

# THE INTERNATIONAL PATENT SYSTEM IN 2006 PCT YEARLY REVIEW



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#### 1. INTRODUCTION

In 2006, the international patent system saw several notable developments.

**International patent application filings** – The number of PCT international applications filed in 2006 grew by 7.9% compared to the previous year, to a total of 147,500 applications. The most significant growth has come from North East Asian countries, namely China, Japan and the Republic of Korea, which now account for 25% of applications filed. In 2006, 23% of the international applications published were classified in three technical fields: telecommunications, pharmaceuticals and cosmetics and information technology. International patent applications published in the field of semiconductors saw an increase of 28%, making this the fastest growing technical field 2006.

**The move to an electronic environment** – For the second consecutive year, more PCT international applications were filed on electronic media than on paper. Since 2006, the International Bureau and other Offices have been exchanging an increasing number of documents in electronic form. For newly received applications, the entire business flow within the International Bureau, from the receipt to the publication of international applications, has moved into a fully electronic environment.

**Dissemination of PCT data through PatentScope** – Since 2005 the PatentScope web portal has provided free access to all published PCT international applications, which now number more than 1.2 million. In 2006, additional features were added (RSS notification of new search results; graphical views of search results; more document types) and all publications are reclassified with the reformed International Patent Classification (IPC8) that came into force in January 2006. The number of PCT database pages viewed has tripled with about 12 million pages viewed in December 2006.

**Additional Statistics** – The International Bureau now publishes statistics on patent applications filed and granted since the signature of the Paris Convention for the Protection of Industrial Property in 1883 and patent applications filings – including PCT national phase entries – by country of origin in electronic format. In 2006, the International Bureau also published the *WIPO Patent Report 2006*, which provides statistics on worldwide patent activities.

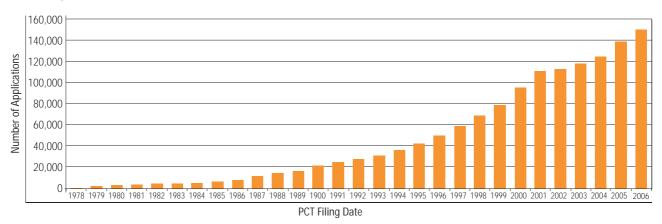
The **Patent Cooperation Treaty (PCT)** offers inventors and industry an advantageous route for obtaining patent protection internationally. By filing one "international" patent application under the PCT, protection of an invention can be sought simultaneously in each of a large number of countries. Both applicants and patent offices of the 134 PCT Member States benefit from the uniform formality requirements, the international search and preliminary examination reports, and the centralized international publication provided by the PCT system. The national patent granting procedure and the related expenses are postponed, in the majority of cases, by up to 18 months (or even longer in the case of some offices) as compared with the traditional patent system. At the end of this period, the applicant should have received important value-added information concerning the likelihood of obtaining patent protection.

# 2. FILING OF PCT INTERNATIONAL APPLICATIONS

# 2.1 PCT Filing Trends

The graph below shows the number of PCT international applications filed since 1978. In 2006, 147,500 PCT international applications were filed, representing a 7.9% increase over the previous year.

# **PCT Filings Trends since 1978**



Source: WIPO Statistics Database

# 2.2 Top 15 Countries of Origin<sup>1</sup>

The top 15 countries of origin are shown in the table below. The most significant changes in 2006 are the rankings of the Republic of Korea (5th, up 1 place) and China (8th, up 2 places). All together, the European Patent Office Member States account for 50,016 PCT international applications, which is an increase of 5.6% over 2005.

Countries of Origin	2002	2003	2004	2005	2006	Change compared with 2005
United States of America	41,296	41,029	43,350	46,772	50,089	7.1%
Japan	14,063	17,414	20,264	24,864	26,906	8.2%
Germany	14,326	14,662	15,216	16,009	16,866	5.4%
France	5,089	5,171	5,185	5,745	6,109	6.3%
Republic of Korea	2,520	2,949	3,558	4,687	5,935	26.6%
United Kingdom	5,376	5,206	5,026	5,077	5,064	-0.3%
Netherlands	3,977	4,479	4,284	4,514	4,452	-1.4%
China	1,018	1,295	1,706	2,499	3,910	56.5%
Switzerland	2,755	2,861	2,899	3,285	3,488	6.2%
Sweden	2,990	2,612	2,851	2,877	3,312	15.1%
Italy	1,982	2,163	2,189	2,346	2,721	16.0%
Canada	2,260	2,270	2,104	2,315	2,470	6.7%
Australia	1,759	1,680	1,837	1,994	1,989	-0.3%
Finland	1,762	1,557	1,672	1,891	1,863	-1.5%
Israel	1,174	1,129	1,227	1,456	1,584	8.8%
All Others	8,045	8,722	9,259	10,308	10,742	4.2%
Total	110,392	115,199	122,627	136,639	147,500	7.9%

The country of origin of an international application is the country of residence of the first-named applicant in the international application.

# 2.3 Top 20 PCT Applicants

The table below shows the top 20 PCT applicants<sup>2</sup>. In 2006, 231,000 applicants<sup>3</sup> (including inventors) used the PCT system. The position of the first five PCT applicants remained the same as in 2005.

