PTMT PROFILE REPORT

U.S. (FEDERAL) GOVERNMENT PATENTING

1/1977 - 12/2007



March 2008 U.S. PATENT AND TRADEMARK OFFICE ELECTRONIC INFORMATION PRODUCTS DIVISION / PTMT MDW 4C18, ALEXANDRIA, VA 22313-1450 tel (571) 272-5600 / FAX (571) 273-0110

A PATENT TECHNOLOGY MONITORING TEAM REPORT

U.S. (Federal) Government Patenting Report 1/1977 - 12/2007 Explanation of Data

This Patent Technology Monitoring Team (PTMT) 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, 2007** 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 database maintained by the U.S. Patent and Trademark Office.

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 1994**" column corresponds to the period January 1, 1977 through **December 31, 1993**.

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 34% 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 32 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 2007**. 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 and 2005 when the PTO issued

fewer patents than would normally have been expected due to administrative reasons. 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 Government 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 name.

percentages restricted to Federal Government patents are not available.

^{*} As of **December 31, 2007**, UTILITY patent application data (most issued patent documents are utility patents) were approximately 98% complete for patent applications filed in 2000, 91% complete for applications filed in 2001, 86% complete for applications filed in 2002, 69% complete for applications filed in 2003, 46% complete for applications filed in 2004, and 21% complete for applications filed in 2005; data are essentially complete for applications filed prior to 2000. Currently, completion

Part A1 Patent Grants as Distributed By Year of Patent Grant

		Patents	Granted	By Da	te Of	Patent	Grant	(Granted:	Jan 01,	1977 -	Dec 31,	2007)					
								UMBER OF									
	Pre 1994	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total	
Total	19441	1310	1083	961	974	1040	1000	960	985	945	891	859	713	815	738	32715	
U.S. Origin	19303	1299	1076	956	963	1031	996	953	975	933	881	855	699	801	727	32448	
Foreign Origin	138	11	7	5	11	9	4	7	10	12	10	4	14	14	11	267	
UNITED KINGDOM	27	1				1	1	1	1		1		2	1	1	37	
GERMANY	14	1		3	2	3	1	1	1	4	_	2	3	1	2	37 37	
CANADA	19	1	2	3	2	3	1	1	_	4	2	1	1	2	1	31	
ISRAEL	14	1	1	1	2				1		1	_	1	1	1	24	
JAPAN	7	3	2	-	1	2			1		1		-	1	3	21	
INDIA	19	3			-				_		_			_	3	19	
ITALY	2				2	1		1	2	1		1	1	1		12	
FRANCE	4	1			_	_		2	_	_		-	1	1	1	10	
RUSSIAN FEDERATION	_	_						1	2	5	1		=	=	_	9	
SOUTH KOREA							1			1			4	1	1	8	
GREECE	7															7	
AUSTRALIA	4		1								1					6	
SWITZERLAND	3	2					1									6	
TURKEY	4															4	
BRAZIL			1		1	1								1		4	
BELGIUM					1						2			1		4	
TAIWAN	1				1				1							3	
SWEDEN	1														1	2	
FINLAND	1					1										2	
YUGOSLAVIA		1											1			2	
CHINA P.REP.	2															2	
EGYPT	2															2	
NORWAY	2															2	
KENYA									1		1					2	
NETHERLANDS	1															1	
ARAB EMIRATES	_			1												1	
TANZANIA	1															1	
JORDAN	_				1											1	
BULGARIA POLAND	1 1															1 1	
VENEZUELA	1															1	
SINGAPORE										1						1	
AUSTRIA										_				1		1	
THAILAND														1		1	
UKRAINE														1		1	
														-		-	
Ownership:																	
U.S. Corporations																0	
U.S. Government	19441	1310	1083	961	974	1040	1000	960	985	945	891	859	713	815	738	32715	
U.S. Individuals																0	
Foreign Corporations																0	
Foreign Government																0	
Foreign Individuals																0	

Page A1- 2

Patents Granted By Date Of Patent Grant (Granted: Jan 01, 1977 - Dec 31, 2007) - - - - - - - - - - - PERCENT OF PATENTS - - - - -Pre 1994 Total Total U.S. Origin Foreign Origin UNITED KINGDOM GERMANY CANADA ISRAEL JAPAN INDIA ITALY FRANCE RUSSIAN FEDERATION SOUTH KOREA GREECE AUSTRALIA SWITZERLAND TURKEY BRAZIL BELGIUM TAIWAN SWEDEN FINLAND YUGOSLAVIA CHINA P.REP. EGYPT NORWAY KENYA NETHERLANDS ARAB EMIRATES TANZANIA JORDAN BULGARIA POLAND VENEZUELA SINGAPORE AUSTRIA THAILAND UKRAINE Ownership: U.S. Corporations U.S. Government U.S. Individuals Foreign Corporations Foreign Government Foreign Individuals

