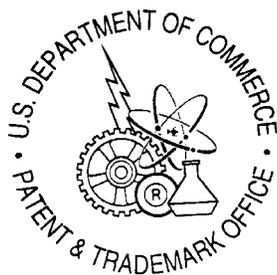


TAF PROFILE REPORT

U.S. (FEDERAL) GOVERNMENT PATENTING

1/1977 - 12/1998



March 1999
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

TAF Profile Report 1/1977 - 12/1998 Explanation of Data

This Technology Assessment and Forecast (TAF) 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, 1998 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 TAF 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 1985" column corresponds to the period January 1, 1977 through December 31, 1984.

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 40% 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 1998**. 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, 1998, UTILITY patent application data (most issued patent documents are utility patents) were approximately 98% complete for patent applications filed in 1995, 84% complete for applications filed in 1996, and 27% complete for applications filed in 1997. They are essentially complete for applications filed prior to 1995.

Part A1

Patent Grants as Distributed By Year of Patent Grant

Part A2

Patent Grants as Distributed By Year of Patent Application

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, 1998) ---- Ranked List of Organizations with 1 or More Patents ----

	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
UNITED STATES OF AMERICA, NAVY																	
Patents By Year of Grant:	2765	248	233	206	126	145	276	396	314	360	395	347	294	299	341	6745	
Patents By Year of Application:	3579	200	118	108	172	214	366	325	358	348	296	315	249	95	2	6745	
UNITED STATES OF AMERICA, ARMY																	
Patents By Year of Grant:	1868	205	256	254	152	200	170	201	168	184	203	191	155	170	166	4543	
Patents By Year of Application:	2350	176	193	144	156	197	171	172	214	204	184	184	145	51	2	4543	
UNITED STATES OF AMERICA, DEPARTMENT OF ENERGY																	
Patents By Year of Grant:	1669	293	258	253	240	233	240	215	250	182	205	119	71	69	61	4358	
Patents By Year of Application:	2259	217	223	187	216	247	229	227	176	165	77	68	57	10	0	4358	
UNITED STATES OF AMERICA, AIR FORCE																	
Patents By Year of Grant:	1098	143	187	204	136	157	114	149	145	139	138	86	104	93	84	2977	
Patents By Year of Application:	1445	175	162	131	133	114	154	134	130	111	95	98	74	20	1	2977	
UNITED STATES OF AMERICA, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION																	
Patents By Year of Grant:	777	144	93	122	93	127	128	151	151	165	160	122	104	97	95	2529	
Patents By Year of Application:	1005	105	93	96	145	139	136	170	156	167	120	102	74	21	0	2529	
UNITED STATES OF AMERICA, HEALTH & HUMAN SERVICES																	
Patents By Year of Grant:	208	35	28	34	27	34	38	50	76	85	108	97	117	150	166	1253	
Patents By Year of Application:	285	29	34	37	56	67	80	91	117	119	149	136	40	13	0	1253	
UNITED STATES OF AMERICA, DEPARTMENT OF AGRICULTURE																	
Patents By Year of Grant:	460	33	34	30	35	43	49	47	55	54	38	49	41	49	75	1092	
Patents By Year of Application:	525	33	34	39	44	58	57	58	34	45	45	55	50	15	0	1092	
UNITED STATES OF AMERICA, DEPARTMENT OF THE INTERIOR																	
Patents By Year of Grant:	274	14	13	11	10	10	8	18	20	10	10	14	17	6	3	438	
Patents By Year of Application:	297	11	11	11	7	12	20	16	9	12	18	10	2	2	0	438	
UNITED STATES OF AMERICA, DEPARTMENT OF COMMERCE																	
Patents By Year of Grant:	51	6	7	13	10	5	18	8	18	27	34	26	23	18	15	279	
Patents By Year of Application:	64	7	10	10	11	16	15	22	41	30	22	21	6	4	0	279	
UNITED STATES OF AMERICA																	
Patents By Year of Grant:	63	3	13	6	7	8	7	16	18	8	5	14	16	9	8	201	
Patents By Year of Application:	71	19	4	4	13	17	17	7	9	13	8	17	1	1	0	201	
UNITED STATES OF AMERICA, TENNESSEE VALLEY AUTHORITY																	
Patents By Year of Grant:	56	7	13	6	8	6	9	10	5	1	4	8	3	3	2	141	
Patents By Year of Application:	66	11	6	10	8	11	6	3	2	8	3	4	3	0	0	141	