2006 Ranking	Position Changed	Applicant's Name	Country of Origin	PCT Applications Published in 2006	Change Compared with 2005
1	0	KONINKLIJKE PHILIPS ELECTRONICS N.V.	NL	2,495	3
2	0	MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.	JP	2,344	324
3	0	SIEMENS AKTIENGESELLSCHAFT	DE	1,480	81
4	0	NOKIA CORPORATION	FI	1,036	137
5	0	ROBERT BOSCH GMBH	DE	962	118
6	+2	3M INNOVATIVE PROPERTIES COMPANY	US	727	122
7	0	BASF AKTIENGESELLSCHAFT	DE	714	58
8	+11	TOYOTA JIDOSHA KABUSHIKI KAISHA	JP	704	305
9	-3	INTEL CORPORATION	US	690	-6
10	-1	MOTOROLA, INC.	US	637	57
11	+6	MITSUBISHI DENKI KABUSHIKI KAISHA	JP	616	178
12	+9	QUALCOMM INCORPORATED	US	608	229
13	+24	HUAWEI TECHNOLOGIES CO., LTD.	CN	575	326
14	-1	TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)	SE	572	61
15	+9	FUJITSU LIMITED	JP	571	213
16	+12	LG ELECTRONICS INC.	KR	567	238
17	+1	E.I. DUPONT DE NEMOURS AND COMPANY	US	523	100
18	+5	HEWLETT-PACKARD DEVELOPMENT COMPANY, L.F	P. US	509	150
19	-7	HONEYWELL INTERNATIONAL INC.	US	508	-11
20	-6	SAMSUNG ELECTRONICS CO., LTD.	KR	505	22

Source: WIPO Statistics Database

# 2.4 PCT and Developing Countries

The table below shows the number of PCT international applications filed by applicants from certain developing countries. In 2006, filings from developing countries saw a 32% increase as compared to 2005, representing 8.3% of all international applications filed.

Developing Country	2002	2003	2004	2005	2006
Republic of Korea	2,520	2,949	3,558	4,687	5,935
China	1,018	1,295	1,706	2,499	3,910
India	525	764	724	679	780
Singapore	330	282	431	442	453
South Africa	384	357	411	359	420
Brazil	201	219	278	280	328
Mexico	132	131	118	141	176
Malaysia	18	31	45	38	59
Cyprus	23	28	43	30	49
Egypt	1	22	53	51	44
Colombia	36	24	22	23	29
Cuba	11	20	18	11	21
Philippines	20	21	11	26	20
Argentina*	9	15	11	20	19
Kazakhstan	16	7	7	7	17
Viet Nam	2	7	2	0	9
Morocco	10	7	7	9	9
Indonesia	16	2	6	8	8
Mongolia	0	0	0	0	6
Democratic People's Republic of Korea	0	3	3	3	4
Algeria	3	5	6	4	4
Uzbekistan	2	0	0	2	1
Antigua and Barbuda	0	1	1	2	0
Zimbabwe	2	2	3	1	0

<sup>\*</sup> Although this is not a PCT Contracting State, applicants who are nationals and/or residents of this State (or of any other State which is not a PCT Contracting State) can file a PCT application together with another applicant who is a national and/or resident of a PCT Contracting State.

Based on the number of PCT international applications published in 2006.

<sup>&</sup>lt;sup>3</sup> An application typically has multiple applicants, thus the number of applicants is greater than the number of PCT international applications.

# 2.5 Languages of Filing

The table below shows the number of PCT international applications filed in 2006 according to the language of filing. A PCT international application may be filed in any language accepted by the relevant receiving Office, but must later be translated into one of the eight official publication languages (Arabic, Chinese, English, French, German, Japanese, Russian and Spanish).

Language of Filing	2006	Percent
English	89,206	60.5%
Japanese	24,542	16.6%
German	16,840	11.4%
French	5,174	3.5%
Korean	3,584	2.4%
Chinese	3,510	2.4%
Spanish	1,167	0.8%
Italian	1,023	0.7%
Russian	642	0.4%
Dutch	506	0.3%
Swedish	444	0.3%
Finnish	418	0.3%
Norwegian	173	0.1%
Danish	140	0.1%
Hungarian	41	<0.1%
Slovenian	22	<0.1%
Turkish	17	<0.1%
Czech	16	<0.1%
Portuguese	11	<0.1%
Croatian	11	<0.1%
Slovak	8	<0.1%
Other	8	<0.1%
Total	147,500	100%

# 2.6 Classification by Technical Field

The table below shows the technical fields of PCT international applications published in 2006, and compares each total with the corresponding total for the previous years. In this table, PCT international applications are classified according to 30 classifications<sup>4</sup> based on the International Patent Classification (IPC) system. As an international application can be counted in more than one technical field, the total of applications by technical field is higher than the total of applications published.

