



# PCT

## THE INTERNATIONAL PATENT SYSTEM IN 2005 PCT YEARLY REVIEW



WORLD  
INTELLECTUAL  
PROPERTY  
ORGANIZATION



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## 1. INTRODUCTION

In 2005, the international patent system saw significant developments on multiple levels.

**Significant growth for international patent filings** – 2005 saw a significant number of international patent filings, over 134,000 PCT international applications, representing a 10.6% increase over 2004. The most impressive rates of growth came from north east Asia - namely, Japan, the Republic of Korea and China, for the second year running.

**Improved Services and Productivity** – The considerable overall growth in the number of international applications resulted not only from better economic conditions, but also from improved services and productivity within the PCT system, resulting particularly from the use of information technology. The number of applications filed on electronic media now exceeded paper filings.

**Democratization of Access to Technology** – The deployment of full electronic processing within WIPO for PCT applications not only resulted in productivity gains at WIPO, but also assisted in making the world's technology available online for free of charge consultation. The WIPO web site "PatentScope" now makes available over 1.2 million international applications, representing many of the most important technological advances of the past twenty years, in fully searchable form (<http://www.wipo.int/patentscope/>).

**Improved Exchange of PCT Data** – Information technology had also been successfully deployed in the movement of applications and associated data between WIPO and the various national and regional offices within the system.

**More Complete and Updated Statistics** – WIPO has also considerably enhanced the collection and dissemination of patent statistics. Since 2005, PCT statistics, including national phase entry statistics, are available every month on the Internet (<http://www.wipo.int/ipstats/en/statistics/patents/>).

2006 will build on these developments in particular in connection with a wider access to the world of technology, through PatentScope, and in the area of information technology.

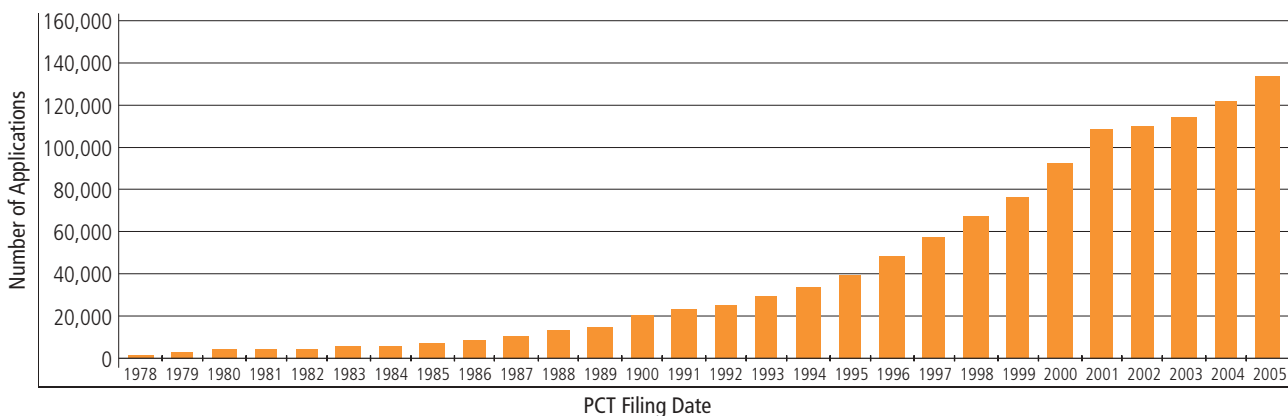
The Patent Cooperation Treaty (PCT) offers inventors and industry an advantageous route for obtaining patent protection internationally. By filing one "international" patent application under the PCT, protection of an invention can be sought simultaneously in each of a large number of countries. Both applicants and patent offices of the 130 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. By this time, the applicant should have received important value-added information concerning the likelihood of obtaining patent protection as well as potential commercial interest in that invention.

## 2. FILING OF PCT INTERNATIONAL APPLICATIONS

### 2.1 PCT Filing Trends (1978-2005)

In 2005, over 134,000 PCT international applications were filed, representing a 10.6% increase over the previous year. The graph below shows the growth in the number of international applications filed since 1978.

**PCT Filings Trends since 1978**



Source: WIPO Statistics Database

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

The five top users of the international patent system remained unchanged, namely: United States of America, Japan, Germany, France and the United Kingdom. The top 15 countries of origin are shown in the table below.

| PCT International Applications<br>Top 15 Countries/Regions of Origin | 2001    | 2002    | 2003    | 2004    | 2005    |
|----------------------------------------------------------------------|---------|---------|---------|---------|---------|
| European Patent Office Member States                                 | 40,633  | 42,447  | 43,205  | 44,010  | 47,239  |
| United States of America                                             | 43,055  | 41,294  | 41,026  | 43,342  | 46,019  |
| Japan                                                                | 11,904  | 14,063  | 17,414  | 20,263  | 24,815  |
| Germany                                                              | 14,031  | 14,326  | 14,662  | 15,213  | 15,995  |
| France                                                               | 4,707   | 5,089   | 5,171   | 5,184   | 5,737   |
| United Kingdom                                                       | 5,482   | 5,376   | 5,206   | 5,028   | 5,114   |
| Republic of Korea                                                    | 2,324   | 2,520   | 2,949   | 3,556   | 4,685   |
| Netherlands                                                          | 3,410   | 3,977   | 4,479   | 4,283   | 4,516   |
| Switzerland                                                          | 2,349   | 2,755   | 2,861   | 2,899   | 3,259   |
| Sweden                                                               | 3,421   | 2,990   | 2,612   | 2,849   | 2,855   |
| China                                                                | 1,731   | 1,018   | 1,295   | 1,705   | 2,500   |
| Italy                                                                | 1,623   | 1,982   | 2,163   | 2,192   | 2,354   |
| Canada                                                               | 2,114   | 2,260   | 2,270   | 2,104   | 2,321   |
| Australia                                                            | 1,664   | 1,759   | 1,680   | 1,837   | 1,984   |
| Finland                                                              | 1,696   | 1,762   | 1,557   | 1,672   | 1,888   |
| All Others                                                           | 3,720   | 3,573   | 3,833   | 5,096   | 6,208   |
| Total                                                                | 108,231 | 110,391 | 115,202 | 122,640 | 135,602 |

Source: WIPO Statistics Database

<sup>1</sup> The country of origin of an application is the country of residence of the first-named applicant in the PCT Request form.

