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**INTERNATIONAL PATENT COOPERATION UNION
(PCT UNION)**

ASSEMBLY

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Geneva, September 26 to October 5, 2005

STATUS REPORT ON PCT AUTOMATION

Document prepared by the International Bureau

INTRODUCTION

1. At the thirty-third Session of the Assembly of the PCT Union, held in Geneva from September 27 to October 5, 2004, a status report was provided on PCT Information Systems (document PCT/A/33/3). The present document reports on PCT Information System and other developments that have occurred in the area of PCT automation since the issuance of this status report and covers the following topics:

I. Electronic processing at the International Bureau;

II. Electronic communication of PCT documents by the International Bureau to offices;

III. Electronic communication of PCT documents by offices to the International Bureau; and

IV. Developments affecting the dissemination of PCT and patent information.

I. ELECTRONIC PROCESSING AT THE INTERNATIONAL BUREAU

2. The status report provided at the previous Session of this Assembly stated that, contrary to what had been the case in preceding years, the International Bureau's new approach to the development of the required functionality for the electronic processing of international applications was based on, *inter alia*, a radically simplified technical architecture, as well as a progressive development and deployment schedule (rather than the delivery of a complete system in a single phase). The status report described concrete progress made at that time, particularly in relation to the E-viewer and E-pdoc applications.

3. Since last year's status report, this new approach has proven to be capable of delivering good results. That being the case, the International Bureau intends to continue working on the same basis for the foreseeable future.

4. The following paragraphs of this report describe the principal achievements since the previous Session of this Assembly. These achievements coincide with the advent and strong growth in E-filings, and relate to the further development of the E-viewer and E-pdoc applications, the creation of new functionality in the form of the E-dossier application and an in-house Optical Character Recognition capability.

E-filings

5. As set out in paragraphs 29 to 31, the percentage of E-filings under the PCT increased from 14% at the end of 2004 to 25% in May 2005. At the receiving Office of the International Bureau, E-filings represented 48% of all filings in May 2005. Although these E-filings have presented particular operational challenges, the International Bureau nonetheless was able to absorb their substantial increase without too much difficulty.

6. E-filings currently are processed in a partially electronic manner at the International Bureau. A paper dossier continues to be created for these filings, containing at least the request form and the remaining documents pertaining to the application. The gradual deployment of the E-dossier (see paragraphs 10 to 14) within the International Bureau likely will obviate the need for this paper dossier in the future.

E-viewer

7. The E-viewer is an application permitting the visualization of PCT documents residing in the International Bureau’s document database. As such, the E-viewer is the foundation on which further functionalities are being built, with the aim to establish a fully electronic dossier which can be used for end-to-end electronic processing of international applications and thus allow the International Bureau to progressively phase out its paper-based operations.

8. At the time of the previous Session of this Assembly, the E-viewer already had been deployed to a limited number of staff in the PCT Operations Division. Since then, this application has been made available to all staff in the Office of the PCT and, consequently, is now routinely relied upon by such staff for the consultation of electronic PCT documents residing in the International Bureau's databases.

E-pdoc application

9. The E-pdoc application permits the full electronic processing of priority documents by the International Bureau. The E-pdoc application was deployed to the entire PCT Operations

Division in the summer of 2004, shortly after the United States Patent and Trademark Office (USPTO) started transmitting to the International Bureau all its priority documents in electronic form. Currently all priority documents at the International Bureau are processed electronically with this application. Those that are received from offices electronically, which is the case for the Japan Patent Office (JPO), the Korean Intellectual Patent Office (KIPO) and USPTO (see paragraph 33 below), are loaded into the system and the remainder which are still received in paper format are scanned upon receipt for further paperless processing with this application. Considering that priority documents represent the most important document type in terms of volume at the International Bureau (more than 143,000 were received in 2004), the complete electronic processing of all these priority documents with the E-pdoc application was a significant step in the International Bureau's progressive migration towards a fully electronic environment.

