PATENTING BY ORGANIZATIONS

1999



April 2000 U.S. PATENT AND TRADEMARK OFFICE OFFICE FOR PATENT AND TRADEMARK INFORMATION / TAF PROGRAM PK3 - Suite 441, WASHINGTON, DC 20231 tel (703) 306-2600 / FAX (703) 306-2737

A TECHNOLOGY ASSESSMENT AND FORECAST REPORT

Patenting By Organizations 1999

This report, prepared from the Technology Assessment and Forecast (TAF) database, profiles utility patents (i.e., patents for inventions) granted during **calendar year 1999**.

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 that 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 was raised from 30, for the 1997 report, to 40 for the 1998 and subsequent reports.

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 1999

In calendar year 1999, the U.S. Government received 983 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)

Utility Patents Granted By Date Of Patent Grant (Granted: Jan 01, 1999 - Dec 31, 1999)

	152400	152400
Total	153489	153489
U.S. Origin	83908	83908
Foreign Origin	69581	69581
JAPAN	31104	31104
GERMANY	9337	9337
FRANCE	3820	3820
TAIWAN	3693	3693
UNITED KINGDOM	3572	3572
SOUTH KOREA	3562	3562
CANADA	3226	3226
ITALY	1492	1492
SWEDEN	1401	1401
SWITZERLAND	1280	1280
NETHERLANDS	1247	1247
ISRAEL	743	743
AUSTRALIA	707	707
FINLAND	649	649
BELGIUM	648	648
DENMARK	487	487
AUSTRIA	479	479
NORWAY	224	224
SPAIN	222	222
RUSSIAN FEDERATION	181	181
CHINA, HONG KONG S.A.R	155	155
SINGAPORE	144	144
NEW ZEALAND	114	114
INDIA	112	112
SOUTH AFRICA	110	110
IRELAND	94	94
BRAZIL	91	91
CHINA P.REP.	90	90
MEXICO	76	76
ARGENTINA	44	44
HUNGARY	39	39
VENEZUELA	39	39
MALAYSIA	30	30
CZECH REPUBLIC	24	24
GREECE	23	23
LUXEMBOURG	22	22
Others (71)	300	300
O		
Ownership:	69392	69392
U.S. Corporations U.S. Government	69392 983	983
U.S. Individuals	16699	16699
U.S. Individuals	10033	10099
Foreign Corporations	60169	60169
Foreign Government	162	162
Foreign Individuals	6084	6084

Utility Patents Granted By Date Of Patent Grant (Granted: Jan 01, 1999 - Dec 31, 1999)

PERCENT OF PATENTS	1999	Total
Total 100	100	
U.S. Origin	55	55
Foreign Origin	45	45
101013 0113		
JAPAN	20	20
GERMANY	6	6
FRANCE	2	2
TAIWAN	2	2
UNITED KINGDOM	2	2
SOUTH KOREA	2	2
CANADA	2	2
ITALY	1	1
SWEDEN	1	1
SWITZERLAND	1	1
NETHERLANDS	1	1
ISRAEL		0
AUSTRALIA		0
FINLAND		0
BELGIUM		0
DENMARK		0
AUSTRIA		0
NORWAY		0
SPAIN		0
RUSSIAN FEDERATION		0
CHINA, HONG KONG S.A.R		0
SINGAPORE		0
NEW ZEALAND		0
INDIA		0
SOUTH AFRICA		0
IRELAND		0
BRAZIL		0
CHINA P.REP.		0
MEXICO		0
ARGENTINA		0
HUNGARY		0
VENEZUELA		0
MALAYSIA		0
CZECH REPUBLIC		0
GREECE		0
LUXEMBOURG		0
Others (71)		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)

NUMBER OF PATENTS	<u>1999</u>	TOTAL
INTERNATIONAL BUSINESS MACHINES CORPORA Patents By Year of Grant:		2756
NEC CORPORATION Patents By Year of Grant:	1842	1842
CANON KABUSHIKI KAISHA Patents By Year of Grant:	1795	1795
SAMSUNG ELECTRONICS CO., LTD. Patents By Year of Grant:	1545	1545
SONY CORPORATION Patents By Year of Grant:	1410	1410
TOSHIBA CORPORATION Patents By Year of Grant:	1200	1200
FUJITSU LIMITED Patents By Year of Grant:	1192	1192
MOTOROLA, INC. Patents By Year of Grant:	1192	1192
LUCENT TECHNOLOGIES INC. Patents By Year of Grant:	1152	1152
MITSUBISHI DENKI KABUSHIKI KAISHA Patents By Year of Grant:	1054	1054
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD Patents By Year of Grant:	1052	1052
HITACHI, LTD Patents By Year of Grant:	1008	1008
EASTMAN KODAK COMPANY Patents By Year of Grant:	992	992
MICRON TECHNOLOGY, INC. Patents By Year of Grant:	933	933
HEWLETT-PACKARD COMPANY Patents By Year of Grant:	850	850
ADVANCED MICRO DEVICES, INC. Patents By Year of Grant:	824	824
U.S. PHILIPS CORPORATION Patents By Year of Grant:	735	735
INTEL CORPORATION Patents By Year of Grant:	733	733
SIEMENS AKTIENGESELLSCHAFT Patents By Year of Grant:	722	722
GENERAL ELECTRIC COMPANY Patents By Year of Grant:	699	699
XEROX CORPORATION Patents By Year of Grant:	665	665
TEXAS INSTRUMENTS, INCORPORATED Patents By Year of Grant:	598	598
SUN MICROSYSTEMS, INC. Patents By Year of Grant:	560	560