## 2.3 Top 20 PCT Applicants

In 2005, 235,000 applicants<sup>2</sup> (or inventors) used the PCT system. The table below shows the top 20 PCT Applicants.

| Ranking | Country of Origin | Applicant                                | Total |
|---------|-------------------|------------------------------------------|-------|
| 1       | NL                | KONINKLIJKE PHILIPS ELECTRONICS N.V.     | 2,492 |
| 2       | JP                | MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. | 2,022 |
| 3       | DE                | SIEMENS AKTIENGESELLSCHAFT               | 1,399 |
| 4       | FI                | NOKIA CORPORATION                        | 898   |
| 5       | DE                | ROBERT BOSCH GMBH                        | 843   |
| 6       | US                | INTEL CORPORATION                        | 691   |
| 7       | DE                | BASF AKTIENGESELLSCHAFT                  | 656   |
| 8       | US                | 3M INNOVATIVE PROPERTIES COMPANY         | 605   |
| 9       | US                | MOTOROLA, INC.                           | 580   |
| 10      | DE                | DAIMLERCHRYSLER AG                       | 572   |
| 11      | US                | EASTMAN KODAK COMPANY                    | 531   |
| 12      | US                | HONEYWELL INTERNATIONAL INC.             | 518   |
| 13      | SE                | TELEFONAKTIEBOLAGET LM ERICSSON (publ)   | 511   |
| 14      | KR                | SAMSUNG ELECTRONICS CO., LTD.            | 483   |
| 15      | DE                | BAYER                                    | 469   |
| 16      | US                | THE PROCTER & GAMBLE COMPANY             | 461   |
| 17      | JP                | SONY CORPORATION                         | 449   |
| 18      | JP                | MITSUBISHI DENKI KABUSHIKI KAISHA        | 438   |
| 19      | US                | E.I. DUPONT DE NEMOURS AND COMPANY       | 423   |
| 20      | JP                | TOYOTA JIDOSHA KABUSHIKI KAISHA          | 399   |

Source: WIPO Statistics Database

## 2.4 PCT and Developing Countries

PCT international applications received from developing countries in 2005 saw a 24.8% increase as compared to 2004, representing 6.9% of all international applications filed. Several developing countries saw double-digit percentage increases in their use of the PCT, notably China, Mexico and the Republic of Korea.

| PCT and Developing Countries    | 2002  | 2003  | 2004  | 2005  |
|---------------------------------|-------|-------|-------|-------|
| Republic of Korea               | 2,520 | 2,949 | 3,556 | 4,685 |
| China                           | 1,018 | 1,295 | 1,705 | 2,500 |
| India                           | 525   | 764   | 723   | 678   |
| Singapore                       | 330   | 282   | 432   | 441   |
| South Africa                    | 384   | 357   | 411   | 358   |
| Brazil                          | 201   | 219   | 279   | 280   |
| Mexico                          | 132   | 131   | 118   | 140   |
| Egypt                           | 1     | 22    | 53    | 51    |
| Malaysia*                       | 18    | 31    | 45    | 37    |
| Cyprus                          | 23    | 28    | 43    | 29    |
| Philippines                     | 20    | 21    | 11    | 27    |
| Colombia                        | 36    | 24    | 22    | 23    |
| Argentina*                      | 9     | 15    | 11    | 21    |
| Cuba                            | 11    | 20    | 18    | 11    |
| Morocco                         | 10    | 7     | 7     | 9     |
| Kazakhstan                      | 16    | 7     | 7     | 7     |
| Indonesia                       | 16    | 2     | 6     | 7     |
| Algeria                         | 3     | 5     | 6     | 4     |
| Dem. People's Republic of Korea | 0     | 3     | 3     | 3     |
| Zimbabwe                        | 2     | 2     | 3     | 2     |
| Uzbekistan                      | 2     | 0     | 0     | 2     |
| Viet Nam                        | 2     | 7     | 2     | 0     |

Source: WIPO Statistics Database

\* 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.

<sup>2</sup> An application typically has multiple applicants. So this is why the number of applicants exceeds the number of PCT international applications.

## 2.5 Filings by Language of Filing

In 2005, PCT international applications were filed in the following languages:

| <b>Filings by Language of Filing</b> | <b>2005</b>    | <b>2005 (Percent)</b> |
|--------------------------------------|----------------|-----------------------|
| English                              | 83,566         | 61.6                  |
| Japanese                             | 22,151         | 16.3                  |
| German                               | 15,863         | 11.7                  |
| French                               | 4,859          | 3.6                   |
| Korean                               | 2,676          | 2.0                   |
| Chinese                              | 2,234          | 1.6                   |
| Spanish                              | 1,065          | 0.8                   |
| Italian                              | 706            | 0.5                   |
| Russian                              | 654            | 0.5                   |
| Swedish                              | 546            | 0.4                   |
| Dutch                                | 483            | 0.4                   |
| Finnish                              | 430            | 0.3                   |
| Norwegian                            | 171            | 0.1                   |
| Danish                               | 111            | 0.1                   |
| Hungarian                            | 24             | <0.1                  |
| Slovenian                            | 14             | <0.1                  |
| Turkish                              | 13             | <0.1                  |
| Croatian                             | 11             | <0.1                  |
| Portuguese                           | 9              | <0.1                  |
| Czech                                | 9              | <0.1                  |
| Slovak                               | 5              | <0.1                  |
| Other                                | 2              | <0.1                  |
| <b>Total</b>                         | <b>135,602</b> |                       |

Source: WIPO Statistics Database

## 2.6 Filings by Technical Field

Each international application is classified according to the International Patent Classification (IPC) – this describes the technical field to which the invention relates. The table below shows the top 15 classifications under which international applications were published in 2005, and compares each total with the corresponding total for previous years.

| <b>Filings by Technical Field</b>                                                                                                                  | <b>2001</b>   | <b>2002</b>    | <b>2003</b>    | <b>2004</b>    | <b>2005</b>    | <b>2005 (Percent)</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|----------------|----------------|----------------|-----------------------|
| A61K Preparations for Medical, Dental, or Toilet Purposes                                                                                          | 5,284         | 6,082          | 7,071          | 6,768          | 6,449          | 5.1                   |
| G06F Electric Digital Data Processing                                                                                                              | 8,018         | 7,993          | 6,951          | 6,428          | 5,784          | 4.6                   |
| H04L Transmission of Digital Information, e.g. Telecommunications                                                                                  | 2,646         | 3,078          | 2,958          | 3,088          | 3,425          | 2.7                   |
| C07D Heterocyclic Compounds                                                                                                                        | 2,479         | 2,563          | 2,612          | 3,110          | 3,173          | 2.5                   |
| H01L Semiconductor Devices; Electric Solid State Devices not Otherwise Provided for                                                                | 2,129         | 2,651          | 2,921          | 3,092          | 3,097          | 2.5                   |
| G01N Investigating or Analysing Materials by Determining their Chemical or Physical Properties                                                     | 2,359         | 2,746          | 2,922          | 2,857          | 2,848          | 2.3                   |
| A61B Diagnosis; Surgery; Identification                                                                                                            | 1,960         | 2,089          | 2,391          | 2,561          | 2,633          | 2.1                   |
| H04N Pictorial communication, e.g. Television                                                                                                      | 1,771         | 1,783          | 2,030          | 1,871          | 1,915          | 1.5                   |
| C12N Micro-Organisms or Enzymes; Compositions thereof                                                                                              | 3,963         | 3,494          | 2,547          | 2,197          | 1,905          | 1.5                   |
| A61F Filters Implantable into Blood Vessels; Prostheses; Devices Providing Patency to, or Preventing Collapsing of, Tubular Structures of the Body | 1,326         | 1,263          | 1,511          | 1,520          | 1,566          | 1.2                   |
| C07C Acyclic or Carbocyclic Compounds                                                                                                              | 1,508         | 1,412          | 1,501          | 1,476          | 1,476          | 1.2                   |
| H04Q Selecting                                                                                                                                     | 1,479         | 1,447          | 1,406          | 1,396          | 1,444          | 1.2                   |
| G02B Optical Elements, Systems, or Apparatus                                                                                                       | 1,170         | 1,606          | 1,583          | 1,453          | 1,437          | 1.1                   |
| H04B Transmission                                                                                                                                  | 1,457         | 1,516          | 1,545          | 1,505          | 1,434          | 1.1                   |
| C12Q Measuring or Testing Processes Involving Enzymes or Micro-Organisms                                                                           | 1,295         | 1,502          | 1,615          | 1,464          | 1,137          | 0.9                   |
| Others                                                                                                                                             | 60,753        | 62,941         | 68,416         | 71,740         | 85,569         | 68.3                  |
| <b>Total</b>                                                                                                                                       | <b>99,597</b> | <b>104,166</b> | <b>109,980</b> | <b>112,526</b> | <b>125,292</b> |                       |