E-dossier

10. The E-dossier is an enhancement of the E-viewer and E-pdoc applications permitting the end-to-end electronic processing of international applications, including all associated documents. As such, the E-dossier is designed to permit applications to be processed in a fully electronic manner, without the need for a paper file. Documents received by the International Bureau in electronic form will be uploaded directly into the E-dossier and those received in paper would be scanned upon receipt and then uploaded to the E-dossier.

11. In an initial phase, it is planned that the E-dossier will work in conjunction with certain legacy systems, particularly in the areas of bibliographic data management and publication management. In a subsequent phase, those remaining functions also would be transferred to the E-dossier, and the legacy systems in question would be phased out.

12. From the user perspective, the deployment of the E-dossier probably is the single most important step in the International Bureau's migration towards a fully electronic environment. This new functionality will represent a radical change in the working methods of the staff, as they will no longer be working on the basis of a paper file, but almost exclusively from the screen. That being the case, and to avoid any significant regression in process efficiencies, this new functionality must be deployed with the appropriate degree of prudence and at pace that can be reasonably absorbed by the staff concerned. A substantial amount of time and energy will be spent on change management and training issues so as to ensure a smooth transition to the new electronic working environment.

13. A progressive deployment schedule is envisaged for the E-dossier in 2005 and 2006, gradually expanding its use for international applications from an increasing number of Receiving Offices. Deployment started during the summer of 2005 for the Korean and Finnish Receiving Offices. The experience gained with the use of the E-dossier in relation to applications received from these Offices together with staff adaptation to the new facility will dictate the pace of further deployment.

14. Several Receiving Offices are making preparations to transmit record copies and other relevant documents (that have been received on paper and then scanned) to the International Bureau in electronic form. It is important that the timing of the transmittal of these electronic records by the receiving offices be coordinated in line with the E-dossier deployment schedule at the International Bureau. Such coordination is an essential element of the bilateral co-operation plans referred to in paragraph 26.

Optical Character Recognition

15. Since the previous Session of this Assembly, the International Bureau has also developed an internal Optical Character Recognition (OCR) capability. This functionality allows the International Bureau to OCR large volumes of documents in batch mode and is also integrated into the E-dossier for adhoc OCR. This in-house OCR capability will offer several benefits to the International Bureau. First, its integration into the E-dossier will facilitate data entry, in particular for the abstracts, but also for other data elements. Second, it will facilitate translation work, as translators will more easily be able to find precedents, helping them to translate more efficiently and accurately. Third, it is likely to permit the International Bureau to publish the searchable text of the published international applications, together with their images, on publication day, rather than at a later date (which is currently the case).

16. The International Bureau's Optical Character Recognition currently is in the initial stages of its production deployment and will be further deployed together with the E-dossier throughout the PCT Operations Division in 2005 and 2006.

II. ELECTRONIC COMMUNICATION OF PCT DOCUMENTS BY THE INTERNATIONAL BUREAU TO OFFICES

17. The status report on PCT Information Systems provided to the previous Session of this Assembly contained an exhaustive description of the International Bureau's new document communication system, and the benefits which this new system offered to the International Bureau and offices. Since this report, the system essentially underwent a period of consolidation, with no major changes being implemented or planned to be implemented. Instead, the International Bureau's efforts have been concentrated on the development of the required functionality for the full electronic processing of PCT applications (see paragraphs 2 to 16) and of other, supplementary means of making patent and PCT data available to a broader range of interested parties (see paragraphs 34 to 42).

18. A number of statistical indicators are provided in the subsequent paragraphs which illustrate the performance of the International Bureau's document communication system since the previous Session of this Assembly.