NUMBER OF PATENTS	1999	TOTAL
PROCTER + GAMBLE COMPANY Patents By Year of Grant:	550	550
FUJI PHOTO FILM CO., LTD Patents By Year of Grant:	539	539
SHARP KABUSHIKI KAISHA (SHARP CORPORAT Patents By Year of Grant:	ION) 521	521
HONDA GIKEN KOGYO KABUSHIKI KAISHA (HOPatents By Year of Grant:		OR CO., LTD.) 461
UNIVERSITY OF CALIFORNIA, THE REGENTS Patents By Year of Grant:		436
ROBERT BOSCH GMBH Patents By Year of Grant:	419	419
BASF AKTIENGESELLSCHAFT Patents By Year of Grant:	414	414
RICOH COMPANY, LTD. Patents By Year of Grant:	411	411
TOYOTA JIDOSHA K.K. Patents By Year of Grant:	402	402
MINOLTA CAMERA CO., LTD. Patents By Year of Grant:	365	365
NIKON CORPORATION Patents By Year of Grant:	365	365
TELEFONAKTIEBOLAGET LM ERICSSON Patents By Year of Grant:	365	365
MICROSOFT CORPORATION Patents By Year of Grant:	352	352
UNITED STATES OF AMERICA, NAVY Patents By Year of Grant:	348	348
BAYER AKTIENGESELLSCHAFT Patents By Year of Grant:	341	341
LSI LOGIC CORPORATION Patents By Year of Grant:	339	339
E. I. DU PONT DE NEMOURS AND COMPANY Patents By Year of Grant:	338	338
MINNESOTA MINING AND MANUFACTURING COM Patents By Year of Grant:	P ANY 317	317
LG SEMICON CO., LTD. Patents By Year of Grant:	311	311
YAZAKI CORP. Patents By Year of Grant:	307	307
DENSO CORPORATION Patents By Year of Grant:	305	305
SEIKO EPSON CORPORATION Patents By Year of Grant:	302	302
ERICSSON, INC. Patents By Year of Grant:	292	292

NUMBER OF PATENTS	<u>1999</u>	TOTAL
TAIWAN SEMICONDUCTOR MANUFACTURING CO., Patents By Year of Grant:	LTD. 290	290
ASAHI KOGAKU KOGYO KABUSHIKI KAISHA Patents By Year of Grant:	278	278
AT&T CORP. Patents By Year of Grant:	278	278
GENERAL MOTORS CORPORATION Patents By Year of Grant:	275	275
DAEWOO ELECTRONICS COMPANY, LTD. Patents By Year of Grant:	273	273
MURATA MANUFACTURING CO., LTD. Patents By Year of Grant:	268	268
UNITED MICROELECTRONICS CORPORATION Patents By Year of Grant:	266	266
APPLIED MATERIALS, INC. Patents By Year of Grant:	264	264
BROTHER KOGYO KABUSHIKI KAISHA Patents By Year of Grant:	263	263
CATERPILLAR INC. Patents By Year of Grant:	262	262
L'OREAL S.A. Patents By Year of Grant:	259	259
FORD GLOBAL TECHNOLOGIES, INC. Patents By Year of Grant:	256	256
COMPAQ COMPUTER CORPORATION, INC. Patents By Year of Grant:	251	251
INCYTE PHARMACEUTICALS, INC. Patents By Year of Grant:	249	249
FUJI XEROX CO., LTD. Patents By Year of Grant:	248	248
HYUNDAI ELECTRONICS INDUSTRIES CO., LTI Patents By Year of Grant:	242	242
NORTHERN TELECOM LIMITED Patents By Year of Grant:	240	240
SANYO ELECTRIC CO., LTD. Patents By Year of Grant:	239	239
LG ELECTRONICS INC. Patents By Year of Grant:	229	229
WHITAKER CORPORATION Patents By Year of Grant:	229	229
EATON CORPORATION Patents By Year of Grant:	222	222
OLYMPUS OPTICAL CO., LTD. Patents By Year of Grant:	222	222
RAYTHEON COMPANY Patents By Year of Grant:	219	219

