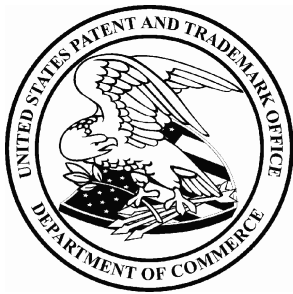


PTMD PROFILE REPORT

U.S. (FEDERAL) GOVERNMENT PATENTING

1/1977 - 12/2004



March 2005
U.S. PATENT AND TRADEMARK OFFICE
OFFICE OF ELECTRONIC INFORMATION PRODUCTS / PTMD
MDW 4C18, ALEXANDRIA, VA 22313-1450
tel (571) 272-5600 / FAX (571) 273-0110

A PATENT TECHNOLOGY MONITORING DIVISION REPORT

PTMD Profile Report
1/1977 - 12/2004
Explanation of Data

This Patent Technology Monitoring Division (PTMD) report profiles patent activity for all U.S. patent documents (design, plant, reissue, and utility patents, defensive publications, and statutory invention registrations) granted between January 1, 1977 and December 31, 2004 for which ownership was assigned to a Federal organization at the time of grant. The source of the data used for this report is the PTMD data base maintained by the Office of Patent and Trademark Information.

Data Distribution By Date of Grant and By Date of Application

Parts A1 and A2

Part A1 distributes patent GRANT data by year of patent grant ("Patents Granted By Date of Patent Grant"). Part A2 distributes grant data by the year in which the patented application was filed ("Patents Granted By Date of Patent Application"). Parts A1 and A2 each provide patent counts (pages A1-1 and A2-1) and percent distributions (pages A1-2 and A2-2).

Patent data in the "Pre 1991" column corresponds to the period January 1, 1977 through December 31, 1990.

Part B

Part B of this report distributes patent GRANT data for organizations that have received U.S. patents since 1977. Data are presented by the year in which the patent was granted ("Patents By Year of Grant") and the year the patented application was filed ("Patents by Year of Application").

DATA FOR THOSE APPLICATIONS WHICH WERE FILED BUT NEVER ISSUED (ROUGHLY 25% OF TOTAL FILINGS) ARE NOT INCLUDED IN THIS REPORT.

Since the average time period between filing for a patent and the issuing of the patent (i.e., a patent's "pendency") is now about 24 months, the patented application data for the most recent years are incomplete.* This is because a significant number of the applications filed in the most recent years, which will ultimately become patents, were still pending in **December 2004**. Since they had not yet become patents at the time this report was prepared, they were not included in this report.

Patented application data are of significant value since the date an application was filed more accurately reflects when the technology was developed. Additionally, fluctuations in data based on application date are much more likely to reflect changes in technological activity, since such fluctuations would for the most part be immune from changes in PTO processing such as occurred in 1986 when the PTO issued fewer

patents than would normally have been expected due to a lack of funds to print patents. Note that a patent's "pendency" can be quite variable from one patent to another thereby affecting the date of patent grant. Such variation in pendency is determined by many factors, including PTO workload (which varies between technologies), budget and manpower levels, patent printing schedules, etc.

Parts of the Report

Parts A1 and A2 present tables which show, by number and percent, the patent activity. Part A1 presents data by year of patent grant ("Patents Granted by Date of Patent Grant"). Part A2 redistributes grant data by year of patent application ("Patents Granted by Date of Patent Application"). The location of patent origin is determined by the residence of the first-named inventor at the time of grant.

Information on **patent ownership** reflects ownership at the time of patent grant and does not include subsequent changes in ownership. If more than one assignee was declared at the time of grant, the patent is attributed to the first-named assignee. The U.S. 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 this category. While U.S. Government patent ownership includes only patents granted to the Federal Government, no such distinction is made for Foreign Government patents.

Part B is a ranked listing of Federal organizations which have received 1 or more U.S. patents since 1977. Information on patent ownership reflects ownership at the time of patent grant (see explanation for Parts A1 and A2, above). Although a substantial effort has been made to combine name variations into a single organizational name, many organizations continue to have patents listed under more than one organizational name.

* As of **December 31, 2004**, UTILITY patent application data (most issued patent documents are utility patents) were approximately 93% complete for patent applications filed in 1999, 84% complete for applications filed in 2000, and 66% complete for 2001 filings, and 44% complete for applications filed in 2002. They are essentially complete for applications filed prior to 1999.