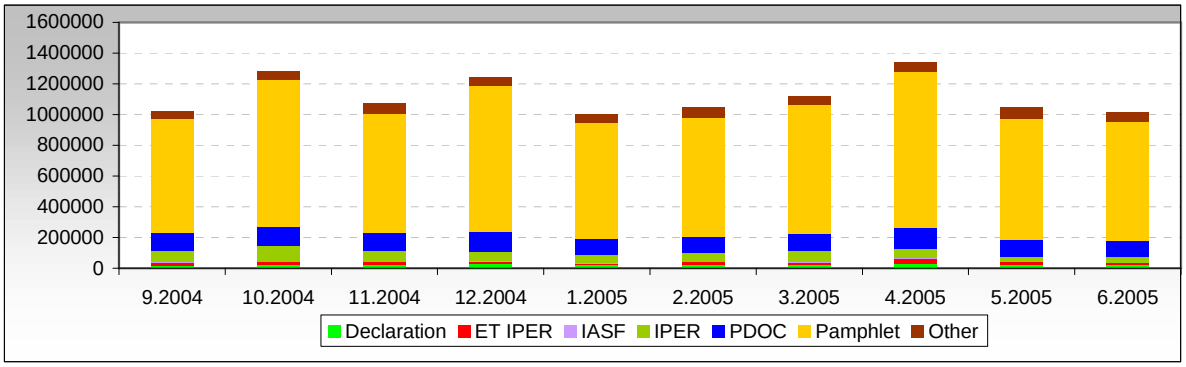
Volume

19. The chart below lists the number of documents which the system has permitted the International Bureau to communicate to offices during the relevant period. As mentioned in the previous status report, this important number of documents has been communicated in a highly automated manner, requiring human intervention only in exceptional cases.

Total Number of Documents Communicated by IB

The table and graph below show the total number of documents communicated by the IB from 9/2004 - 6/2005.

	9.2004	10.2004	11.2004	12.2004	1.2005	2.2005	3.2005	4.2005	5.2005	6.2005	Total
Declaration	18477	22201	20653	27706	19908	22976	23457	34270	23689	22415	235752
ET IPER	17418	14816	17397	13628	12080	18001	10620	27371	16376	14586	162293
IASF	6200	8344	6206	6688	4147	3514	7770	6068	5310	2778	57025
IPER	74497	99873	73539	59030	51267	57582	72621	60920	31599	33469	614397
PDOC	116466	127372	111735	132124	105098	105946	108443	133419	104431	106342	1151376
Pamphlet	737132	953067	776787	945316	755413	770761	840185	1013716	794623	775594	8362594
Other	49894	60508	70280	54795	57973	68052	57480	65996	74103	64109	623190
Total	1020084	1286181	1076597	1239287	1005886	1046832	1120576	1341760	1050131	1019293	11206627



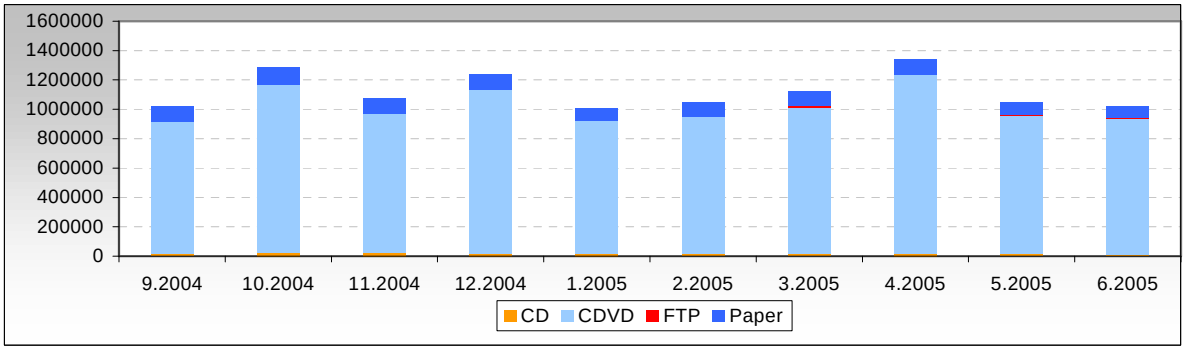
Media

20. The chart below shows the media (paper, CD, DVD or Internet) that is utilized for the communication of documents to offices during the relevant period. The chart confirms a trend already observed in the previous status report, namely that CD/DVD is the most popular medium. In the future, the International Bureau would like to see greater usage being made of Internet-based transmissions of documents, in particular documents 'specifically' requested by offices, as this would offer an even speedier service at lower cost.