NUMBER OF PATENTS	1999	TOTAL
MERCK + CO., INC. Patents By Year of Grant:	216	216
CHRYSLER MOTORS CORPORATION Patents By Year of Grant:	215	215
NISSAN MOTOR COMPANY, LIMITED Patents By Year of Grant:	211	211
INDUSTRIAL TECHNOLOGY RESEARCH INSTITUT	E, TA	EWAN .
Patents By Year of Grant:	-	208
MEDTRONIC INC. Patents By Year of Grant:	208	208
YAMAHA CORPORATION Patents By Year of Grant:	208	208
OKI ELECTRIC INDUSTRY CO., LTD. Patents By Year of Grant:	200	200
TRW INC. Patents By Year of Grant:	200	200
NATIONAL SEMICONDUCTOR CORPORATION Patents By Year of Grant:	197	197
SEAGATE TECHNOLOGY, INCORPORATED Patents By Year of Grant:	190	190
ELI LILLY AND COMPANY Patents By Year of Grant:	189	189
NCR CORPORATION Patents By Year of Grant:	189	189
SEMICONDUCTOR ENERGY LABORATORY CO., LT Patents By Year of Grant:	D. 184	184
SMITHKLINE BEECHAM CORPORATION Patents By Year of Grant:	184	184
CIBA SPECIALTY CHEMICALS CORPORATION Patents By Year of Grant:	182	182
NOVO NORDISK A/S Patents By Year of Grant:	178	178
KIMBERLY-CLARK WORLDWIDE, INC. Patents By Year of Grant:	176	176
DAIMLER-BENZ AKTIENGESELLSCHAFT Patents By Year of Grant:	174	174
3M INNOVATIVE PROPERTIES COMPANY Patents By Year of Grant:	172	172
APPLE COMPUTER, INC. Patents By Year of Grant:	169	169
NORTHROP GRUMMAN CORPORATION Patents By Year of Grant:	164	164
SUMITOMO ELECTRIC INDUSTRIES CO., LTD. Patents By Year of Grant:	162	162
KONICA CORPORATION Patents By Year of Grant:	159	159

NUMBER OF PATENTS	<u>1999</u>	TOTAL
VLSI TECHNOLOGY, INC. Patents By Year of Grant:	158	158
HOECHST AKTIENGESELLSCHAFT Patents By Year of Grant:	152	152
NOKIA MOBILE PHONES LTD. Patents By Year of Grant:	152	152
ALPS ELECTRIC CO., LTD. Patents By Year of Grant:	151	151
FORD MOTOR COMPANY Patents By Year of Grant:	151	151
ABBOTT LABORATORIES Patents By Year of Grant:	149	149
ALLIED-SIGNAL INC. Patents By Year of Grant:	147	147
BOEING COMPANY Patents By Year of Grant:	147	147
BRISTOL-MYERS SQUIBB COMPANY Patents By Year of Grant:	146	146
TOKYO ELECTRON LIMITED Patents By Year of Grant:	146	146
HUGHES ELECTRONICS CORP. Patents By Year of Grant:	144	144
SUMITOMO WIRING SYSTEMS, LTD. Patents By Year of Grant:	143	143
MASSACHUSETTS INSTITUTE OF TECHNOLOGY Patents By Year of Grant:	142	142
DOW CHEMICAL COMPANY Patents By Year of Grant:	141	141
PIONEER ELECTRONIC CORPORATION Patents By Year of Grant:	139	139
UNITED STATES OF AMERICA, ARMY Patents By Year of Grant:	139	139
UNITED STATES OF AMERICA, HEALTH & HUM Patents By Year of Grant:		ICES 139
COLGATE-PALMOLIVE COMPANY Patents By Year of Grant:	138	138
MCDONNELL DOUGLAS CORP. Patents By Year of Grant:	138	138
AISIN SEIKI KABUSHIKI KAISHA Patents By Year of Grant:	137	137
SUMITOMO CHEMICAL COMPANY, LIMITED Patents By Year of Grant:	136	136
ZENECA LIMITED Patents By Year of Grant:	136	136
BAYER CORPORATION Patents By Year of Grant:	134	134

NUMBER OF PATENTS	1999	TOTAL
DIGITAL EQUIPMENT CORPORATION Patents By Year of Grant:	133	133
BECTON, DICKINSON AND COMPANY Patents By Year of Grant:	131	131
SHELL OIL COMPANY Patents By Year of Grant:	131	131
ELECTRONICS AND TELECOMMUNICATIONS RESERVATIONS Patents By Year of Grant:		INSTITUTE
HONEYWELL INC. Patents By Year of Grant:	128	128
AGFA-GEVAERT N.V. Patents By Year of Grant:	127	127
PHILIPS ELECTRONICS NORTH AMERICA CORP. Patents By Year of Grant:		124
NGK INSULATORS LTD.	124	124
Patents By Year of Grant:	123	123
EXXON RESEARCH + ENGINEERING CO. Patents By Year of Grant:	122	122
AKZO NOBEL NV Patents By Year of Grant:	120	120
HARRIS CORP. Patents By Year of Grant:	120	120
STMICROELECTRONICS, INC. Patents By Year of Grant:	118	118
LOCKHEED MARTIN CORPORATION Patents By Year of Grant:	117	117
CYPRESS SEMICONDUCTOR CORP. Patents By Year of Grant:	116	116
NOKIA TELECOMMUNICATIONS OY Patents By Year of Grant:	116	116
HALLIBURTON ENERGY SERVICES Patents By Year of Grant:	115	115
WINBOND ELECTRONICS CORP. Patents By Year of Grant:	115	115
SGS-THOMSON MICROELECTRONICS S.A. Patents By Year of Grant:		114
SGS-THOMSON MICROELECTRONICS S.R.L. Patents By Year of Grant:	114	114
EXXON CHEMICALS PATENTS INC.		
Patents By Year of Grant: PFIZER INC.	112	112
Patents By Year of Grant:	112	112
VANGUARD INTERNATIONAL SEMICONDUCTOR COMPatents By Year of Grant:		ATION 112
AMERICAN CYANAMID COMPANY Patents By Year of Grant:	111	111