Part A2 Patent Grants as Distributed By Year of Patent Application

Page A2- 1 U.S. (FEDERAL) GOVERNMENT PATENTING REPORT

	Pat	onta Cr	antod B	n Dato	Of Bat	ont Ann	liantion	(Crant	od. Tan	01 1977	- Dog 3	1 2007)					
	Pat	ents Gr	anted E	By Date	OI Pate	ent App	lication	(Grant	ea: Jan	01, 19//	- Dec 3	1, 2007)					
						N	UMBER O		ED ADDIT	CA TITOMA							
	Pre 1994	1994	1995	1996	 1997	N 1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total	
	PIE 1994	1334	1993	1990	1337	1990	1333	2000	2001	2002	2003	2004	2005	2000	2007	IOCAL	
Total	22008	1117	1209	954	987	948	860	999	1006	915	782	543	305	77	5	32715	
U.S. Origin	21852	1105	1199	944	980	942	851	986	994	905	768	538	303	76	5	32448	
Foreign Origin	156	12	1199	10	980 7	6	9	13	12	10	14	5	2	1	5	267	
Foreign Origin	136	12	10	10	,	0	9	13	12	10	14	5	4			267	
UNITED KINGDOM	28			1	1	1	1		1	1	2		1			37	
GERMANY	16	3	1	3	1	1	-	4	1	2	3	1	1			37	
CANADA	23	1	_	3	_	1	2	1	3	2	3	_				31	
ISRAEL	16	1	1	1		1	1	-	,	2	1					24	
JAPAN	11	2	1	1	1	_	_	1	1	2	2			1		21	
INDIA	19	2	_	_	_			_			2			_		19	
ITALY	2	2	2		1		1	1	2			1				12	
FRANCE	5	2	1	1	_		1		2	2	1					10	
RUSSIAN FEDERATION	3			_		1	2	4	1	1	_					9	
SOUTH KOREA					1	_	2	2		1	4					8	
GREECE	7				_			2		_	4					7	
AUSTRALIA	5								1							6	
SWITZERLAND	5		1													6	
TURKEY	4		1													4	
BELGIUM	4	1			1				1	1						4	
BRAZIL		1	1	1			1									4	
TAIWAN	1	1		_	1											3	
SWEDEN	1	_			_							1				2	
FINLAND	1			1								1				2	
CHINA P.REP.	2															2	
YUGOSLAVIA	1										1					2	
KENYA			1				1				1					2	
EGYPT	2		_				_									2	
NORWAY	2															2	
VENEZUELA	1															1	
NETHERLANDS	1															1	
ARAB EMIRATES	_		1													1	
BULGARIA	1															1	
JORDAN	_			1												1	
TANZANIA	1			_												1	
POLAND	1															1	
SINGAPORE						1										1	
THAILAND						_			1							1	
AUSTRIA									-			1				1	
UKRAINE												1				1	
UKKAINE																•	
Ownership:																	
U.S. Corporations																0	
U.S. Government	22008	1117	1209	954	987	948	860	999	1006	915	782	543	305	77	5	32715	
U.S. Individuals	22000	111/	1203	734	201	740	500	,,,,	1000	713	,02	543	303	,,	,	0	
U.D. Individuals																0	
Foreign Corporations																0	
Foreign Government																0	
Foreign Individuals																0	
																•	

Page A2- 2

Patents Granted By Date Of Patent Application (Granted: Jan 01, 1977 - Dec 31, 2007) - - - - - - - - PERCENT OF PATENTED APPLICATIONS - - - - - -Pre 1994 Total Total U.S. Origin Foreign Origin UNITED KINGDOM GERMANY CANADA ISRAEL JAPAN INDIA ITALY FRANCE RUSSIAN FEDERATION SOUTH KOREA GREECE AUSTRALIA SWITZERLAND TURKEY BELGIUM BRAZIL TAIWAN SWEDEN FINLAND CHINA P.REP. YUGOSLAVIA KENYA EGYPT NORWAY VENEZUELA NETHERLANDS ARAB EMIRATES BULGARIA JORDAN TANZANIA POLAND SINGAPORE THAILAND AUSTRIA UKRAINE Ownership: U.S. Corporations U.S. Government U.S. Individuals Foreign Corporations Foreign Government Foreign Individuals

