZIONI Patents By Year of Grant :	45	45
LUDWIG INSTITUTE FOR CANCER RESEARCH Patents By Year of Grant :	45	45
mitsui toatsu chemicals inc. Patents By Year of Grant :	45	45
SANOFI, S.A. Patents By Year of Grant :	45	45
SCHLUMBERGER TECHNOLOGY CORPORATION Patents By Year of Grant :	45	45
SUNDSTRAND CORPORATION Patents By Year of Grant :	45	45
WESTERN ATLAS INTERNATIONAL, INC. Patents By Year of Grant :	45	45
CHESEBROUGH-POND'S USA CO., DIVISION OF CONOPCO, INC. Patents By Year of Grant :	44	44
IMATION CORP. Patents By Year of Grant :	44	44
INGERSOLL-RAND COMPANY Patents By Year of Grant :	44	44

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
 Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY Patents By Year of Grant :	44	44
MATSUSHITA ELECTRIC WORKS, LTD. Patents By Year of Grant :	44	44
NGK SPARK PLUG CO., LTD. Patents By Year of Grant :	44	44
ALBEMARLE CORPORATION Patents By Year of Grant :	43	43
FUTABA DENSHI KOGYO KABUSHIKI KAISHA Patents By Year of Grant :	43	43
HITACHI METALS LTD. Patents By Year of Grant :	43	43
NIPPON SHOKUBAI CO., LTD. Patents By Year of Grant :	43	43
PHARMACIA & UPJOHN COMPANY Patents By Year of Grant :	43	43
TRW OCCUPANT RESTRAINT SYSTEMS GMBH Patents By Year of Grant :	43	43
UNIVERSITY OF MINNESOTA, THE REGENTS OF Patents By Year of Grant :	43	43
CITIZEN WATCH CO., LTD. Patents By Year of Grant :	42	42
DISCOVISION ASSOCIATES Patents By Year of Grant :	42	42
DOW CORNING TORAY SILICONE COMPANY LIMITED Patents By Year of Grant :	42	42
HAMAMATSU PHOTONICS KABUSHIKI KAISHA Patents By Year of Grant :	42	42
INSTITUT PASTEUR Patents By Year of Grant :	42	42
INTERNATIONAL PAPER CO. Patents By Year of Grant :	42	42
KIA MOTORS CORP. Patents By Year of Grant :	42	42
KURARAY CO., LTD. Patents By Year of Grant :	42	42
LAM RESEARCH CORPORATION Patents By Year of Grant :	42	42
MITSUBISHI MATERIALS CORPORATION Patents By Year of Grant :	42	42
mitsui chemicals, INCORPORATED Patents By Year of Grant :	42	42
THOMSON MULTIMEDIA S.A. Patents By Year of Grant :	42	42
BORG-WARNER AUTOMOTIVE, INC. Patents By Year of Grant :	41	41

Organizational Patenting (Granted: Jan 01, 1998 - Dec 31, 1998)
Ranked List of Organizations with 40 or More Patents

<u>NUMBER OF PATENTS</u>	<u>1998</u>	<u>TOTAL</u>
FURUKAWA ELECTRIC CO., LTD. Patents By Year of Grant:	41	41
GLAXO WELLCOME INC. Patents By Year of Grant:	41	41
JOHNSON & JOHNSON VISION PRODUCTS, INC. Patents By Year of Grant:	41	41
MCNEIL-PPC, INC. Patents By Year of Grant:	41	41
NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CORPORATION Patents By Year of Grant:	41	41
NKK CORPORATION Patents By Year of Grant:	41	41
ZEXEL CORPORATION Patents By Year of Grant:	41	41
BOC GROUP, INC. Patents By Year of Grant:	40	40
FUJII JUKOGYO KABUSHIKI KAISHA Patents By Year of Grant:	40	40
HITACHI KOKI COMPANY, LIMITED Patents By Year of Grant:	40	40
HOECHST MARION ROUSSEL, INC. Patents By Year of Grant:	40	40
WASHINGTON UNIVERSITY Patents By Year of Grant:	40	40
WESTVACO CORPORATION Patents By Year of Grant:	40	40
Other Organizations (23435) Patents By Year of Grant:	59485	59485