Source: WIPO Statistics Database

### 3. PERFORMANCE OF THE INTERNATIONAL PATENT SYSTEM

#### 3.1 Receiving Offices

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. There are 103 Offices acting as receiving Offices within the PCT system. The table below shows the top 10 receiving Offices.

| PCT International Applications by Receiving Office | 2005    | 2005 (Percent) |
|----------------------------------------------------|---------|----------------|
| United States of America                           | 46,014  | 33.9           |
| Japan                                              | 24,293  | 17.9           |
| European Patent Office                             | 21,240  | 15.7           |
| International Bureau                               | 7,883   | 5.8            |
| United Kingdom                                     | 5,169   | 3.8            |
| Republic of Korea                                  | 4,685   | 3.5            |
| France                                             | 3,920   | 2.9            |
| China                                              | 2,438   | 1.8            |
| Germany                                            | 2,324   | 1.7            |
| Sweden                                             | 2,050   | 1.5            |
| Others                                             | 15,586  | 11.5           |
| Total                                              | 135,602 |                |

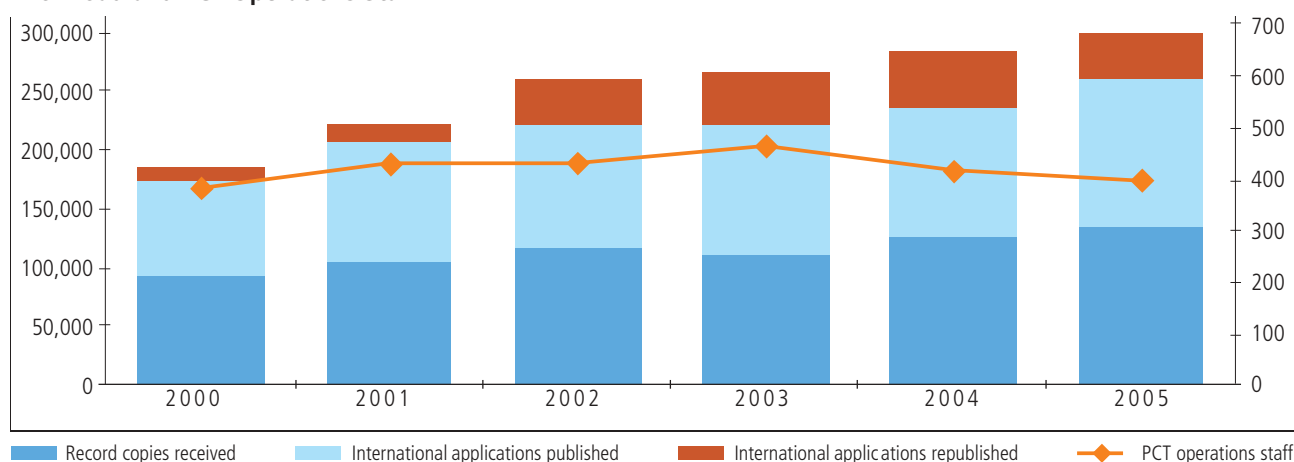
Source: WIPO Statistics Database

#### 3.2 International Bureau

##### 3.2.1 Workload and PCT Operations Staff

During the last five years, the workload of the International Bureau increased by over 50%; over the same period, the number of staff<sup>3</sup> processing record copies saw only a 3% increase.

Workload and PCT Operations Staff



|                                        | 2000   | 2001    | 2002    | 2003    | 2004    | 2005    | Growth 2000-2005 (Percent) |
|----------------------------------------|--------|---------|---------|---------|---------|---------|----------------------------|
| Record copies received                 | 91,114 | 104,098 | 114,363 | 110,282 | 123,415 | 133,132 | +46.1                      |
| International applications published   | 79,947 | 99,597  | 104,166 | 109,980 | 112,526 | 125,292 | +56.7                      |
| International applications republished | 12,676 | 16,526  | 40,382  | 42,704  | 44,809  | 39,271  | +209.8                     |
| PCT operations staff                   | 377    | 422     | 421     | 455     | 407     | 388     | +2.9                       |

Source: WIPO Statistics Database

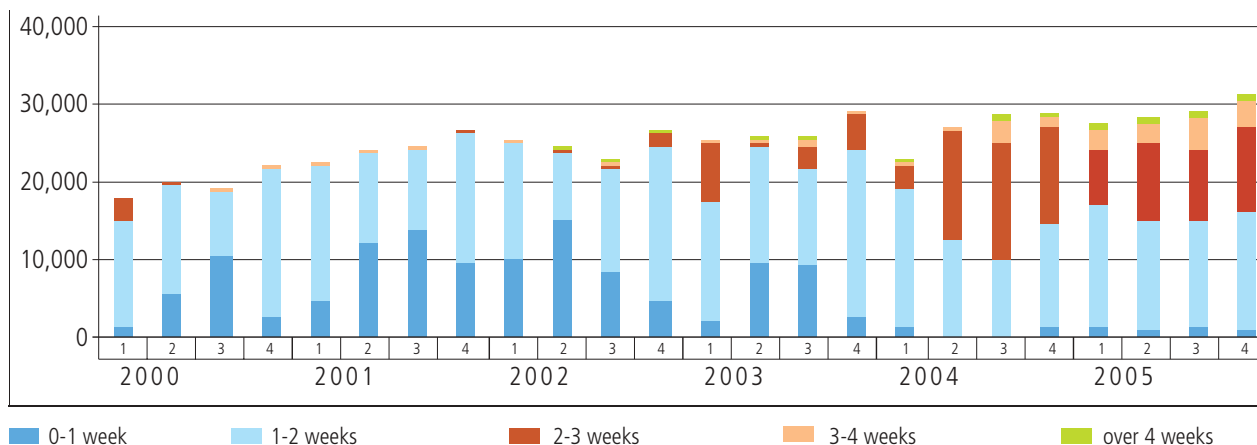
<sup>3</sup> This is the number of staff directly involved in processing, translating and publishing PCT international applications.