NUMBER OF PATENTS	<u> 1999</u> <u> </u>	OTAL
EASTMAN CHEMICAL COMPANY Patents By Year of Grant:	111	111
CIRRUS LOGIC, INC. Patents By Year of Grant:	110	110
FUJI ELECTRIC CO., LTD. Patents By Year of Grant:	110	110
MITSUBISHI CHEMICAL CORPORATION Patents By Year of Grant:	110	110
QUALCOMM, INC. Patents By Year of Grant:	110	110
BRIDGESTONE CORPORATION Patents By Year of Grant:	109	109
MICRON ELECTRONICS, INC. Patents By Year of Grant:	109	109
LEXMARK INTERNATIONAL, INC. Patents By Year of Grant:	107	107
MITSUI CHEMICALS, INCORPORATED Patents By Year of Grant:	107	107
NESTEC, S.A. Patents By Year of Grant:	107	107
UNITED TECHNOLOGIES CORPORATION Patents By Year of Grant:	107	107
UOP Patents By Year of Grant:	107	107
BAKER HUGHES INCORPORATED Patents By Year of Grant:	106	106
HON HAI PRECISION IND. CO., LTD. Patents By Year of Grant:	106	106
DOW CORNING CORPORATION Patents By Year of Grant:	105	105
ITT MANUFACTURING ENTERPRISES, INC. Patents By Year of Grant:	105	105
MCI COMMUNICATIONS CORP. Patents By Year of Grant:	105	105
TDK CORPORATION Patents By Year of Grant:	104	104
CORNING INCORPORATED Patents By Year of Grant:	102	102
INSTITUT FRANCAIS DU PETROLE Patents By Year of Grant:	102	102
BAXTER INTERNATIONAL INC. Patents By Year of Grant:	101	101
YAMAHA HATSUDOKI KABUSHIKI KAISHA, Y Patents By Year of Grant:	AMAHA MOTOR 101	CO., LTD.
CALIFORNIA INSTITUTE OF TECHNOLOGY Patents By Year of Grant:	99	99

NUMBER OF PATENTS	1999	TOTAL	
NIPPONDENSO CO., LTD. Patents By Year of Grant:	99	99	
KAO KABUSHIKI KAISHA (KAO CORPORATION Patents By Year of Grant:		98	
PIONEER HI-BRED INTERNATIONAL, INC. Patents By Year of Grant:	98	98	
ILLINOIS TOOL WORKS INC. Patents By Year of Grant:	97	97	
SHIN ETSU CHEMICAL CO., LTD. Patents By Year of Grant:	97	97	
DELCO ELECTRONICS CORPORATION Patents By Year of Grant:	96	96	
JOHNS HOPKINS UNIVERSITY Patents By Year of Grant:	95	95	
ROHM COMPANY LIMITED Patents By Year of Grant:	95	95	
UNITED STATES SURGICAL CORPORATION Patents By Year of Grant:	95	95	
HENKEL CORPORATION Patents By Year of Grant:	94	94	
PITNEY-BOWES, INC. Patents By Year of Grant:	94	94	
HEIDELBERGER DRUCKMASCHINEN AG Patents By Year of Grant:	93	93	
HYUNDAI MOTOR CO., LTD. Patents By Year of Grant:	93	93	
UNITED STATES OF AMERICA, NATIONAL AE Patents By Year of Grant:		S AND SPACE 93	E ADMINISTRATION
XILINX, INC. Patents By Year of Grant:	93	93	
NORTEL NETWORKS CORPORATION Patents By Year of Grant:	92	92	
UNISYS CORPORATION Patents By Year of Grant:	91	91	
UNIVERSITY OF TEXAS Patents By Year of Grant:	91	91	
3COM CORPORATION Patents By Year of Grant:	90	90	
SANDIA CORPORATION Patents By Year of Grant:	90	90	
UNITED STATES OF AMERICA, AIR FORCE Patents By Year of Grant:	90	90	
BASF CORP. Patents By Year of Grant:	88	88	
MOLEX INCORPORATED Patents By Year of Grant:	88	88	

NUMBER OF PATENTS	1999	TOTAL
AIR PRODUCTS AND CHEMICALS, INC. Patents By Year of Grant:	86	86
DAI NIPPON PRINTING CO. LTD Patents By Year of Grant:	86	86
DAIMLER CHRYSLER A.G. Patents By Year of Grant:	86	86
DANA CORPORATION Patents By Year of Grant:	86	86
FUJI PHOTO OPTICAL CO. LTD. Patents By Year of Grant:	86	86
TOYODA JIDOSHOKKI SEISAKUSHO KABUSHIKI Patents By Year of Grant:		86
WISCONSIN ALUMNI RESEARCH FOUNDATION Patents By Year of Grant:	86	86
DELL USA, L.P. Patents By Year of Grant:	85	85
MITSUBISHI HEAVY INDUSTRIES CO., LTD. Patents By Year of Grant:	85	85
ORACLE CORPORATION Patents By Year of Grant:	85	85
ROHM AND HAAS COMPANY Patents By Year of Grant:	85	85
DEERE + COMPANY Patents By Year of Grant:	84	84
HENKEL KOMMANDITGESELLSCHAFT AUF AKTIE Patents By Year of Grant:	N(HENKEL 83	KGAA) 83
MONSANTO COMPANY, INC. Patents By Year of Grant:	83	83
STANFORD UNIVERSITY, LELAND JUNIOR, THE Patents By Year of Grant:	E BOARD 83	OF TRUSTEES OF 83
GENERAL HOSPITAL CORPORATION Patents By Year of Grant:	82	82
SCI-MED LIFE SYSTEMS, INC. Patents By Year of Grant:	82	82
COMMISSARIAT A L'ENERGIE ATOMIQUE Patents By Year of Grant:	81	81
SCHERING CORP. Patents By Year of Grant:	81	81
BRITISH TELECOMMUNICATION, PLC Patents By Year of Grant:	80	80
CASIO COMPUTER CO. LTD. Patents By Year of Grant:	80	80
FMC CORPORATION Patents By Year of Grant:	80	80
SCHLUMBERGER TECHNOLOGY CORPORATION Patents By Year of Grant:	80	80