Part A1

Patent Grants as Distributed By Year of Patent Grant

Page A1- 1

Foreign Individuals

Page A1- 2

Foreign Individuals	0
---------------------	---

Part A2

Patent Grants as Distributed By Year of Patent Application

U.S. FEDERAL GOVERNMENT (UTILITY, DESIGN, PLANT, REISSUE PATENTS, STATUTORY INVENTION REGISTRATIONS, DEFENSIVE PUBLICATIONS)

---- Patents Granted By Date Of Patent Application (Granted: Jan 01, 1977 - Dec 31, 2004) ----

Ownership:

Page A2- 2

[illegible]

Part B

Ranked Listing of Organizations with Patent Grants
As Distributed By Year of Patent Grant
and As Distributed By Year of Patent Application

---- Organizational Patenting (Granted: Jan 01, 1977 - Dec 31, 2004) ---- Ranked List of Organizations with 1 or More Patents ----

	Pre															
	1991	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	TOTAL
UNITED STATES OF AMERICA, NAVY																
Patents By Year of Grant:	3999	396	314	360	395	347	294	299	345	358	365	326	386	365	322	8871
Patents By Year of Application:	4815	331	368	368	316	343	336	372	358	285	320	316	258	84	1	8871
UNITED STATES OF AMERICA, ARMY																
Patents By Year of Grant:	3105	201	168	184	203	191	155	170	166	142	147	165	149	131	135	5412
Patents By Year of Application:	3403	172	214	205	188	206	178	144	155	146	154	123	88	35	1	5412
UNITED STATES OF AMERICA, DEPARTMENT OF ENERGY																
Patents By Year of Grant:	3185	215	250	182	205	119	71	69	62	53	57	69	45	42	40	4664
Patents By Year of Application:	3594	227	178	167	78	69	68	56	55	48	56	39	27	2	0	4664
UNITED STATES OF AMERICA, AIR FORCE																
Patents By Year of Grant:	2039	149	145	139	138	86	104	94	84	91	84	106	76	68	55	3458
Patents By Year of Application:	2325	135	131	112	101	106	94	83	91	85	74	66	42	13	0	3458
UNITED STATES OF AMERICA, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION																
Patents By Year of Grant:	1484	151	151	166	160	122	104	97	95	93	97	92	85	80	89	3066
Patents By Year of Application:	1721	170	159	167	125	111	99	95	102	72	98	74	64	9	0	3066
UNITED STATES OF AMERICA, HEALTH & HUMAN SERVICES																
Patents By Year of Grant:	404	50	76	85	108	97	117	150	169	139	97	103	91	87	118	1891
Patents By Year of Application:	595	98	131	129	190	217	72	103	69	85	82	91	25	4	0	1891
UNITED STATES OF AMERICA, DEPARTMENT OF AGRICULTURE																
Patents By Year of Grant:	684	47	55	54	38	49	41	49	75	71	55	67	51	63	41	1440
Patents By Year of Application:	791	58	39	49	51	67	74	65	52	51	56	62	23	2	0	1440
UNITED STATES OF AMERICA, DEPARTMENT OF THE INTERIOR																
Patents By Year of Grant:	340	18	20	10	10	14	17	6	3	5	7	5	12	7	11	485
Patents By Year of Application:	369	16	9	12	18	10	3	5	10	7	6	14	4	2	0	485
UNITED STATES OF AMERICA, DEPARTMENT OF COMMERCE																
Patents By Year of Grant:	110	8	18	27	34	26	24	18	15	21	21	21	20	12	9	384
Patents By Year of Application:	133	22	42	30	26	25	12	18	24	16	18	12	6	0	0	384
UNITED STATES OF AMERICA																
Patents By Year of Grant:	107	16	18	8	5	14	16	9	8	8	1	1	3	2	0	216
Patents By Year of Application:	145	7	9	13	9	20	1	7	1	3	1	0	0	0	0	216
UNITED STATES OF AMERICA, TENNESSEE VALLEY AUTHORITY																
Patents By Year of Grant:	105	10	5	1	4	8	3	3	3	7	2	2	1	1	2	157
Patents By Year of Application:	118	3	2	8	3	4	5	4	4	2	2	0	2	0	0	157

Page B - 2

```

----  Ranked List of Organizations with 1  or More Patents  ----

```

[illegible]

---- Ranked List of Organizations with 1 or More Patents ----