### 3.2.2 Timeliness

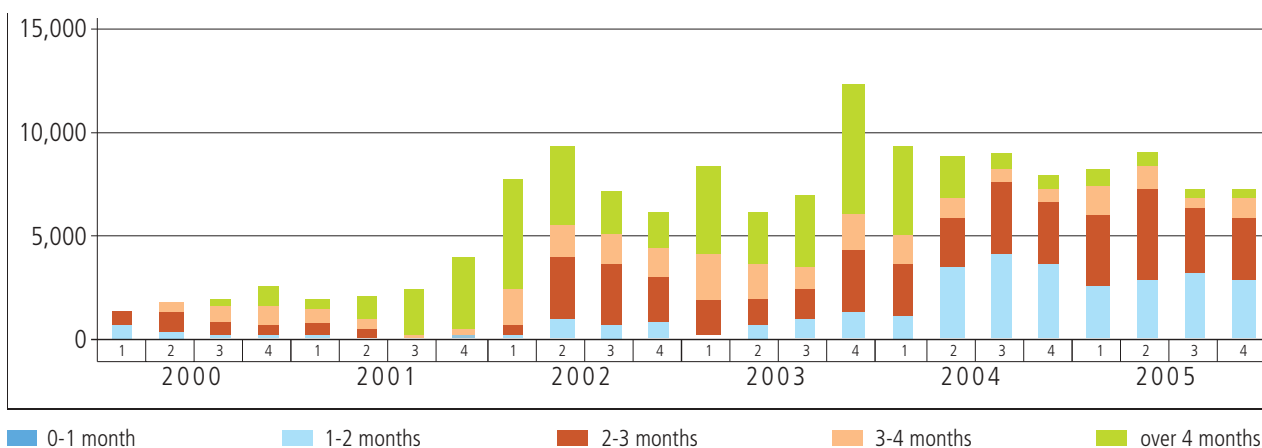
The graph below shows the timeliness of publication by the International Bureau. In 2005, 50% of the international applications were published within 2 weeks after the expiration of 18 months from the priority, 86% were published within 2-3 weeks after and 97% within 3-4 weeks after.

**International Bureau (PCT/IB) timeliness to publish International Applications**



The graph below shows the timeliness of publication by the International Bureau of late-received search reports. The number of late-received search reports has increased markedly since 2002. In 2005, 35% were published by the International Bureau within 2 months of receipt, 80% within 2-3 months and 93% within 3-4 months.

**International Bureau (PCT/IB) timeliness to republish International Applications with the International Search Report (ISR)**



### 3.2.3 Outsourcing translation work as a means of handling the workload

The International Bureau has increased its reliance on outsourcing in 2005 as a means of dealing with the increasing workload in the area of the translation of abstracts and reports. Whereas the International Bureau has, for some years already, outsourced the translation into English of Japanese and Chinese abstracts and reports, it started outsourcing a broader range of language combinations in 2005. This has permitted the International Bureau to better cope with an important and sudden increase in its workload, resulting in particular from the issuance, under recent rule changes, of a written opinion by the International Searching Authorities in every international application.

### 3.3 International Bureau as Receiving Office

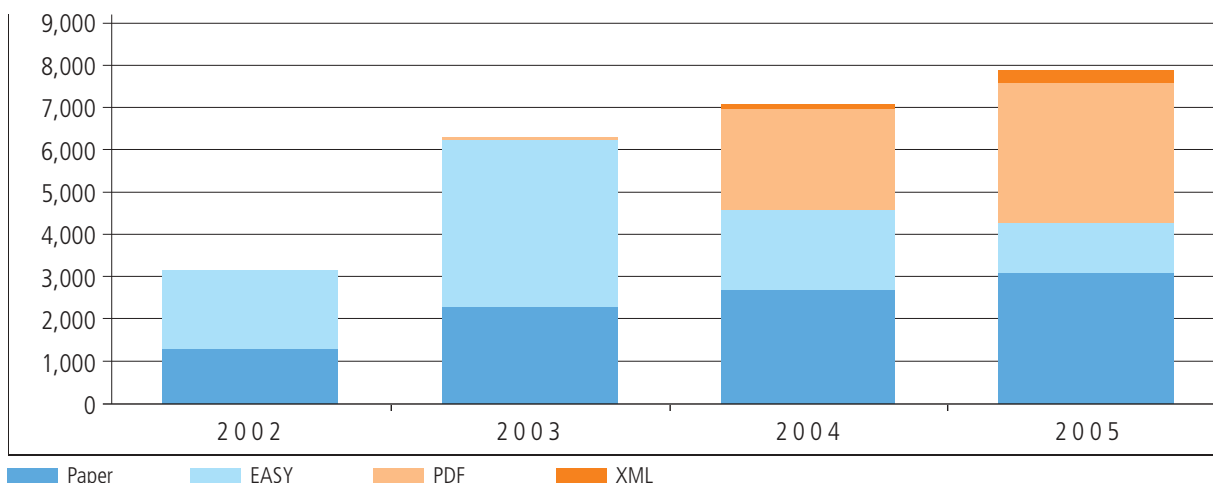
#### 3.3.1 Percentage of growth between 2004 and 2005

The use of the International Bureau as receiving Office (RO/IB) increased in 2005. The RO/IB received 7,883 international applications, an increase of 10.9% compared with 2004, from applicants from 80 countries.

#### 3.3.2 Breakdown by filing method

Of the 7,883 applications received at RO/IB, 45.3% were filed electronically. The graph below shows the changing share of filings on paper, filings on paper together with the Request Form on a diskette prepared electronically using the PCT-EASY functionality, and fully electronic filings (PDF and XML formats).

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



|       | 2002  | 2003  | 2004  | 2005  |
|-------|-------|-------|-------|-------|
| XML   |       |       | 142   | 334   |
| PDF   |       | 15    | 2,355 | 3,243 |
| EASY  | 1,850 | 3,971 | 1,930 | 1,199 |
| Paper | 1,280 | 2,300 | 2,691 | 3,107 |

Source: WIPO Statistics Database

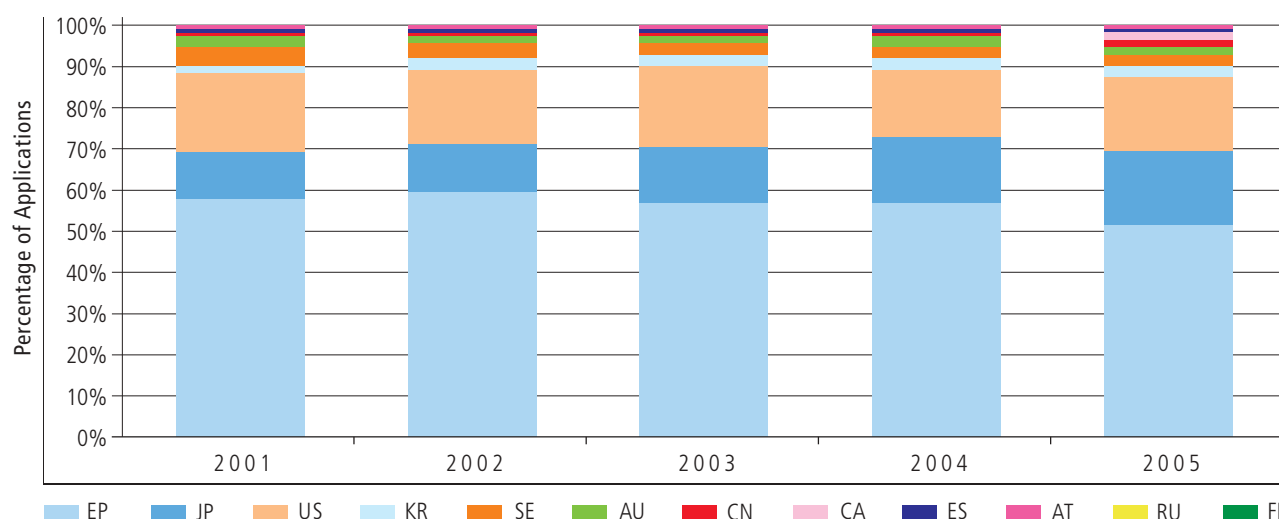
### 3.4 International Search

At the end of 2005, 12 Offices were operating as International Searching and Preliminary Examining Authorities.