	Technical field	2002	2003	2004	2005	(	Change compared with 2005
	Electricity – Electronics						
1	Electrical devices, electrical engineering, electrical energy	6,973	7,365	7,569	8,774	9,847	12%
2	Audio-visual technology	5,391	6,057	6,075	6,718	7,322	9%
3	Telecommunications	11,167	10,821	10,441	11,674	13,478	15%
4	Information technology	11,096	9,916	9,535	11,026	13,428	22%
5 <b>II</b>	Semiconductors	3,612	4,051	4,109	4,727	6,034	28%
	Instruments						
6	Optics	2,408	2,616	2,562	3,216	3,725	16%
7	Analysis, measurement, control technology	10,767	11,449	10,869	11,881	12,780	8%
8	Medical technology	7,360	8,601	8,878	9,568	11,009	15%
9	Nuclear engineering	448	517	496	499	561	12%
Ш	Chemistry – Pharmaceuticals						
10	Organic fine chemistry	4,537	5,225	5,653	6,116	6,236	2%
11	Macromolecular chemistry, polymers	3,894	3,984	4,002	4,534	5,390	19%
12	Pharmaceuticals, cosmetics	9,654	9,976	9,437	11,101	13,470	21%
13	Biotechnology	9,001	8,601	7,611	7,320	7,026	-4%
14	Agriculture and food	1,522	1,660	1,839	1,950	2,290	17%
15	Chemical and petrol industry, basic materials chemistry	3,646	3,879	3,703	4,264	4,739	11%
16	Surface technology, coating	2,912	3,293	3,327	3,649	4,297	18%
17	Materials, metallurgy	2,909	3,037	3,032	3,256	3,764	16%
IV	Process engineering						
18	Chemical engineering	4,767	5,365	4,908	4,917	5,567	13%
19	Materials processing, textiles, paper	4,159	4,780	4,284	4,764	5,406	13%
20	Handling, printing	3,947	4,540	4,556	5,406	6,120	13%
21	Agricultural and food processing, machinery and apparatu		1,274	1,334	1,525	1,479	-3%
22	Environmental technology	1,230	1,314	1,250	1,383	1,541	11%
V	Machinery – Mechanics – Transport						
23	Machine tools	2,369	2,485	2,324	2,774	2,963	7%
24	Engines, pumps, turbines	2,583	2,820	2,975	3,205	3,666	14%
25	Thermal processes and apparatus	1,390	1,580	1,542	1,825	2,031	11%
26	Mechanical Components	3,229	3,567	3,720	4,113	4,657	13%
27	Transport	3,944	4,597	4,881	5,545	6,012	8%
28	Space technology and weapons	448	494	436	536	498	-7%
VI	Consumer goods – Civil engineering						
29	Consumer goods and equipment	4,952	5,757	6,040	7,244	8,182	13%
30	Civil engineering, building, mining	3,132	3,461	3,848	3,914	4,362	11%
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<sup>&</sup>lt;sup>4</sup> Created by OST, INPI and Fhg-ISI.

# 3. PERFORMANCE OF THE INTERNATIONAL PATENT SYSTEM

# 3.1 Receiving Offices

The table below shows the top 10 receiving Offices in 2006. International applications filed under the PCT are first filed with a receiving Office, which may be a national or regional Office or the International Bureau of WIPO. In 2006, there were 107 Offices acting as PCT receiving Offices.

Receiving Office	2006	Percent
United States of America	49,439	33.5%
Japan	26,420	17.9%
European Patent Office	23,546	16.0%
International Bureau	8,310	5.6%
Republic of Korea	5,919	4.0%
United Kingdom	5,237	3.6%
France	3,854	2.6%
China	3,826	2.6%
Germany	2,337	1.6%
Canada	2,156	1.5%
Others	16,456	11.2%
Total	147,500	100%

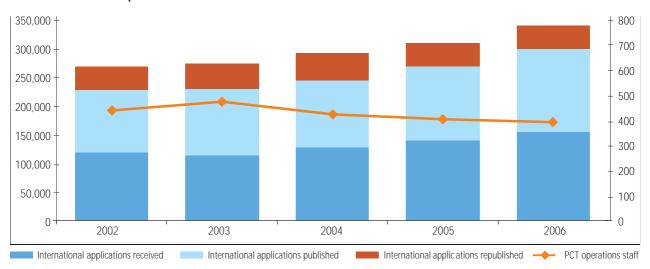
Source: WIPO Statistics Database

#### 3.2 International Bureau

# 3.2.1 Workload and PCT Operations Staff

Between 2002 and 2006, the workload of the International Bureau increased by 26.6% while the number of personnel<sup>5</sup> processing international applications decreased by 11%.

#### **Workload and PCT Operations Staff**



	2002	2003	2004	2005	2006	Change Compared with 2002
International Applications Received	114,363	110,282	123,415	133,545	148,772	30%
International Applications Published	104,166	109,980	112,526	125,292	138,740	33%
International Applications Republished	40,382	42,704	44,809	39,271	40,349	0%
PCT Operations Staff	421	455	407	388	376	-11%

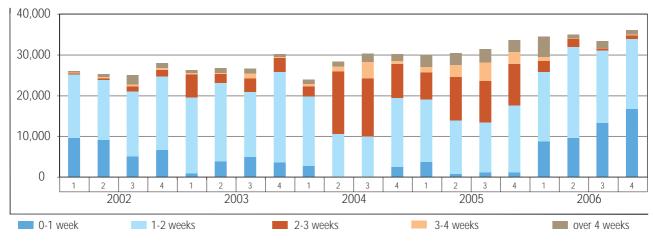
<sup>&</sup>lt;sup>5</sup> Number of staff directly involved in processing, translating and publishing PCT international applications.

#### 3.2.2 Timeliness of Publication

#### **Publication**

The graph below shows the timeliness of publication by the International Bureau. In 2006, 89% of international applications were published within the 2 weeks following the expiration of the 18 months from the priority date, 93% were published within 3 weeks and 94% within 4 weeks.

#### Timeliness of PCT/IB to publish International Applications

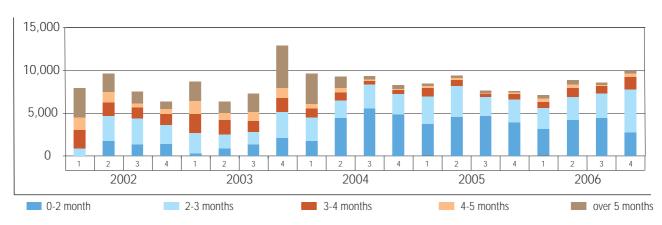


Source: WIPO Statistics Database

# Republication

The graph below shows the timeliness of publication by the International Bureau of the International Search Reports (ISRs) received after the publication of the international applications they relate to. In 2006, 42% were published within 2 months of receipt, 80% within 3 months and 92% within 4 months.