NUMBER OF PATENTS	1999	TOTAL				
TAKEDA CHEMICAL INDUSTRIES LTD. Patents By Year of Grant:	80	80				
TEKTRONIX INC. Patents By Year of Grant:	80	80				
WARNER-LAMBERT COMPANY Patents By Year of Grant:	80	80				
KOMATSU LTD. Patents By Year of Grant:	79	79				
SANDVIK AKTIEBOLAG Patents By Year of Grant:	79	79				
SHIN-ETSU HANDOTAI CO., LTD. Patents By Year of Grant:	79	79				
VICTOR COMPANY OF JAPAN, LIMITED Patents By Year of Grant:	79	79				
EBARA CORPORATION, NIKKISO CO., LTD. Patents By Year of Grant:	78	78				
SHIMANO INC. Patents By Year of Grant:	78	78				
UNITED TECHNOLOGIES AUTOMOTIVE, INC. Patents By Year of Grant:	78	78				
ISIS PHARMACEUTICALS, INC. Patents By Year of Grant:	77	77				
LEAR CORPORATION Patents By Year of Grant:	77	77				
ADVANTEST CORP. Patents By Year of Grant:	76	76				
LITTON SYSTEMS INC. Patents By Year of Grant:	76	76				
MITA INDUSTRIAL COMPANY LTD. Patents By Year of Grant:	76	76				
EXEDY CORPORATION Patents By Year of Grant:	75	75				
L'AIR LIQUIDE, SOCIETE ANONYME POUR L Patents By Year of Grant:	'ETUDE E 75	T L'EXPLOI 75	ITATION DES	PROCEDES	GEORGES	CLAUDE
SAMSUNG DISPLAY DEVICES CO., LTD. Patents By Year of Grant:	74	74				
GOODYEAR TIRE + RUBBER COMPANY Patents By Year of Grant:	73	73				
NATIONAL SCIENCE COUNCIL Patents By Year of Grant:	73	73				
OTIS ELEVATOR COMPANY Patents By Year of Grant:	73	73				
SARNOFF CORPORATION Patents By Year of Grant:	73	73				
TETRA LAVAL HOLDINGS & FINANCE S.A. Patents By Year of Grant:	73	73				

NUMBER OF PATENTS	1999	TOTAL
TRIMBLE NAVIGATION, LTD. Patents By Year of Grant:	73	73
HOECHST MARION ROUSSEL, INC. Patents By Year of Grant:	72	72
MATSUSHITA ELECTRONICS CORPORATION Patents By Year of Grant:	72	72
MOBIL OIL CORP. Patents By Year of Grant:	72	72
NOVARTIS AG (FORMERLY SANDOZ LTD.) Patents By Year of Grant:	72	72
PHILLIPS PETROLEUM COMPANY Patents By Year of Grant:	72	72
PRAXAIR TECHNOLOGY, INC. Patents By Year of Grant:	72	72
SMITHKLINE BEECHAM PLC Patents By Year of Grant:	72	72
ELF ATOCHEM S.A. Patents By Year of Grant:	71	71
PPG INDUSTRIES OHIO INC. Patents By Year of Grant:	71	71
ALTERA CORPORATION Patents By Year of Grant:	70	70
HOFFMANN-LA ROCHE INC. Patents By Year of Grant:	70	70
SEIKO INSTRUMENTS INC. Patents By Year of Grant:	70	70
UNITED STATES OF AMERICA, DEPARTMENT	OF AGRIC	ULTURE
Patents By Year of Grant:	70	70
ZEXEL CORPORATION Patents By Year of Grant:	70	70
ASEA BROWN BOVERI AKTIENGESELLSCHAFT Patents By Year of Grant:	69	69
CITIZEN WATCH CO., LTD. Patents By Year of Grant:	69	69
ETHICON ENDO-SURGERY Patents By Year of Grant:	69	69
SANSHIN KOGYO KABUSHIKI KAISHA Patents By Year of Grant:	69	69
EMC CORPORATION Patents By Year of Grant:	68	68
LEVER BROS. CO., DIVISION OF CONOPCO, Patents By Year of Grant:	INC. 68	68
ASAHI GLASS COMPANY, LTD. Patents By Year of Grant:	67	67
CASE CORPORATION Patents By Year of Grant:	67	67