Total Number of Documents on Different Media Communicated by IB

The table and graph below show the break-down on different media types of the total number of documents communicated by the IB.

	9.2004	10.2004	11.2004	12.2004	1.2005	2.2005	3.2005	4.2005	5.2005	6.2005	Total
CD	18532	21434	20422	14346	14772	16919	17032	15579	13129	10950	163115
CDVD	896588	1143815	948051	1120757	905044	931487	995930	1217943	942718	924810	10027143
FTP	1	16	14	0	0	4	10522	7479	8259	2549	28844
Paper	104963	120916	108110	104186	86071	98422	97092	100759	86025	81484	988028
Total	1020084	1286181	1076597	1239289	1005887	1046832	1120576	1341760	1050131	1019793	11207130



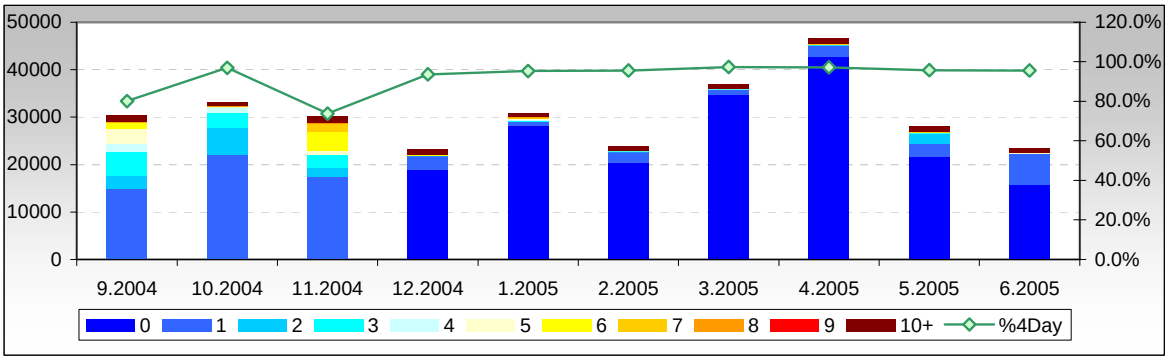
Timeliness

21. As shown in the chart below, in the case of specific document requests by offices, in most cases the International Bureau is capable of transmitting the documents within a few days. As mentioned above, increased reliance on Internet-based transmissions would further reduce the time required for these documents to reach the offices concerned, because there would no longer be any need to mail the CD/DVDs. On the rare occasion that there are delays in the International Bureau's document communication process, it is most often due to the fact that the International Bureau has not yet received the documents in question from the originating offices.

Timeliness for Communicating Documents

Total number of documents that are sent to recipients within specified time, in days.

	9.2004	10.2004	11.2004	12.2004	1.2005	2.2005	3.2005	4.2005	5.2005	6.2005
0	0	0	0	18925	28163	20381	34701	42788	21694	15750
1	14998	22078	17412	2870	872	2272	984	2354	2688	6487
2	2644	5602	1929	49	44	8	168	50	2178	72
3	5117	3307	2715	8	108	228	48	56	138	37
4	1533	1109	157	3	239	9	39	24	32	36
5	3282	69	655	4	162	29	22	35	24	58
6	1305	31	3954	19	92	22	27	22	56	29
7	47	80	1924	16	278	16	40	122	36	23
8	30	38	36	12	111	22	50	38	10	25
9	26	16	54	245	4	27	34	25	13	10
10+	1366	787	1268	1186	819	938	839	1076	1068	898
Total	30348	33117	30104	23337	30892	23952	36952	46590	27937	23425
%4Day	80.0%	96.9%	73.8%	93.6%	95.3%	95.6%	97.3%	97.2%	95.7%	95.5%



III. ELECTRONIC COMMUNICATION OF PCT DOCUMENTS BY OFFICES TO THE INTERNATIONAL BUREAU

22. In 2004, the International Bureau established the WIPO PCT Electronic Data Interchange Service (PCT EDI), which provides a flexible, secure and automated mechanism for the exchange of intellectual property information between offices and the International Bureau. During the last 12 months, further progress was made with the electronic communication of PCT documents to the International Bureau, and in particular with the deployment of the PCT EDI Service.