Part B

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

Ownerstand Patentin				(C	J. T ^	1077	D 31	2007		Dankad Ti	^			1	V D-1	
Organizational Patenting				(Grante	a: Jan 0	11, 1977	- Dec 31,	, 2007)		kanked Li	st of O	rganızati	ons with	1 or	more Pat	ents
	Pre															
	1994	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL
	1994	1334	1993	1990	1997	1990	1999	2000	2001	2002	2003	2001	2003	2000	2007	IOIAL
UNITED STATES OF AMERICA, NAVY																
Patents By Year of Grant:	5124	397	352	299	303	346	360	366	326	388	366	322	262	284	273	9768
Patents By Year of Application:	5947	318	354	338	377	361	292	340	360	345	327	236	130	40	3	9768
UNITED STATES OF AMERICA, ARMY																
Patents By Year of Grant:	3662	204	192	156	170	167	143	147	165	150	131	135	127	181	144	5874
Patents By Year of Application:	4003	189	208	179	148	157	154	163	143	153	153	139	66	18	1	5874
UNITED STATES OF AMERICA, DEPARTMENT	OF ENERG	Y														
Patents By Year of Grant:	3833	205	119	71	69	63	53	57	69	45	43	40	22	22	23	4734
Patents By Year of Application:	4168	78	69	68	56	55	48	57	43	43	27	10	10	2	0	4734
UNITED STATES OF AMERICA, AIR FORCE																
Patents By Year of Grant:	2473	138	86	104	94	84	91	84	106	76	68	55	55	49	43	3606
Patents By Year of Application:	2705	101	106	94	83	92	85	77	76	73	51	34	27	2	0	3606
UNITED STATES OF AMERICA, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION																
-																
Patents By Year of Grant:	1955	160	122	104	97	95	93	97	92	85	80	102	87	62	70	3301
Patents By Year of Application:	2220	125	111	99	95	102	72	104	93	111	84	48	29	7	1	3301
UNITED STATES OF AMERICA, HEALTH & H	IIMANI CEDIT	TORC														
Patents By Year of Grant:	OMAN SERV 631	110	104	123	152	174	142	97	103	92	87	118	81	122	100	2236
Patents By Year of Application:	986	193	234	73	106	76	102	127	149	89	60	22	15	4	0	2236
racenes by rear or apprication:	300	193	231	73	100	70	102	12/	149	03	00	22	13	-	U	2230
UNITED STATES OF AMERICA, DEPARTMENT	OF AGRIC	ULTURE														
Patents By Year of Grant:	842	38	49	41	49	75	71	55	67	51	63	41	29	39	26	1536
Patents By Year of Application:	939	51	67	74	65	52	52	60	72	45	35	18	6	0	0	1536
UNITED STATES OF AMERICA, DEPARTMENT	OF THE I	NTERIOR														
Patents By Year of Grant:	388	10	14	17	8	3	5	7	5	12	7	11	9	1	7	504
Patents By Year of Application:	406	18	12	3	5	10	7	8	17	5	8	3	2	0	0	504
UNITED STATES OF AMERICA, DEPARTMENT	OF COMME	RCE														
Patents By Year of Grant:	164	34	26	24	18	15	21	21	21	20	12	9	4	5	3	397
Patents By Year of Application:	228	26	25	12	18	24	16	19	14	11	1	1	2	0	0	397
UNITED STATES OF AMERICA, DIRECTOR N.		ECURITY		_		_	_						_			
Patents By Year of Grant:	45	4	3	3	1	8	7	17	11	10	15	10	9	17	12	172
Patents By Year of Application:	56	4	3	3	14	11	15	17	12	15	4	10	8	0	0	172
INTERD CHARGE OF AMERICA STREET	mar ppe==	ICMTON 3.C	ENGV.													
UNITED STATES OF AMERICA, ENVIRONMENT				•	7	,	4	•	10	_		8	_	10	1.0	170
Patents By Year of Grant:	69 78	4 7	5 12	9	7 8	3	4 10	9 8	12 11	6 7	8 15	8 6	6 4	12 2	10	172 172
Patents By Year of Application:	/8	,	12	2	0	2	10	8	11	,	13	0	4	2	U	1/2