NUMBER OF PATENTS	<u>1999</u>	TOTAL
CUMMINS ENGINE CO., INC. Patents By Year of Grant:	67	67
EMERSON ELECTRIC CO. Patents By Year of Grant:	67	67
NIPPON STEEL CORP. Patents By Year of Grant:	67	67
OWENS-CORNING FIBERGLAS CORPORATION Patents By Year of Grant:	67	67
ROCKWELL INTERNATIONAL CORPORATION Patents By Year of Grant:	67	67
THOMSON-CSF Patents By Year of Grant:	67	67
TOYODA GOSEI KABUSHIKI KAISHA Patents By Year of Grant:	67	67
VOITH SULZER PAPIERMASCHINEN GMBH	67	67
Patents By Year of Grant:	67	67
DOW CORNING TORAY SILICONE COMPANY LIM Patents By Year of Grant:	ITED 66	66
MITSUBISHI GAS-CHEMICAL COMPANY, INC. Patents By Year of Grant:	66	66
THOMSON CONSUMER ELECTRONICS, INC. Patents By Year of Grant:	66	66
ANALOG DEVICES, INC. Patents By Year of Grant:	65	65
MANNESMANN AG Patents By Year of Grant:	65	65
AISIN AW CO., LTD. Patents By Year of Grant:	64	64
	01	01
AKTIEBOLAGET ASTRA Patents By Year of Grant:	64	64
CHIRON CORPORATION Patents By Year of Grant:	64	64
CORNELL RESEARCH FOUNDATION INC. Patents By Year of Grant:	64	64
NGK SPARK PLUG CO., LTD. Patents By Year of Grant:	64	64
AVERY DENNISON CORPORATION Patents By Year of Grant:	63	63
HUMAN GENOME SCIENCES, INC.		
Patents By Year of Grant:	63	63
IMATION CORP. Patents By Year of Grant:	63	63
ACUSON CORPORATION Patents By Year of Grant:	62	62
G. D. SEARLE & CO. Patents By Year of Grant:	62	62

NUMBER OF PATENTS	1999	TOTAL
KAWASAKI STEEL CORPORATION Patents By Year of Grant:	62	62
SYMBOL TECHNOLOGIES, INC. Patents By Year of Grant:	62	62
VALMET CORP. Patents By Year of Grant:	62	62
ALCATEL THOMSON FAISCEAUX HERTZIENS Patents By Year of Grant:	61	61
ASAHI KASEI KOGYO KABUSHIKI KAISHA Patents By Year of Grant:	61	61
CARRIER CORPORATION Patents By Year of Grant:	61	61
BLACK & DECKER INC. Patents By Year of Grant:	60	60
ETHICON, INC. Patents By Year of Grant:	60	60
KOMATSU ELECTRONIC METALS CO., LTD. Patents By Year of Grant:	60	60
TORAY INDUSTRIES INC. Patents By Year of Grant:	60	60
UNISIA JECS CORPORATION Patents By Year of Grant:	60	60
WESTINGHOUSE AIR BRAKE COMPANY Patents By Year of Grant:	60	60
BOSTON SCIENTIFIC CORPORATION Patents By Year of Grant:	59	59
BREED AUTOMOTIVE TECHNOLOGY, INC. Patents By Year of Grant:	59	59
MITSUBISHI JIDOSHA KOGYO KABUSHIKI KAI: Patents By Year of Grant:	SHA 59	59
SIEMENS INFORMATION AND COMMUNICATIONS Patents By Year of Grant:		KS, INC. 59
SILICON GRAPHICS, INC. Patents By Year of Grant:	59	59
UNIVERSITY OF PENNSYLVANIA Patents By Year of Grant:	59	59
W. L. GORE ASSOCIATES, INC. Patents By Year of Grant:	59	59
YKK CORPORATION Patents By Year of Grant:	59	59
FRAUNHOFER-GESELLSCHAFT ZUR FORDERUNG : Patents By Year of Grant:	DER ANG 58	
MATSUSHITA ELECTRIC WORKS, LTD. Patents By Year of Grant:	58	58
NIPPON TELEGRAPH & TELEPHONE CORP. Patents By Year of Grant:	58	58