#### 3.4.1 Distribution of International Searching Authorities (ISAs)

The percentage of international applications searched by each ISA in 2005 is indicated below.

**ISA Selected for IAs Filed by Year**



Source: WIPO Statistics Database

The table below shows the number of international search reports and written opinions of the International Searching Authority (WO-ISA)<sup>4</sup> issued by each Searching Authority.

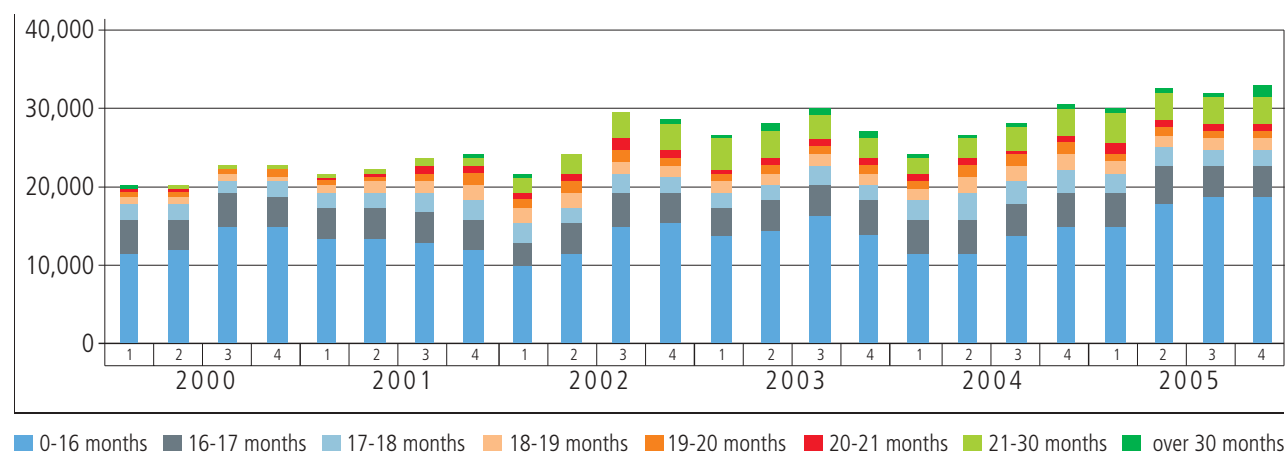
| Number of International Search Reports<br>by Searching Authority | 2001   | 2002   | 2003   | 2004   | 2005   | 2005<br>(Percent) |
|------------------------------------------------------------------|--------|--------|--------|--------|--------|-------------------|
| European Patent Office                                           | 52,765 | 61,907 | 63,134 | 62,111 | 65,075 | 51.3              |
| Japan                                                            | 10,653 | 12,128 | 15,390 | 17,946 | 22,801 | 18.0              |
| United States of America                                         | 17,645 | 18,860 | 22,324 | 18,566 | 22,742 | 17.9              |
| Republic of Korea                                                | 1,756  | 2,122  | 2,325  | 2,927  | 3,579  | 2.8               |
| Sweden                                                           | 4,105  | 4,170  | 3,678  | 3,114  | 3,411  | 2.7               |
| Australia                                                        | 1,990  | 2,142  | 2,194  | 2,361  | 2,565  | 2.0               |
| China                                                            | 1,464  | 1,000  | 1,159  | 1,315  | 2,149  | 1.7               |
| Canada                                                           |        |        |        | 93     | 2,076  | 1.6               |
| Spain                                                            | 475    | 598    | 683    | 713    | 833    | 0.7               |
| Austria                                                          | 535    | 551    | 534    | 788    | 776    | 0.6               |
| Russian Federation                                               | 535    | 643    | 558    | 609    | 591    | 0.5               |
| Finland                                                          |        |        |        |        | 217    | 0.2               |

Source: WIPO Statistics Database

### 3.4.2 Timeliness

The graph below shows the timeliness of issuance of International Search Reports (ISR). Over the last 5 years, the timeliness to issue ISR remains stable, although an increase in the number issued after 21 months is noticeable.

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



Source: WIPO Statistics Database

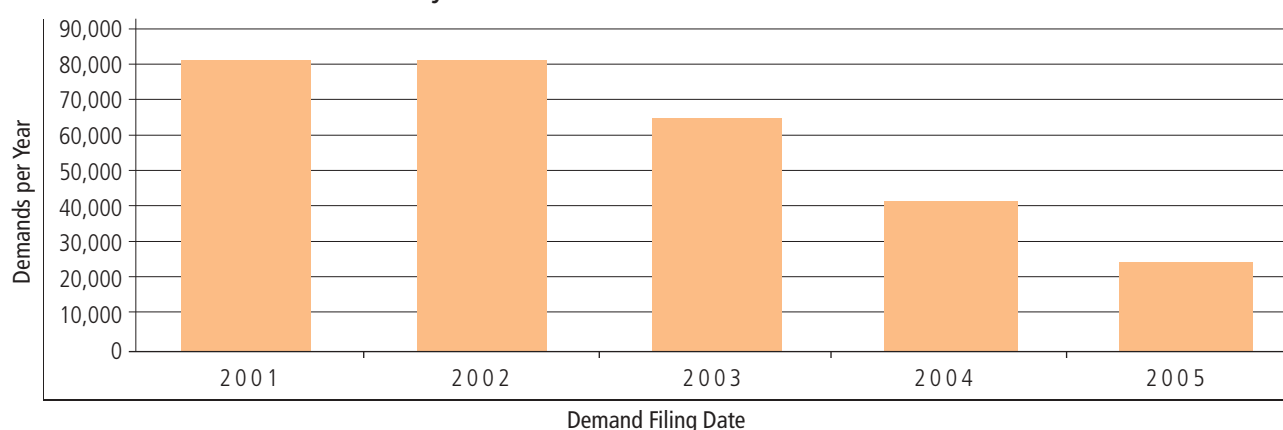
<sup>4</sup> Since 2004.

## 3.5 International Preliminary Examination

### 3.5.1 Distribution of International Preliminary Examining Authorities (IPEAs)

In 2005, filings of demands for international preliminary examination continued their expected downward trend of recent years – there was a decrease of about 41% over 2004 (see graph below). The trend is mostly due to the modification of the time limit for entry into the national phase in force since April 2002 and the introduction of the written opinion of the International Searching Authority (WO-ISA) in 2004, resulting in fewer applicants filing demands.

**Demands for International Preliminary Examination**



Source: WIPO Statistics Database

This table shows the number of demands for International Preliminary Examination by Examining Authority.