# Timeliness of PCT/IB to republish International Applications with their ISR



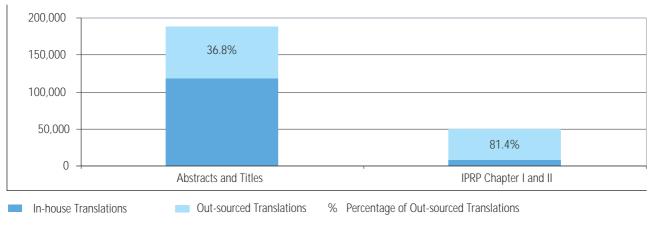
#### 3.2.3 Translation and Terminology

As part of its duties, the International Bureau translates and publishes the abstracts and titles of PCT applications into English and French, and International Preliminary Examination Reports on Patentability (IPRP) into English. In 2006, the International Bureau produced approximately 187,920 abstract translations and 50,836 IPRP translations. The International Bureau has relied heavily on outsourcing as a means of absorbing this considerable workload. In conjunction with the outsourcing activities, the International Bureau has maintained and will continue to maintain an appropriate level of internally produced translations and is implementing a series of control measures to ensure the quality of the externally produced translations.

The objective underlying the International Bureau's translation work is to enhance the patent system's disclosure function by making the technological information embodied in PCT applications accessible in languages other than those in which the original documents were filed.

The graph below shows the distribution of translations done directly by the International Bureau or outsourced in 2006.

#### **Distribution of Translation Work**



Source: WIPO Statistics Database

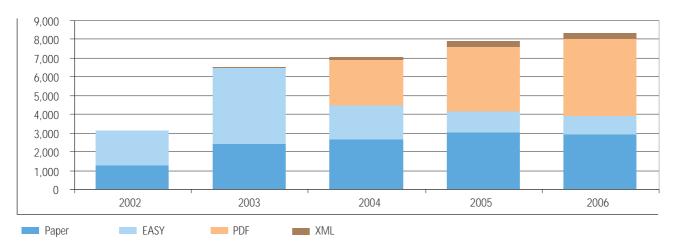
The means of meeting this policy objective must evolve with the technology and the increasingly global reach of the PCT system, marked in particular by rapid growth in North East Asian countries. To meet these challenges, the International Bureau is reorienting its translation activities with a view to creating a multi-lingual search facility to be integrated into PatentScope. As an initial step in the development of this facility, the International Bureau will place more emphasis than in the past on terminology with a view to creating a terminology database in all PCT publication languages that is intended to be the backbone of the multi-lingual search engine.

#### 3.3 International Bureau as Receiving Office (RO/IB)

# 3.3.1 Filing Trends at RO/IB by Filing Method

The graph below shows the number of international applications filed with the International Bureau as receiving Office with a breakdown by filing method. Three filing methods exist: filings on paper, filings on paper together with the Request Form on a diskette using the PCT-EASY functionality, and fully electronic filings (PDF and XML formats). In 2006, 8,310 international applications where filed at RO/IB of which 53% were filed electronically.

#### International Applications filed with RO/IB by filing method



Filing method	2002	2003	2004	2005	2006
XML			161	336	278
PDF		16	2,414	3,406	4,120
EASY	1,850	4,072	1,771	1,137	976
Paper Total	1,280	2,425	2,694	3,046	2,936
Total	3,130	6,513	7,040	7,925	8,310

Source: WIPO Statistics Database

#### 3.3.2 Transmittal of International Applications to the International Bureau as Receiving Office

Where an international application is filed with a receiving Office that cannot accept that application due to the country of residence of the applicant, language of filing or another reason, that international application is considered to have been received by, and forwarded to, RO/IB<sup>6</sup>. In 2006, RO/IB received 875 such transmittals of international applications, which represents 11% of the international applications it received<sup>7</sup>.

<sup>&</sup>lt;sup>6</sup> Transmittal under Rule 19.4 of the PCT Regulations.

<sup>&</sup>lt;sup>7</sup> Based on the actual date of receipt at RO/IB and not the International Filing Date.

#### 3.4 International Search

# 3.4.1 Distribution of International Searching Authorities (ISAs)

The table below shows the number of PCT international applications filed according to their selected International Searching Authority.

Searching Authority	2002	2003	2004	2005	2006	2006
					(	Percent)
European Patent Office	60,426	60,855	63,230	67,082	70,666	47.9%
United States of America	25,525	26,476	26,885	28,551	29,126	19.7%
Japan	13,161	16,142	18,695	23,020	25,386	17.2%
Republic of Korea	2,247	2,595	3,211	4,230	6,645	4.5%
Sweden	3,999	3,518	3,400	3,383	3,195	2.2%
Australia	2,208	2,249	2,503	2,735	2,768	1.9%
China	977	1,225	1,650	2,481	3,920	2.7%
Canada	0	0	840	2,101	2,277	1.5%
Spain	686	746	772	986	1,067	0.7%
Austria	532	748	824	914	1,095	0.7%
Russian Federation	625	641	615	720	695	0.5%
Finland	0	0	0	426	648	0.4%
Unknown	6	4	2	10	10	0.0%
Total	110,392	115,199	122,627	136,639	147,500	100%

Source: WIPO Statistics Database

#### 3.4.2 Timeliness

The graph below shows the timeliness of issuance of International Search Reports (ISRs) by International Searching Authorities. In 2006, 56% of the ISRs were received at the International Bureau before 16 months from the priority date and 16% after 20 months from the priority date.

#### International Searching Authorities (ISA) timeliness to send International Search Reports (ISRs)



# 3.5 International Preliminary Examination

# 3.5.1 Distribution of International Preliminary Examining Authorities (IPEAs)

The graph below shows the number of demands for international preliminary examination since 2002. The decrease is due to modifications of the time limit for entry into the national phase, in force since April 2002, and the introduction in 2004 of the written opinion of the International Searching Authority with is now established with the International Search Report for all PCT international applications.