23. PCT EDI is designed as a bulk data and document exchange mechanism, supporting multiple exchange media (Internet, TriNet, CD/DVD), and multiple network protocols

(FTP/SFTP). The network-based document exchange protocols have been selected to ensure minimum overhead and maximum efficiency in the document exchange process, while ensuring security over public networks without requiring the use of custom-designed software. The numerous commercial and freely available open source packages that support the PCT EDI communication protocols may be exploited without modification. PCT EDI also allows interested offices to automatic document delivery directly into their local automation software.

24. The International Bureau will respond to increased office interest in network data exchange, particularly among larger offices, through the possible enhancement of the PCT EDI service to include support for the Trilateral Document Access (TDA) service.

25. At the time of writing this report, eleven Offices have implemented a working PCT EDI network connection (AU, CA, CN, EA, ES, FI, FR, GB, KR, SE and VN) and are progressively using PCT EDI for production purposes. Offices desiring to use CD/DVD as their transfer medium may continue do so.

26. As a means of further increasing the level of electronic document exchange the International Bureau has negotiated cooperation plans with a number of offices. As of the date of this document, the International Bureau has drafted cooperation plans with seven Offices (AU, CA, CN, EA, ES, KR and SE). The International Bureau will continue to actively seek to increase the number of offices with which it has agreed cooperation plans.

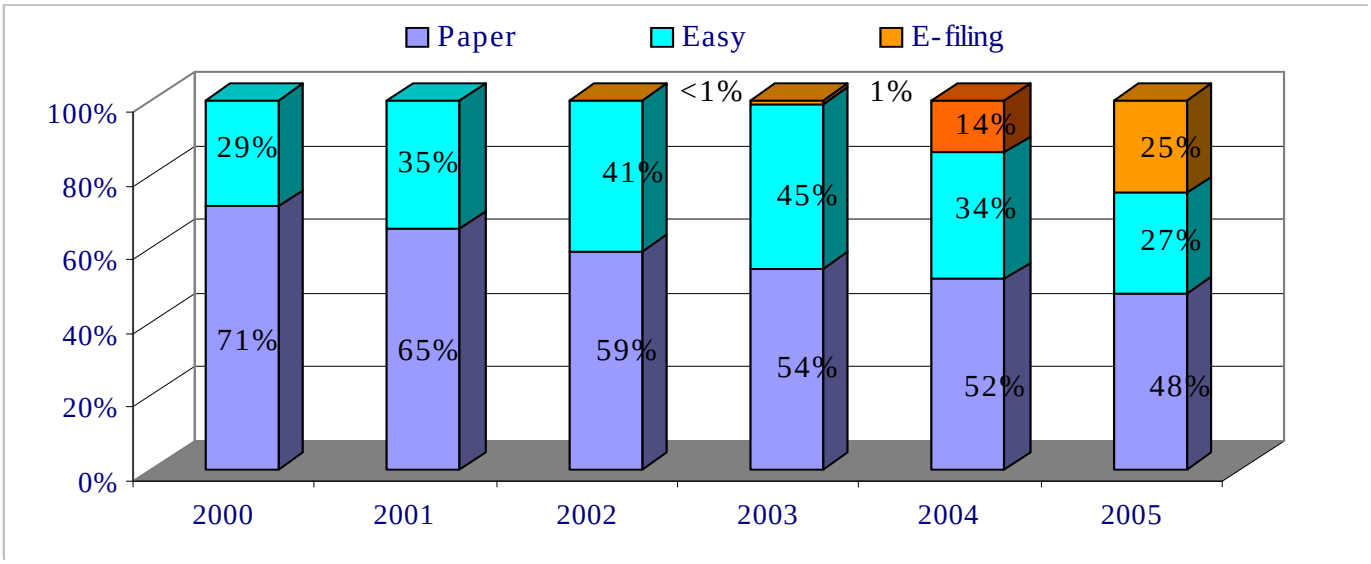
27. The International Bureau, in close cooperation with participating offices, has made significant progress towards the goal of replacing paper as the document exchange medium within the PCT. This has resulted in significant increases in document exchange efficiencies for participants. These efficiencies are centered around printing, scanning, storage and postal-related activities. Furthermore, the International Bureau has gained invaluable experience and expertise in the “real-world” aspects of on-line, on-demand document exchange and submission requirements that need to be addressed in order to enable appropriate electronic document exchange and processing services.