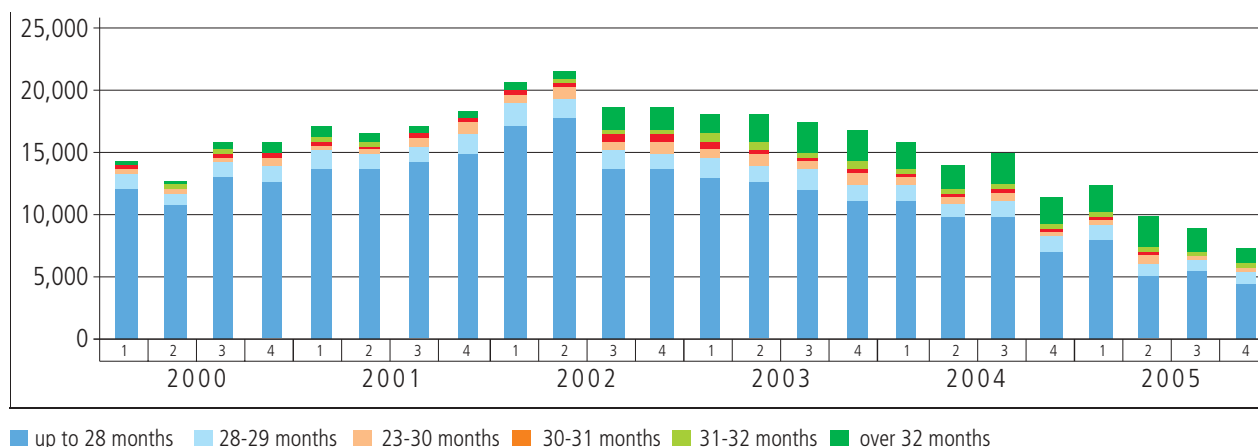
| Number of Demands for International Preliminary Examination by Examining Authority | 2001   | 2002   | 2003   | 2004   | 2005   | 2005 (Percent) |
|------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|----------------|
| European Patent Office                                                             | 45,938 | 41,056 | 31,468 | 21,668 | 13,565 | 54.1           |
| United States of America                                                           | 21,257 | 24,677 | 20,106 | 11,450 | 5,200  | 20.7           |
| Japan                                                                              | 6,139  | 7,076  | 6,815  | 4,203  | 2,521  | 10.1           |
| Australia                                                                          | 1,839  | 1,855  | 1,694  | 1,252  | 1,012  | 4.0            |
| Sweden                                                                             | 3,571  | 3,464  | 2,618  | 1,620  | 975    | 3.9            |
| Republic of Korea                                                                  | 970    | 1,367  | 1,079  | 934    | 638    | 2.5            |
| China                                                                              | 779    | 675    | 669    | 501    | 432    | 1.7            |
| Canada                                                                             |        |        |        | 1      | 309    | 1.2            |
| Austria                                                                            | 210    | 258    | 239    | 147    | 159    | 0.6            |
| Russian Federation                                                                 | 388    | 379    | 212    | 162    | 136    | 0.5            |
| Spain                                                                              |        |        | 8      | 128    | 128    | 0.5            |
| Finland                                                                            |        |        |        |        | 4      | <0.1           |
| Total                                                                              | 81,091 | 80,807 | 64,908 | 42,066 | 25,079 |                |

Source: WIPO Statistics Database

### 3.5.2 Timeliness

Most of International Preliminary Examination Reports (IPERs) reach the International Bureau before 29 months from the priority date although there is still a significant number of later furnished reports.

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



Source: WIPO Statistics Database

### 3.6 National Phase Entry

In 2005, WIPO started to collect and disseminate PCT national phase information with the aim of filling the gap in the information available about PCT applications after the international phase. A preliminary report on PCT national phase entries has been published. The report contains analysis of PCT national phase entries by office, by country of origin and by technical field.

The information is based on data supplied to WIPO by national patent offices which have accepted to participate in this initiative.

This table shows PCT national phase entry statistics<sup>5</sup> for 15 Offices.

| National Phase Entries for Selected Offices |        |        |        |        |        |        |        |
|---------------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Office                                      | 1998   | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   |
| EP                                          | 33,537 | 39,123 | 46,066 | 53,168 | 52,493 | 61,488 | 65,227 |
| JP                                          | 23,436 | 26,847 | 14,270 | 36,813 | 37,796 | 36,124 | 39,973 |
| US                                          | 17,078 | 20,628 | 24,848 | 24,250 | 34,142 | 31,497 | 36,739 |
| CA                                          | 18,825 | 22,747 | 24,771 | 26,320 | 27,348 | 25,786 |        |
| CN                                          | 11,436 | 13,350 | 15,801 | 19,231 | 22,657 | 23,354 | 32,414 |
| KR                                          | 10,838 | 12,338 | 14,876 | 16,686 | 17,868 | 16,973 | 21,660 |
| AU                                          | 11,223 | 13,303 | 15,492 | 16,507 | 17,503 | 15,839 | 16,796 |
| BR                                          | 2,461  | 11,552 | 14,090 | 9,674  | 11,098 | 7,618  | 12,444 |
| IN                                          |        |        | 4,164  | 6,351  | 7,049  | 7,717  | 10,671 |
| MX                                          |        |        | 9,643  | 10,572 | 10,355 | 9,780  | 10,657 |
| RU                                          | 3,391  | 3,185  | 3,649  | 4,101  | 4,083  | 4,219  | 5,288  |
| PL                                          | 2,900  | 3,519  | 3,799  | 3,419  | 3,443  | 3,177  | 4,961  |
| NZ                                          | 3,258  | 3,738  | 4,318  | 4,548  | 4,440  | 4,097  | 4,272  |
| GB                                          | 994    | 1,265  | 1,335  | 1,504  | 1,620  | 1,789  | 1,731  |
| DE                                          | 2,201  |        |        |        |        | 7,580  | 1,450  |

Source: WIPO Statistics Database

<sup>5</sup> As available at the International Bureau on the date of publication of this document (June 12, 2006).

## 4. ELECTRONIC ENVIRONMENT AND PCT

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

In 2005, the International Bureau started to process certain international applications in a fully electronic manner, without the need for a paper file. International applications and associated documents received by the International Bureau in electronic form are now uploaded directly into an electronic dossier (E-dossier), and those received in paper form are scanned upon receipt and then imported into the E-dossier. This represents a radical change in the working methods of the staff, as they no longer work on the basis of a paper file.

Deployment of E-dossier at the International Bureau started progressively with the electronic processing of international applications filed with the Korean Intellectual Property Office (KIPO) and the National Board of Patents and Registration of Finland. The deployment is now almost complete, with the international applications from all but one receiving Office being processed in a fully electronic manner.

Electronic processing is aimed at securing longer term efficiency gains and providing improved services at the International Bureau, including the establishment of a comprehensive database of PCT-related documents and data in electronic form.

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

Twelve Offices<sup>6</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). This flexible, secure and automated mechanism enables Offices to exchange bulk data and documents with the International Bureau.