NUMBER OF PATENTS	<u>1999</u>	TOTAL
NSK LIMITED Patents By Year of Grant:	58	58
SOUTHPAC TRUST INTERNATIONAL, INC. Patents By Year of Grant:	58	58
TRW OCCUPANT RESTRAINT SYSTEMS GMBH Patents By Year of Grant:	58	58
AGENCY OF INDUSTRIAL SCIENCE & TECHNOL Patents By Year of Grant:	OGY 57	57
ALZA CORPORATION Patents By Year of Grant:	57	57
SUMITOMO RUBBER INDUSTRIES, LTD. Patents By Year of Grant:	57	57
ABB RESEARCH LTD. Patents By Year of Grant:	56	56
HUELS AKTIENGESELLSCHAFT Patents By Year of Grant:	56	56
INTEGRATED DEVICE TECHNOLOGY, INC. Patents By Year of Grant:	56	56
KOBE STEEL LTD. Patents By Year of Grant:	56	56
MAZDA MOTOR CORPORATION Patents By Year of Grant:	56	56
MERCK PATENT GESELLSCHAFT MIT BESCHRAN Patents By Year of Grant:	KTER HA 56	FTUNG 56
CLARIANT GMBH Patents By Year of Grant:	55	55
COLUMBIA UNIVERSITY Patents By Year of Grant:	55	55
DAINIPPON SCREEN MFG. CO., LTD. Patents By Year of Grant:	55	55
STMICROELECTRONICS S.R.L. Patents By Year of Grant:	55	55
AGFA-GEVAERT, AG Patents By Year of Grant:	54	54
ALCATEL USA SOURCING, L.P. Patents By Year of Grant:	54	54
ALLEN BRADLEY COMPANY, LLC Patents By Year of Grant:	54	54
DAICEL CHEMICAL INDUSTRIES LTD. Patents By Year of Grant:	54	54
NOVELL, INC. Patents By Year of Grant:	54	54
POLAROID CORPORATION Patents By Year of Grant:	54	54
RESEARCH FOUNDATION OF STATE UNIVERSIT Patents By Year of Grant:	Y OF NE	W YORK 54

NUMBER OF PATENTS	1999	TOTAL
BELOIT TECHNOLOGIES, INC. Patents By Year of Grant:	53	53
FURUKAWA ELECTRIC CO., LTD. Patents By Year of Grant:	53	53
GENENTECH, INC. Patents By Year of Grant:	53	53
MICHIGAN STATE UNIVERSITY Patents By Year of Grant:	53	53
NATIONAL STARCH AND CHEMICAL INVESTME Patents By Year of Grant:	ENT HOLDI 53	NG CORPORATION 53
NORITSU KOKI CO., LTD. Patents By Year of Grant:	53	53
UNION CARBIDE CHEMICALS & PLASTICS T Patents By Year of Grant:	ECHNOLOGY 53	CORPORATION 53
UNITED STATES OF AMERICA, DEPARTMENT Patents By Year of Grant:		Y 53
ALCATEL ALSTHOM COMPAGNIE GENERALE I Patents By Year of Grant:	'ELECTRIC	TITE 52
AJINOMOTO COMPANY INCORPORATED	32	32
Patents By Year of Grant:	51	51
INSTITUT PASTEUR Patents By Year of Grant:	51	51
OSRAM SYLVANIA INC. Patents By Year of Grant:	51	51
PHARMACIA & UPJOHN COMPANY Patents By Year of Grant:	51	51
SALOMON S.A. Patents By Year of Grant:	51	51
UNIVERSITY OF MICHIGAN Patents By Year of Grant:	51	51
ARCO CHEMICAL TECHNOLOGY, L.P. Patents By Year of Grant:	50	50
GLAXO WELLCOME INC. Patents By Year of Grant:	50	50
LUCAS INDUSTRIES PUBLIC LTD. COMPANY Patents By Year of Grant:	50	50
WASHINGTON UNIVERSITY Patents By Year of Grant:	50	50
ALUMINUM COMPANY OF AMERICA Patents By Year of Grant:	49	49
DEGUSSA AKTIENGESELLSCHAFT Patents By Year of Grant:	49	49
ELECTRONIC DATA SYSTEMS CORPORATION Patents By Year of Grant:	49	49
FANUC LTD. Patents By Year of Grant:	49	49

NUMBER OF PATENTS	<u>1999</u>	TOTAL
FRANCE TELECOM Patents By Year of Grant:	49	49
HAMAMATSU PHOTONICS KABUSHIKI KAISHA Patents By Year of Grant:	49	49
KOITO MANUFACTURING COMPANY LIMITED Patents By Year of Grant:	49	49
LOCKHEED MARTIN ENERGY RESEARCH CORPOR Patents By Year of Grant:	ATION 49	49
MITSUMI ELECTRIC CO., LTD. Patents By Year of Grant:	49	49
NIPPON SHOKUBAI CO., LTD. Patents By Year of Grant:	49	49
TEXAS INSTRUMENTS - ACER INCORPORATED Patents By Year of Grant:	49	49
UNIVERSITY OF MINNESOTA, THE REGENTS OF Patents By Year of Grant:	F 49	49
BRUNSWICK CORPORATION Patents By Year of Grant:	48	48
DEUTSCHE THOMSON-BRANDT GMBH Patents By Year of Grant:	48	48
GAS RESEARCH INSTITUTE Patents By Year of Grant:	48	48
PORSCHE AG Patents By Year of Grant:	48	48
RHONE-POULENC CHIMIE Patents By Year of Grant:	48	48
SCHNEIDER ELECTRIC SA Patents By Year of Grant:	48	48
SIEMENS WESTINGHOUSE POWER CORPORATION Patents By Year of Grant:	I 48	48
AMERICAN HOME PRODUCTS CORPORATION Patents By Year of Grant:	47	47
IOMEGA CORPORATION Patents By Year of Grant:	47	47
SMS SCHLOEMANN-SIEMAG AG Patents By Year of Grant:	47	47
SQUARE D COMPANY Patents By Year of Grant:	47	47
UNIVERSITY OF WASHINGTON Patents By Year of Grant:	47	47
BERG TECHNOLOGY, INC. Patents By Year of Grant:	46	46
BORG-WARNER AUTOMOTIVE, INC. Patents By Year of Grant:	46	46
ENGELHARD CORPORATION Patents By Year of Grant:	46	46