# **Demands for International Preliminary Examination**



Source: WIPO Statistics Database

The table shows the number of demands for International Preliminary Examination at each Examining Authority.

Examining Authority	2002	2003	2004	2005	2006	2006
						(Percent)
European Patent Office	41,054	31,472	21,681	13,899	11,391	54.2%
United States of America	24,685	20,165	11,553	5,512	3,543	16.9%
Japan	7,076	6,816	4,209	2,527	2,584	12.3%
Australia	1,855	1,693	1,250	1,038	971	4.6%
Sweden	3,462	2,618	1,618	986	685	3.3%
Republic of Korea	1,367	1,079	934	651	600	2.9%
Canada			1	322	419	2.0%
China	675	669	501	438	347	1.7%
Finland				4	127	0.6%
Austria	258	239	148	160	112	0.5%
Spain		8	129	128	111	0.5%
Russian Federation	379	212	162	138	109	0.5%
Total	80,811	64,971	42,186	25,803	21,000	100%

#### 3.5.2 Timeliness

The graph below shows the timeliness of issuance of IPERs and IPRPs chapter II according to the International Preliminary Examining Authority. In 2006, 61% of the IPERs and IPRPs chapter II were received at the International Bureau before 28 months from the priority date and 20% after 32 months from the priority date.

International Preliminary Examining Authorities (IPEA) timeliness of furnish International Preliminary Examination Reports (IPERs)



Source: WIPO Statistics Database

# 3.6 National Phase Entry

The table below shows the number of PCT national phase entries at 20 Offices. The information is based on data and statistics supplied to WIPO by national patent offices. In addition, individual national phase notifications are available via PatentScope in cases where the Office participates in the WIPO project for collection and dissemination of national phase information.

Office	2001	2002	2003	2004	2005	Change Compared with 2004
European Patent Office	53,168	52,493	61,488	65,227	67,948	4%
Japan	36,813	37,796	36,124	39,973	45,576	14%
China	19,231	22,657	23,354	32,689	40,133	23%
United States of America	24,250	34,142	31,497	36,739	38,296	4%
Canada	26,320	27,348	25,786	26,056	28,020	8%
Republic of Korea	16,686	17,868	16,972	21,660	24,761	14%
Australia	16,507	17,503	15,839	16,796	17,979	7%
Mexico	10,572	10,355	9,780	10,657	11,753	10%
Brazil	9,674	11,098	7,618	12,444		
India	6,351	7,049	7,717	10,671		
Russian Federation	4,101	4,083	4,219	5,288	6,415	21%
Singapore	5,470	5,851	5,691	5,714	6,128	7%
South Africa	3,971	4,452	4,894	5,221	5,554	6%
Israel	3,106	4,654	4,280	4,675	5,127	10%
New Zealand	4,548	4,440	4,097	4,272	4,477	5%
Poland <sup>8</sup>	3,419	3,443	3,177	4,961	4,356	-12%
Norway	4,166	4,343	3,968	3,587	4,137	15%
Indonesia	2,901	2,976	2,620	2,989	3,536	18%
Germany	1,508	1,278	1,543	1,450	2,471	70%
United Kingdom	1,504	1,620	1,789	1,731	1,796	4%
Ukraine	1,370	1,001	1,299	1,423	1,750	23%

Poland became party to the European Patent Convention in March 2004.

#### 4. PCT AND THE ELECTRONIC ENVIRONMENT

# 4.1 Electronic Processing of PCT International Applications at the International Bureau

In 2006, the International Bureau completed the deployment of fully electronic processing of international applications using the electronic dossier software (E-dossier), without the need for a paper file. During the course of 2006, the scope of electronic processing was extended to the PCT translation process, and all PCT-related translation work at the International Bureau is now performed in a fully electronic environment with an integrated translation work distribution system within E-dossier.

The deployment of the E-dossier is therefore complete, with the entire business flow at the International Bureau, from receipt and formalities examination to translation and publication being a fully electronic process. E-dossier will continue to evolve and be further developed in order to incorporate improved functions such as fully integrated bibliographic data management, XML processing and terminology. As a result of the E-dossier deployment, the PatentScope database of PCT-related documents and data has been greatly enhanced (see chapter 5 for more details).

# 4.2 Electronic Exchange of Data between the International Bureau and Offices

Six additional offices, making a total of nineteen<sup>9</sup>, either in their capacities as receiving Offices and/or International Searching Authorities, have started transmitting record copies, international search reports and other documents to the International Bureau in electronic form, via the PCT Electronic Data Interchange Service (PCT EDI). The aim of PCT EDI is to become a flexible, secure and automated mechanism that enables Offices to exchange bulk data and documents with the International Bureau. The International Bureau at the end of 2006 received more than 50% of all monthly document pages in electronic form.

#### 4.3 Electronic filing

# 4.3.1 Continued Shift to E-filing

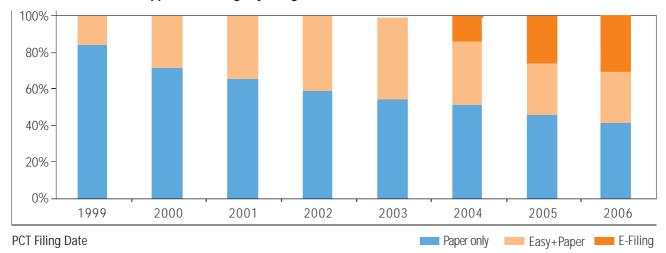
In 2006, 32.4% of all PCT international applications were filed electronically. In 2006, six new Offices announced that they accept fully electronic filings<sup>10</sup> bringing the total to 19 Offices prepared to receive PCT international applications in fully electronic form.