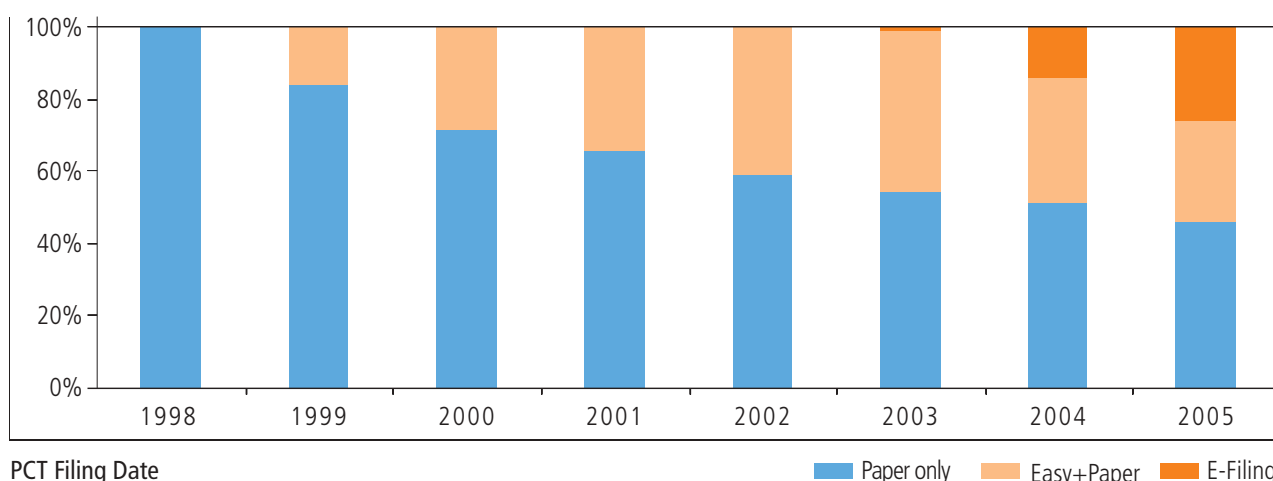
### 4.3 Electronic filing

#### 4.3.1 Significant Move to E-filing

In 2005, 26.3% of the total number of international applications were filed electronically. It became possible to file international applications electronically with three more receiving Offices: the Australian Patent Office, the Danish Patent and Trademark Office, and the Netherlands Industrial Property Office. At the end of 2005, there were 12 receiving Offices that accepted filing in electronic form. Four further Offices were added in early 2006: the Polish Patent Office, the Romanian Office for Inventions and Trademarks, the Slovak Industrial Property Office, and the Swedish Patent and Registration Office.

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 1998.

Share of Filings by Filing Methods



<sup>6</sup> Australia, Canada, China, Eurasian Patent Organization, Finland, France, Mexico, Republic of Korea, Spain, Sweden, United Kingdom and Viet Nam.

| Filing Methods (Percent) | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|--------------------------|------|------|------|------|------|------|------|------|
| Paper                    | 99.9 | 84.1 | 71.3 | 65.3 | 59   | 54.2 | 51.2 | 45.9 |
| Easy+Paper               | <1   | 15.9 | 28.7 | 34.7 | 41   | 44.9 | 34.7 | 27.7 |
| E-Filing                 |      |      |      |      | <1   | 1    | 14.1 | 26.3 |

Source: WIPO Statistics Database

#### 4.3.2 PCT-SAFE Software

Several new builds of the PCT-SAFE (Secure Applications Filed Electronically) client software were released to introduce new functionality, new Offices and other PCT changes. By the end of 2005, a total of 73 receiving Offices were prepared to accept international applications containing requests prepared using the PCT-EASY functionality of the PCT-SAFE software, together with PCT-EASY diskettes (or other physical medium). Although applicants continue to take advantage of the benefits of the PCT-EASY functionality, there has been a reduction in its use as more applicants are now filing PCT applications in fully electronic form.

#### 4.3.3 PCT-ROAD

The PCT-ROAD (Receiving Office Administration) system, a cooperation project between the Korean Intellectual Property Office (KIPO) and WIPO, enabling electronic filing under the PCT on physical media, was deployed via an on-site training and installation process to four PCT receiving Offices as pilot Offices, Egypt, Israel, Philippines and Viet Nam. The PCT-ROAD software has been made available since early 2005 to any office which is interested in the system as well as the four pilot Offices for their feedback. By the end of 2005, the PCT-ROAD system had been introduced to 16 PCT receiving Offices.

## 5. DISSEMINATION OF PCT AND PATENT INFORMATION

### 5.1 Launch of the PatentScope Web Portal

During the third quarter of 2005, the new PatentScope web portal ([www.wipo.int/patentscope](http://www.wipo.int/patentscope)) was launched. All information concerning WIPO's patent and PCT-related services and activities are available via this portal, including access to published PCT applications.

### 5.2 World's Technology Available Online

Over 1.2 million published PCT applications, including the latest bibliographic data and documents (such as priority documents, written opinions of the ISA, or international preliminary reports on patentability) are available online for free-of-charge consultation at [www.wipo.int/pctdb/](http://www.wipo.int/pctdb/).

The service provides:

- 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;
- Access to status information, published documents and file contents through a single system.

The International Bureau has also developed its own Optical Character Recognition (OCR) system. This permits the International Bureau to publish the searchable text of published international applications, together with their images, on the publication date. The International Bureau's Optical Character Recognition started being deployed during the last quarter of 2005 and will be further deployed in 2006.

### 5.3 Full and exclusive electronic publication of PCT applications and the publication of the PCT Gazette solely in electronic form

In October 2005, the Member States decided that the PCT Gazette would no longer be made available in paper form, but would be published wholly in electronic form as from April 1, 2006. The content of the electronic Gazette has therefore been updated. WIPO published in July 2005 a prototype of the new version of the electronic Gazette, this prototype became the "official" Gazette on April 1, 2006.

From this date, international publication of PCT international applications takes place wholly in electronic form. This means that the legal publication of international applications is now the electronic publication. The electronic publication is available in several different formats on the date of publication on the PatentScope portal at [www.wipo.int/pctdb](http://www.wipo.int/pctdb).

### 5.4 Aggregate Patent Statistics

An initiative to enhance the International Bureau's collection and dissemination of patent statistics has been started. As part of this initiative, the International Bureau has improved the data collection mechanism via a revised and modernized questionnaire. The data has been made available in a number of ways, including analytical reports and Internet-based queries for aggregate data.

### 5.5 Publication of IPC 8th Edition

A new, updated edition of the International Patent Classification (IPC) entered into force on January 1, 2006. As of that date, all published patent documents are classified according to the new edition. The eighth edition of the IPC is the product of a six-year process of reform designed to adapt the IPC to the electronic environment for improved efficiency in the retrieval of patent information and to facilitate its use by industrial property offices and the general public.

## 6. CHANGES IN THE PCT LEGAL FRAMEWORK

### 6.1 Changes in 2005

#### 6.1.1 Amendments to PCT Regulations (entry into force: April 1, 2005)

A number of amendments to the PCT Regulations, as approved by the PCT Assembly in 2004, entered into force on April 1, 2005. The amendments related to the following matters:

- Fee for late furnishing of paper or electronic version of sequence listing for the purposes of search and examination;
- Simplified protest procedure before both the ISA and the IPEA in case of non-unity of invention; and
- Corrigenda and consequential amendments to the Rule changes which entered into force on January 1, 2004.