28. The PCT EDI service is used mainly in three areas: electronic filing, document exchange and national phase information as well as translations of international applications under Rule 95. The subsequent paragraphs of this report will describe these areas more in detail.

Electronic Filing

29. At the time of writing this report, the International Bureau receives e-filed international applications from the following nine receiving Offices: EP, ES, FI, FR, GB, IB, JP, KR and NL.

30. The chart below illustrates the evolution, since 2000, of the use of paper, PCT-EASY and E-filing, as a means of submitting PCT applications. A gradual reduction of paper-based filings is to be noted, as well as a transition from PCT-EASY to the E-filing format, which now represents twenty-five percent of all applications and is expected to continue to grow in importance.

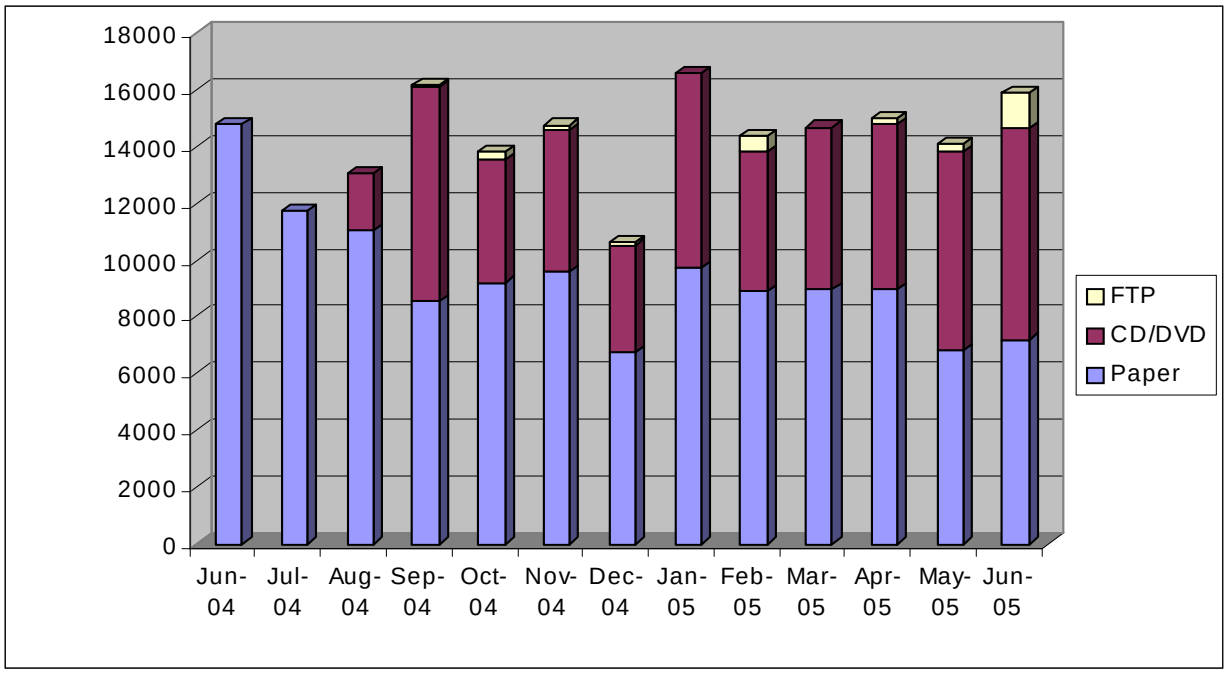


31. In addition to electronic application submission via PCT EDI, various additional services for PCT applicants and offices have been introduced, most particularly a new version of the PCT-SAFE (Secure Applications Filed Electronically) client software, containing new functionality for approximately 8,000 PCT applicants and nine PCT receiving Offices. Moreover, the PCT-ROAD (Receiving Office Administration) system, which enables electronic filing under the PCT on physical media, was deployed via an on-site training and installation process to three PCT receiving Offices, Israel, Egypt and Vietnam. PCT-ROAD, which is a cooperation project between KIPO and WIPO, was made available in early 2005 to five pilot Offices for their feedback, Egypt, India, Israel, Philippines and Vietnam.

Document Exchange

32. Document exchange is the principal use for PCT EDI. Document exchange services currently have two primary flows: document retrieval from the International Bureau to the office, which already has been addressed in section II, and document submission by the office to the International Bureau.

33. The chart below illustrates the evolution, since September 2004, of the use of paper, CD/DVD and FTP for the transmission of priority documents to the International Bureau. Increasingly, offices choose to submit documents electronically to the International Bureau: the USPTO and the JPO send all their priority documents to the International Bureau on CD; KIPO sends all their priority documents and e-filed international applications to the International Bureau using PCT EDI network transfer. During the first six months of 2005, 28,000 priority documents arrived electronically and were subsequently processed electronically by the International Bureau.



IV. DEVELOPMENTS AFFECTING THE DISSEMINATION OF PCT AND PATENT INFORMATION

Launch of the PatentScope web portal

34. During the third quarter of 2005, the new PatentScope web portal was launched. All WIPO's patent and PCT-related services and activities are available via this portal, which can be found at *http://www.wipo.int/patentscope/en.*