Page B - 2

																_	
	Organizational Patenting				(Grante	d: Jan (1, 1977	- Dec 31	, 2007)]	Ranked Li	st of Or	ganizati	ons with	1 or	More Pat	ents
		Pre															
		1994	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL
UNITED STATE	ES OF AMERICA, TENNESSEE V	ALLEY AU	THORITY														
Patents 1	By Year of Grant:	121	4	8	3	3	3	7	2	2	1	1	2	0	1	1	159
Patents 1	By Year of Application:	131	3	4	5	4	4	2	2	0	2	0	1	0	1	0	159
UNITED STATE	ES OF AMERICA																
Patents 1	By Year of Grant:	59	0	1	0	0	1	0	0	1	0	0	0	0	1	1	64
Patents 1	By Year of Application:	60	0	1	0	1	0	0	0	0	0	1	1	0	0	0	64
UNITED STAT	ES OF AMERICA, POSTAL SERV	ICE															
Patents 1	By Year of Grant:	6	1	0	1	1	0	0	0	2	1	4	2	13	14	19	64
Patents 1	By Year of Application:	8	0	0	1	0	0	2	8	8	11	10	11	4	1	0	64
UNITED STATE	ES OF AMERICA, DEPARTMENT	OF TRANS	PORTATIO	N													
Patents 1	By Year of Grant:	29	1	0	2	2	3	2	1	0	6	0	2	1	0	0	49
Patents 1	By Year of Application:	30	1	2	3	5	2	0	4	1	1	0	0	0	0	0	49
UNITED STATE	ES OF AMERICA, DEPARTMENT	OF VETER	ANS AFFA	IRS													
Patents 1	By Year of Grant:	10	0	0	0	0	0	0	0	1	2	4	1	7	3	5	33
Patents 1	By Year of Application:	10	0	0	0	1	0	1	4	6	4	3	3	1	0	0	33
UNITED STATE	ES OF AMERICA, FEDERAL COM	MUNICATI	ONS COMM	ISSION													
Patents 1	By Year of Grant:	15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	17
Patents 1	By Year of Application:	15	0	0	0	1	0	1	0	0	0	0	0	0	0	0	17
UNITED STAT	ES OF AMERICA, TREASURY																
Patents 1	By Year of Grant:	7	0	0	2	0	0	0	0	0	0	0	0	0	0	0	9
Patents 1	By Year of Application:	7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	9
UNITED STATE	ES OF AMERICA, ATTORNEY GE	NERAL															
Patents 1	By Year of Grant:	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	4
Patents 1	By Year of Application:	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4
UNITED STAT	ES OF AMERICA, LIBRARY OF	CONGRESS															
Patents 1	By Year of Grant:	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4
Patents 1	By Year of Application:	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
UNITED STAT	ES OF AMERICA, DEPARTMENT	OF STATE															
Patents 1	By Year of Grant:	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	3
Patents 1	By Year of Application:	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3
ARMY & AIR	FORCE EXCHANGE SERVICE																
Patents 1	By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Patents 1	By Year of Application:	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1

Page B - 3

Organizational Patenting				(Grante	ed: Jan 0	1, 1977	- Dec 31	, 2007)		Ranked Li	st of Or	rganizati	lons with	1 or	More Pat	tents
	_															
	Pre	1004	1005	1006	1005	1000	1000	2000	0001	0000	0000	2004	2225	2006	0000	mom
	1994	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL
UNITED STATES OF AMERICA, CENTRAL IN	TELLIGENC:	E AGENCY														
Patents By Year of Grant:	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Patents By Year of Application:	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
UNITED STATES OF AMERICA, FEDERAL RE	SERVE BAN	K OF ATL	ANTA													
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
UNITED STATES OF AMERICA, FEDERAL RE																
Patents By Year of Grant:	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Patents By Year of Application:	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
THE COLUMN TO THE COLUMN TWO THE COL																
UNITED STATES OF AMERICA, FEDERAL RE- Patents By Year of Grant:	SERVE BAN	COF CLE	0 OELAND	0	0	0	0	0	0	0	0	0	0	0	1	1
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
ratenes by rear or apprication.	Ū	Ū	Ū	v	v	Ū	Ū	Ū	Ū	Ū	Ū	Ū	_	Ū	Ū	-
UNITED STATES OF AMERICA, FEDERAL RE	SERVE BAN	K OF RIC	HMOND													
Patents By Year of Grant:	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Patents By Year of Application:	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
UNITED STATES OF AMERICA, FEDERAL TRA	ADE COMMI	SSION														
Patents By Year of Grant:	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Patents By Year of Application:	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
UNITED STATES OF AMERICA, NATIONAL SO	CIENCE FO		•	^	•	•	•	•	•	•		•	•	•	•	-
Patents By Year of Grant: Patents By Year of Application:	0	0	0	0	0	0	0	0 1	0	0	1 0	0	0	0	0	1 1
Patents By Year of Application:	U	U	U	U	U	U	U	_	U	U	U	U	U	U	U	1
UNITED STATES OF AMERICA, SMALL BUSI	NESS ADMI	NISTRATI	ON													
Patents By Year of Grant:	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Patents By Year of Application:	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Other Organizations (0)																
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0