The graph below shows the changing share of filings on paper, filings on paper together with a diskette prepared electronically using the PCT-EASY functionality and fully electronic filings (E-filings) since 1999.

<sup>&</sup>lt;sup>9</sup> Australia, Canada, China, Denmark, European Patent Office, Finland, France, Germany, Japan, Mexico, the Netherlands, Poland, the Republic of Korea, Slovakia, Spain, Sweden, United Kingdom, United States of America and Viet Nam.

Germany, Japan, Malaysia, Philippines, Poland and Romania.

#### Share of International Application Filings by Filing Method



Filing Method	1999	2000	2001	2002	2003	2004	2005	2006
Paper	84.1%	71.3%	65.3%	59.0%	54.2%	51.1%	46.0%	42.6%
Easy+Paper	15.9%	28.7%	34.7%	41.0%	44.9%	34.7%	27.8%	25.0%
E-Filing				< 1.0%	1.0%	14.1%	26.2%	32.4%

Source: WIPO Statistics Database

#### 4.3.2 PCT-SAFE Software

In 2006, four new versions of the PCT-SAFE (Secure Applications Filed Electronically) client software were released to introduce new functionality, new Offices and other PCT changes.

#### 4.3.3 PCT-ROAD

The PCT-ROAD (Receiving Office Administration) system, a cooperation project between WIPO and the Korean Intellectual Property Office (KIPO), enables electronic filing of PCT international applications on physical media. The PCT-ROAD software has been made available since early 2005 to any Office interested in the system as well as the five pilot Offices<sup>11</sup> for their feedback. The system was upgraded in 2006 to provide further functions, such as generating receiving Office forms, deadline monitoring, multi-user support and Spanish language support. By the end of 2006, the PCT-ROAD system had been introduced to 17 PCT receiving Offices.

# 4.4 Digital Access to Priority Documents

The PCT Assembly, in conjunction with the Assemblies of the Paris Union and the Patent Law Treaty, endorsed a proposal to establish a digital access service for priority documents. This is a voluntary arrangement designed to save applicants from having to produce proof of filing of the original application separately in each state where priority is claimed for Paris Convention filings and to increase the number of cases where priority documents for PCT applications can be provided by the Office of first filing instead of the applicant needing to obtain a certified copy himself. A working group was convened in February 2007 to help establish the procedures, which will build on existing PCT systems for transfer of documents between Offices. A further session of the working group will be held in April 2007.

<sup>&</sup>lt;sup>11</sup> Egypt, Israel, Malaysia, Philippines and Viet Nam.

#### 5. DISSEMINATION OF PCT AND PATENT INFORMATION

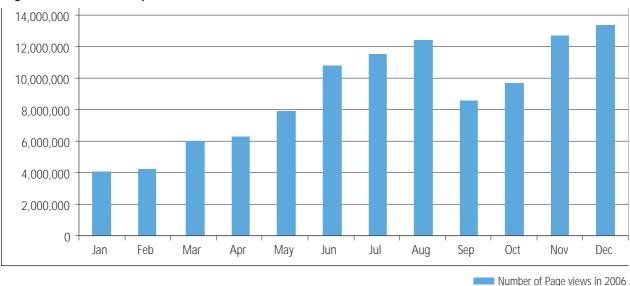
#### 5.1 PatentScope Web Portal

The PatentScope web portal was launched in July 2005. It gathers together all information concerning WIPO's patent and PCT-related activities, including access to published PCT applications.

In April 2006, PatentScope became the vehicle for electronic publication of PCT international applications, as described below.

PatentScope now provides access to more than 1.2 million PCT international applications published since 1978. The graph below shows the increase in the number of page views on the PatentScope database since the beginning of 2006. The Internet traffic has tripled between January and December 2006.

#### Page views on Patentscope



Source: WIPO Web Statistics

In 2006, several new features were added to the PatentScope database of PCT international applications:

- graphical views of search results;
- RSS feed for search results;
- choice of the text source searched and highlighting of terms found;
- additional data: PCT national phase entries for 27 offices; and
- additional documents: the Notification Concerning Submission or Transmittal of Priority Document (Form PCT/IB/304) and the Notification of the Recording of a Change (Form PCT/IB/306) for changes made between the international publication and the expiration of the international phase.

#### Other features provide

- Advanced and rapid search facilities, including full-text search for applications published in English,
   French, German and Spanish since April 1998;
- the complete collection of published PCT applications from the first publication in 1978 to the present day;
- access to new PCT applications on the publication date every week;
- facility for printing and/or downloading complete documents in a choice of formats;
- the latest bibliographic data available on record at the International Bureau, including changes since publication; and
- access to status information, published documents and file contents through a single system.

#### Improved services to patent information providers

The International Bureau has been working to improve the dissemination of PCT-related data via private and public patent information providers. In 2006, a pilot project was started to test the delivery of PCT data over the Internet. Participants in the pilot project can now download, each week on publication date, the complete PCT publication including page images and full-text data produced by the International Bureau's in-house OCR (Optical Character Recognition) software.

# 5.2 Exclusive Electronic Publication of PCT Applications

Since 1 April 2006, international publication of PCT international applications and any republications of previously published international applications takes place in electronic form, and the International Bureau no longer transmits a paper copy of the published international application to the applicant.

Published international applications can be viewed, downloaded or printed directly from PatentScope. The international publication can be found by searching on the international application number, publication number, or any other search criteria supported by PatentScope. Weekly indexes of published applications can also be browsed online.

# 5.3 New Internet Resources for PCT Applicants

Since January 2006, the PCT Applicant's Guide is a web-based publication, available free-of-charge and updated weekly. It is available at: www.wipo.int/pct/guide/en/.

In addition, several new Internet services were launched in 2006:

- the PCT Time Limit Calculator;
- the Repository for Information on Emergency Preparedness Measures, and
- the PCT Glossary.