35. All existing information concerning PCT and patent services is available through this new portal. In addition, new sections on patent data dissemination and patent statistics have been introduced. The patent data dissemination section provides access, through an enhanced PCT Electronic Gazette, to the complete collection of published PCT International Applications (now more than a million) from 1978 to the present date in image format and to fully searchable text of descriptions and claims for PCT International Applications filed as from July 1998.

36. PatentScope will provide access to new services that will be made available in the coming months such as an on-line public file inspection system providing access to published PCT documents for applicants and the general public, as well as tutorials and other resources for patent information retrieval.

PCT national phase statistics

37. An initiative to collect and disseminate PCT national phase information has started. Both national phase statistics information and translations of international application entering the national phase are considered within this initiative.

38. Key features of this initiative are:

(a) A preliminary report on PCT national phase entries has been produced. This preliminary report is based on data provided to the International Bureau by a number of national patent offices. The report has been created to fill a gap in the information available about PCT applications after the international phase. The report contains analysis of PCT national phase entries by office, by country of origin and by technical field. In addition, it gives an indication of the number, type and source of PCT international applications entering the national phase in different offices around the world. The report is available at *http://www.wipo.int/ipstats/en/statistics/patents/index.html*;

(b) It is expected that more data will be added to this report in the near future, as a result of increasing the number of reporting offices and by the completion of historical data from all offices; and

(c) At a later stage, the International Bureau intends to publish, where information is available, the national phase status of individual PCT applications via the PatentScope web portal.

39. The International Bureau now accepts national phase information from offices via PCT EDI. Offices prepare a simple, structured statistical report and upload it into their PCT EDI account.

40. The International Bureau is seeking the assistance of all offices in the collection of national phase entry data during this initiative.

Global Industrial Property statistics

41. An initiative to enhance the International Bureau's dissemination of global IP statistics is also underway. As part of this initiative, the International Bureau has improved the data collection mechanism via a revised and modernized questionnaire.

42. It is intended that the data would be made available in a number of ways, including analytical reports and Internet-based queries for aggregate or individual application data.

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