NUMBER OF PATENTS	<u>1999</u>	TOTAL		
EP TECHNOLOGIES, INC. Patents By Year of Grant:	46	46		
MORTON INTERNATIONAL, INC. Patents By Year of Grant:	46	46		
S. C. JOHNSON + SON, INC. Patents By Year of Grant:	46	46		
ADAPTEC, INC. Patents By Year of Grant:	45	45		
CISCO TECHNOLOGY, INC. Patents By Year of Grant:	45	45		
INTERMEC IP CORP. Patents By Year of Grant:	45	45		
KABUSHIKI KAISHA TOPCON Patents By Year of Grant:	45	45		
LAM RESEARCH CORPORATION Patents By Year of Grant:	45	45		
PACESETTER, INC. Patents By Year of Grant:	45	45		
SCHERING AKTIENGESELLSCHAFT Patents By Year of Grant:	45	45		
SUZUKI MOTOR CORPORATION Patents By Year of Grant:	45	45		
CHARTERED SEMICONDUCTOR MANUFACTURING Patents By Year of Grant:	PTE LTD 44	44		
DEKALB GENETICS CORPORATION Patents By Year of Grant:	44	44		
IMPERIAL CHEMICAL INDUSTRIES PLC Patents By Year of Grant:	44	44		
IOWA STATE UNIVERSITY RESEARCH FOUNDAT Patents By Year of Grant:	TION INC. 44	44		
JOHNSON & JOHNSON PROFESSIONAL INC. Patents By Year of Grant:	44	44		
NEW HOLLAND NORTH AMERICA, INC. Patents By Year of Grant:	44	44		
PPG INDUSTRIES INC. Patents By Year of Grant:	44	44		
SOCIETE NATIONALE D'ETUDE ET DE CONSTR Patents By Year of Grant:	RUCTION D	E MOTEURS D	'AVIATION	"S.N.E.C.M.A."
ALBEMARLE CORPORATION Patents By Year of Grant:	43	43		
CHISSO CORPORATION Patents By Year of Grant:	43	43		
DAIKIN INDUSTRIES LIMITED Patents By Year of Grant:	43	43		
DRESSER INDUSTRIES, INC. Patents By Year of Grant:	43	43		

NUMBER OF PATENTS	<u>1999</u>	TOTAL
HUBBELL INCORPORATED Patents By Year of Grant:	43	43
MONSANTO CORPORATION Patents By Year of Grant:	43	43
UNIVERSITY OF NORTH CAROLINA Patents By Year of Grant:	43	43
ALCON LABORATORIES, INC. Patents By Year of Grant:	42	42
BOEHRINGER MANNHEIM G.M.B.H. Patents By Year of Grant:	42	42
HITACHI CHEMICAL COMPANY, LTD. Patents By Year of Grant:	42	42
KOKUSAI DENSHIN DENWA KABUSHIKI KAISH Patents By Year of Grant:	A 42	42
SANDEN CORPORATION Patents By Year of Grant:	42	42
SECRETARY OF STATE FOR DEFENCE IN HER Patents By Year of Grant:		IC MAJESTY'S 42
THE SCRIPPS RESEARCH INSTITUTE Patents By Year of Grant:	42	42
AT&T WIRELESS SERVICES, INC. Patents By Year of Grant:	41	41
ATLANTIC RICHFIELD COMPANY Patents By Year of Grant:	41	41
BETZDEARBORN INC. Patents By Year of Grant:	41	41
BOC GROUP, INC. Patents By Year of Grant:	41	41
COMMONWEALTH SCIENTIFIC AND INDUSTRIA Patents By Year of Grant:		RCH ORGANIZATION 41
HARVARD COLLEGE, PRESIDENT AND FELLOW Patents By Year of Grant:		41
KOREA INSTITUTE OF SCIENCE AND TECHNO: Patents By Year of Grant:	LOGY 41	41
MANNESMANN SACHS AG Patents By Year of Grant:	41	41
MAYTAG CORPORATION Patents By Year of Grant:	41	41
QUANTUM CORP. (CA) Patents By Year of Grant:	41	41
READ-RITE CORPORATION Patents By Year of Grant:	41	41
SENSORMATIC ELECTRONICS CORPORATION Patents By Year of Grant:	41	41
WACKER-CHEMIE GMBH Patents By Year of Grant:	41	41

NUMBER OF PATENTS	<u>1999</u>	TOTAL
CABLETRON SYSTEMS, INC. Patents By Year of Grant:	40	40
FICHTEL + SACHS AG Patents By Year of Grant:	40	40
NITTO DENKO CORPORATION Patents By Year of Grant:	40	40
NOVARTIS FINANCE CORPORATION Patents By Year of Grant:	40	40
RELIANCE ELECTRIC INDUSTRIAL COMPANY Patents By Year of Grant:	40	40
RISO KAGAKU CORPORATION Patents By Year of Grant:	40	40
SEGA ENTERPRISES, LTD. Patents By Year of Grant:	40	40
VOLKSWAGEN AKTIENGESELLSCHAFT Patents By Year of Grant:	40	40
Other Organizations (24284) Patents By Year of Grant:	61551	61551