#### 6.1.2 Other Changes in 2005

- *Increasing number of International Searching and Preliminary Examining Authorities.*

The National Board of Patents and Registration (Finland) started functioning as International Searching and Preliminary Examining Authority in respect of international applications filed on or after April 1, 2005. This development brought the number of ISAs/IPEAs to twelve.



- *KIPO specified by RO/US as International Searching Authority.*

The Korean Intellectual Property Office (KIPO) has been specified by RO/US as International Searching Authority for international applications filed with the United States Patent and Trademark Office (USPTO). The Agreement between KIPO and USPTO was signed at the end of 2005 and entered into force on January 1, 2006.

## 6.2 Changes in 2006

### 6.2.1 Amendments to PCT Regulations (entry into force: April 1, 2006)

The PCT Assembly, in October 2005, approved a number of amendments concerning the following issues:

- International publication and the PCT Gazette in electronic form – the move towards full and exclusive electronic publication of all international applications, and the publication of the PCT Gazette solely in electronic form (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.

### 6.2.2 Future Work – Some Outstanding Issues

- *Supplementary Searches and International Publication in Multiple Languages.*

The Working Group on Reform of the PCT will continue consideration of proposals on the publication of the international application in multiple languages and permitting supplementary searches to be carried out by International Authorities other than the main International Searching Authority.

- *Common Quality Framework for International Search and Preliminary Examination.*

All twelve ISAs and IPEAs met in 2005 at two sessions of the Meeting of International Authorities (MIA). They agreed that future work should be undertaken on certain matters on which a common approach might be desirable, including quality standards, manuals and documentation, examiner skills and training, and quality metrics. It was felt that there were areas in which coordination and cooperation among the various Authorities would be productive. Dedicating proper importance to the quality of international search and preliminary examination builds confidence in the PCT system among Contracting States and encourages Offices to rely on the results of the work of the International Authorities.

- *PCT Minimum Documentation.*

The MIA also agreed that two further traditional knowledge-related journals should be added to the list of non-patent literature that forms part of the PCT Minimum Documentation. The Meeting also supported a proposal by the Korean Intellectual Property Office (KIPO) that patent documents from the Republic of Korea should be included in the PCT Minimum Documentation. Such proposal was approved by the PCT Assembly in October 2005. For the longer term, task forces were set up to conduct a more comprehensive review of the concept of minimum documentation and to oversee development of a search guidance intellectual property digital library.

## 6.3 Changes in 2007 – Amendments to PCT Regulations (entry into force: April 1, 2007)

The amendments which will enter into force in 2007 relate to:

- Missing elements and parts of the international application;
- Restoration of the right of priority;
- Rectification of obvious mistakes; and
- Addition of patent documents from the Republic of Korea to the PCT Minimum Documentation.

## 7. PCT TRAINING

Around 110 seminars and presentations about the use and advantages of the PCT, and promotion of accession to it, were given by officials of the International Bureau to some 7,260 interested parties in the following languages: Arabic, English, Finnish, French, German, Japanese, Portuguese and Spanish.

The seminars and presentations were held in the following 31 countries: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Cuba, Denmark, Ecuador, Egypt, Finland, France, Germany, Hungary, Italy, Japan, Jordan, Mexico, Norway, the Republic of Korea, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States of America, Uruguay and Viet Nam.

## 8. PCT CONTRACTING STATES

During 2005, four new Contracting States became bound by the PCT – Comoros, the Libyan Arab Jamahiriya, Nigeria, and Saint Kitts and Nevis – bringing the number of States which had acceded to the PCT by December 31, 2005, to 128<sup>7</sup>, as follows:

|                                          |                        |                                              |
|------------------------------------------|------------------------|----------------------------------------------|
| Albania                                  | Germany                | Portugal                                     |
| Algeria                                  | Ghana                  | Republic of Korea                            |
| Antigua and Barbuda                      | Greece                 | Republic of Moldova                          |
| Armenia                                  | Grenada                | Romania                                      |
| Australia                                | Guinea                 | Russian Federation                           |
| Austria                                  | Guinea-Bissau          | Saint Kitts and Nevis                        |
| Azerbaijan                               | Hungary                | Saint Lucia                                  |
| Barbados                                 | Iceland                | Saint Vincent and the Grenadines             |
| Belarus                                  | India                  | San Marino                                   |
| Belgium                                  | Indonesia              | Senegal                                      |
| Belize                                   | Ireland                | Serbia and Montenegro                        |
| Benin                                    | Israel                 | Seychelles                                   |
| Bosnia and Herzegovina                   | Italy                  | Sierra Leone                                 |
| Botswana                                 | Japan                  | Singapore                                    |
| Brazil                                   | Kazakhstan             | Slovakia                                     |
| Bulgaria                                 | Kenya                  | Slovenia                                     |
| Burkina Faso                             | Kyrgyzstan             | South Africa                                 |
| Cameroon                                 | Latvia                 | Spain                                        |
| Canada                                   | Lesotho                | Sri Lanka                                    |
| Central African Republic                 | Liberia                | Sudan                                        |
| Chad                                     | Libyan Arab Jamahiriya | Swaziland                                    |
| China                                    | Liechtenstein          | Sweden                                       |
| Colombia                                 | Lithuania              | Switzerland                                  |
| Comoros                                  | Luxembourg             | Syrian Arab Republic                         |
| Congo                                    | Madagascar             | Tajikistan                                   |
| Costa Rica                               | Malawi                 | The former Yugoslav Republic of<br>Macedonia |
| Côte d'Ivoire                            | Mali                   | Togo                                         |
| Croatia                                  | Mauritania             | Trinidad and Tobago                          |
| Cuba                                     | Mexico                 | Tunisia                                      |
| Cyprus                                   | Monaco                 | Turkey                                       |
| Czech Republic                           | Mongolia               | Turkmenistan                                 |
| Democratic People's Republic of<br>Korea | Morocco                | Uganda                                       |
| Denmark                                  | Mozambique             | Ukraine                                      |
| Dominica                                 | Namibia                | United Arab Emirates                         |
| Ecuador                                  | Netherlands            | United Kingdom                               |
| Egypt                                    | New Zealand            | United Republic of Tanzania                  |
| Equatorial Guinea                        | Nicaragua              | United States of America                     |
| Estonia                                  | Niger                  | Uzbekistan                                   |
| Finland                                  | Nigeria                | Viet Nam                                     |
| France                                   | Norway                 | Zambia                                       |
| Gabon                                    | Oman                   | Zimbabwe                                     |
| Gambia                                   | Papua New Guinea       |                                              |
| Georgia                                  | Philippines            |                                              |
|                                          | Poland                 |                                              |

<sup>7</sup> Between the end of 2005 and the date of publication of this document (June 12, 2006), the Lao People's Democratic Republic and Honduras have acceded to the PCT, bringing the total number of Contracting States to 130.

## 9. MORE RESOURCES ON THE INTERNET

More resources relating to PCT matters have been published on WIPO's web site including:

### **More Data**

Search International Patent Applications Service  
PCT Statistics

### **More Updated Legal Information**

### **More Resources for Interested Parties**

### **More Languages**

Chinese, Japanese, Russian, Spanish, German, Korean...

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***[www.wipo.int/patentscope](http://www.wipo.int/patentscope)***



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