#### 5.4 Aggregate Patent Statistics

The International Bureau has improved the collection of patent statistics and established a patent statistics database. In 2006, the International Bureau published the first edition of the *WIPO Patent Report*<sup>12</sup> which contains indicators and explanations of the main trends in worldwide patent activity.

In addition to analytical reports and Internet-based queries for aggregate data, WIPO now publishes aggregate statistics covering patents since 1883 and patent filings (including PCT national phase entries) and grants by country of origin in a choice of electronic formats.

# 5.5 Eighth Edition of the IPC

The eighth edition of the International Patent Classification (IPC) came into force on 1 January 2006. Since this date, all published PCT applications are classified using the eighth edition of the IPC.

An IPC master classification database (MCD) has been created for the purpose of collecting classification data of published documents so that all patent documentation can be searched using a single edition of the IPC. Since the end of May 2006, the entire collection of published PCT applications available through PatentScope are reclassified according to the 8th edition of the IPC, based on the reclassification information made available from the MCD.

<sup>&</sup>lt;sup>12</sup> Available at http://www.wipo.int/ipstats/en/statistics/patents/

#### 6. CHANGES IN THE PCT LEGAL FRAMEWORK

# 6.1 Changes in 2006

#### 6.1.1 Amendments to PCT Regulations

In October 2005, the PCT Assembly approved a number of amendments, which entered into force on 1 April 2006, concerning the following issues:

- international applications and the PCT Gazette may be fully and exclusively published in electronic format (see Chapter 5 for more details);
- addition of Arabic as a language of publication;
- exceptions to the all-inclusive designation system; and
- publication of declarations relating to national requirements as part of the international application.

# 6.1.2 Other Changes in 2006

- The former State Union of Serbia and Montenegro (country code: YU) ceased to exist on 3 June 2006. The International Organization for Standardization has assigned the Republic of Serbia the two-letter code of "RS" and the Republic of Montenegro the two-letter code "ME";
- The Assembly amended, with effect from 12 October 2006, the Schedule of Fees annexed to the PCT Regulations to incorporate a new fee reduction for international applications filed in electronic form where the entire application, including the request, is in a non-character coded format.

Further noteworthy developments in 2006 include the following:

- The PCT Assembly appointed the Nordic Patent Institute (NPI), comprising the patent offices of Denmark, Iceland and Norway, as an International Searching and Preliminary Examining Authority under the PCT. The appointment will take effect from the date of entry into force of the necessary agreement between NPI and the International Bureau;
- The Member States reviewed the status of the PCT reform process. The Assembly agreed that there would be a further session of the Working Group on the Reform of the PCT before the 2007 session of the Assembly to consider outstanding proposals for the reform of the PCT; and
- The Member States noted a report concerning a new reporting system agreed by the Meeting of International Authorities Under the PCT to assist International Authorities in understanding and benefiting from quality reports sent to them by other Authorities under the quality framework set out in Chapter 21 of the PCT International Search and Preliminary Examination Guidelines.

# 6.2 Changes in 2007

#### 6.2.1 Amendments to PCT Regulations

In October 2005 and 2006, the PCT Assembly approved a number of amendments, which will enter into force on 1 April 2007, concerning the following issues:

- missing elements and parts of the international application;
- restoration of the right of priority;
- rectification of obvious mistakes;
- addition of patent documents from the Republic of Korea to the PCT minimum documentation;
- minimum requirements for International Searching and Preliminary Examining Authorities;
- changes to physical requirements of the international application to assist optical character recognition; and
- clarification of language-related requirements of the international application.

# 6.3 PCT Training

Around 180 seminars and presentations about the use and advantages of the PCT system, and promotion of accession to it, were given by officials of the International Bureau in the following languages: Arabic, Chinese, English, French, German, Indonesian, Japanese, Portuguese and Spanish.

The seminars and presentations were held in the following 40 countries: Australia, Belgium, Brazil, Bulgaria, Canada, China, Cuba, Denmark, Ecuador, Egypt, Finland, France, Germany, Honduras, Indonesia, Ireland, Israel, Italy, Japan, Kenya, the Republic of Korea, Lithuania, Libya, Malaysia, Mexico, Morocco, the Netherlands, Nigeria, Panama, Peru, El Salvador, Slovenia, South Africa, Spain, Sweden, Switzerland, Tanzania, the United Kingdom, the United States of America and Zimbabwe.

#### 7. PCT CONTRACTING STATES

During 2006, 7 new Contracting States became bound by the PCT, namely: Bahrain (from 18 March 2007), Lao People's Democratic Republic, Honduras, Malaysia, Malta (from 1 March 2007), El Salvador and Guatemala – bringing the number of States which had acceded to the PCT by 31 December 2006, to 136, as follows:

ΑE	United Arab Emirates	GQ	Equatorial Guinea (OA) <sup>2</sup>	MZ	Mozambique (AP)
AG	Antigua and Barbuda	GR	Greece (EP) <sup>2</sup>	NA	Namibia (AP)
AL	Albania <sup>1</sup>	GT	Guatemala	NE	Niger (OA) <sup>2</sup>
AM	Armenia (EA)	GW	Guinea-Bissau (OA) <sup>2</sup>	NG	Nigeria
AT	Austria (EP)	HN	Honduras	NI	Nicaragua
ΑU	Australia	HR	Croatia¹	NL	Netherlands (EP) <sup>2</sup>
ΑZ	Azerbaijan (EA)	HU	Hungary (EP)	NO	Norway
BA	Bosnia and Herzegovina <sup>1</sup>	ID	Indonesia	NZ	New Zealand
BB	Barbados	IE		OM	Oman
BE			Ireland (EP) <sup>2</sup>		
	Belgium (EP) <sup>2</sup>	IL	Israel	PG	Papua New Guinea
BF	Burkina Faso (OA) <sup>2</sup>	IN	India	PH	Philippines (FR)
BG	Bulgaria (EP)	IS	Iceland (EP)	PL	Poland (EP)
ВН	Bahrain (from 18 March 2007)	ΙΤ	Italy (EP) <sup>2</sup>	PT	Portugal (EP)
BJ	Benin (OA) <sup>2</sup>	JP	Japan	RO	Romania (EP)
BR	Brazil	KE	Kenya (AP)	RS	Serbia
BW	Botswana (AP)	KG	Kyrgyzstan (EA)	RU	Russian Federation (EA)
BY	Belarus (EA)	KM	Comoros	SC	Seychelles
ΒZ	Belize	KN	Saint Kitts and Nevis	SD	Sudan (AP)
CA	Canada	KP	Democratic People's	SE	Sweden (EP)
CF	Central African Republic (OA) <sup>2</sup>		Republic of Korea	SG	Singapore
CG	Congo (OA) <sup>2</sup>	KR	Republic of Korea	SI	Slovenia (EP) <sup>2</sup>
CH	Switzerland (EP)	ΚZ	Kazakhstan (EA)	SK	Slovakia (EP)
CI	Côte d'Ivoire (OA) <sup>2</sup>	LA	Lao People's Democratic	SL	Sierra Leone (AP)
CM	Cameroon (OA) <sup>2</sup>		Republic	SM	San Marino
CN	China	LC	Saint Lucia	SN	
CO	Colombia	LI	Liechtenstein (EP)	SV	Senegal (OA) <sup>2</sup>
					El Salvador
CR	Costa Rica	LK	Sri Lanka	SY	Syrian Arab Republic
CU	Cuba	LR	Liberia	SZ	Swaziland (AP) <sup>2</sup>
CY	Cyprus (EP) <sup>2</sup>	LS	Lesotho (AP)	TD	Chad (OA) <sup>2</sup>
CZ	Czech Republic (EP)	LT	Lithuania (EP)	TG	Togo (OA) <sup>2</sup>
DE	Germany (EP)	LU	Luxembourg (EP)	TJ	Tajikistan (EA)
DK	Denmark (EP)	LV	Latvia (EP)	TM	Turkmenistan (EA)
DM	Dominica	LY	Libyan Arab Jamahiriya	TN	Tunisia
DZ	Algeria	MA	Morocco	TR	Turkey (EP)
EC	Ecuador	MC	Monaco (EP) <sup>2</sup>	TT	Trinidad and Tobago
EE	Estonia (EP)	MD	Moldova (EA)	TZ	United Republic of
EG	Egypt	ME	Montenegro		Tanzania (AP)
ES	Spain (EP)	MG	Madagascar	UA	Ukraine
FI	Finland (EP)	MK	The former Yugoslav Republic	UG	Uganda (AP)
FR	France (EP) <sup>2</sup>		of Macedonia <sup>1</sup>	US	United States of America
GΑ	Gabon (OA) <sup>2</sup>	ML	Mali (OA) <sup>2</sup>	UZ	Uzbekistan
GB	United Kingdom (EP)		Mongolia	VC	Saint Vincent and
GD	Grenada	MR	Mauritania (OA) <sup>2</sup>	v C	the Grenadines
GE	Georgia	MT	<b>Malta</b> (EP) (from 1 March 2007)	VN	Viet Nam
GH	Ghana (AP)	MW		ZA	South Africa
GM	Gambia (AP)	MX	Mexico Malayria	ZM	Zambia (AP)
GN	Guinea (OA) <sup>2</sup>	MY	Malaysia	ZW	Zimbabwe (AP)

#### Note

This list includes all States that have adhered to the PCT by the date shown in the heading. Any State indicated in bold italics has adhered to the PCT but will only become bound by the PCT on the date shown in parentheses; it will not be considered to have been designated in international applications filed before that date. Note that even though the filing of a request constitutes under PCT Rule 4.9(a) the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents, applicants should always use the latest versions of the request form (PCT/RO/101) and demand form (PCT/IPEA/401) (the latest versions are dated April 2006) or, if filing the request using the PCT-EASY features of the PCT-SAFE software, the latest version of that software (which is available at: www.wipo.int/pct-safe). The request and demand forms can be printed from the web site, in editable PDF format, at: www.wipo.int/pct/en/forms/, or obtained from receiving Offices or the International Bureau, or, in the case of the demand form, also from International Preliminary Examining Authorities.

Where a State can be designated for a regional patent, the two-letter code for the regional patent concerned is indicated in parentheses (AP = ARIPO patent, EA = Eurasian patent, EP = European patent, OA = OAPI patent).

Extension of European patent possible.

May only be designated for a regional patent (the "national route" via the PCT has been closed).

#### **PCT Contracting States in 2006**



# 8. MORE RESOURCES ON THE INTERNET

The following patent resources are available on the WIPO Internet:

- **PatentScope** WIPO's portal for information on Patents and the PCT System http://www.wipo.int/patentscope/en/
- Information on the **PCT System**http://www.wipo.int/pct/en/
- **Patent Search** Search PCT International Applications and view/download complete patent applications and related documentation.

http://www.wipo.int/pctdb/en/

- Law of Patents includes current and emerging issues related to patents, information on WIPO-administered treaties, access to national/regional patent laws, patent law harmonization.

  http://www.wipo.int/patent/law/en/
- **PCT Statistics** monthly and yearly statistics on the PCT system, including comparative list of applicants and details of the indicators included in this report.

http://www.wipo.int/ipstats/en/statistics/pct/



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