

## **Patent Cooperation Treaty (PCT) Working Group**

**Eighth Session**  
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### **PCT ONLINE SERVICES**

*Document prepared by the International Bureau*

#### **SUMMARY**

1. On April 16, 2015, the ePCT system concluded its pilot stage, during which the interface was in English only, by deploying a multilingual version offering the interface and most technical functions in all 10 languages of publication. ePCT now offers online filing to 16 receiving Offices (with several more at various stages of testing) and provides support for an increasing range of Office functions, especially for receiving Offices.
2. The ePCT system and developments in other electronic services hosted by the International Bureau offer the possibility of significantly improving the services offered to PCT applicants from all Contracting States. This requires further involvement by the national Offices, but need not result in significant new costs – indeed, there are opportunities for savings for many Offices in terms of processing time, mailing costs and the extent to which local IT system support is required.
3. The International Bureau regards a number of areas as priorities for work during 2015 and 2016, involving also receiving Offices and International Authorities, including:
  - (a) an increased number of receiving Offices able to receive international applications prepared and filed using ePCT;
  - (b) receiving Offices and International Authorities accepting post-filing documents uploaded by the applicant using ePCT;

- (c) receiving Offices and International Authorities providing additional documents to the International Bureau to make available to applicants through ePCT;
- (d) International Authorities enabling the receipt of search copies from other Offices as receiving Office via the International Bureau's electronic systems using eSearchCopy;
- (e) moving towards exchange of directly usable data instead of image-based forms, particularly for international search reports and information concerning important status information, such as receipt of the search copy; and
- (f) identifying opportunities for improving the efficiency or usefulness of the entire PCT system by enabling near-real-time interactions between Offices or between applicants and Offices using web services.

## **GENERAL**

4. The International Bureau has, for many years, supported a variety of electronic services to assist its own tasks and those of receiving Offices, International Searching and Preliminary Examining Authorities ("International Authorities") and designated and elected Offices ("designated Offices"). These services have overall been extremely successful, with approximately 92 per cent of international applications filed in the last six months having been received in fully electronic format and a large majority of documents exchanged between the International Bureau and national Offices in their various PCT capacities being transmitted in electronic format. This has permitted significant efficiencies in postal costs, postal delays and speedy and accurate assignment of work to the file of the correct international application and the correct staff to deal with the particular type of document.

5. However, the expectations of users, the challenges faced by Offices and the technical possibilities change with time. There is an ever-increasing desire for improved information relating to international applications, both by applicants wishing to manage their applications effectively, and by third parties wishing to monitor the development of technology and to monitor their competitors. There is an ever-increasing diversity in international applications, both in geographical source and in the languages used for filing, search and publication. Several International Authorities receive a considerable proportion of their work from receiving Offices located in very different geographic regions of the world. Different Offices have implemented electronic services at different times, based on the technology which was available at the time – maintaining multiple systems in parallel is an increasingly complex burden, which detracts from the development of new services to meet expectations more effectively.

6. The International Bureau wishes to improve its online services, but also to consolidate them and to support the take-up of new technologies by national Offices which will allow Offices to work together more effectively to make the PCT system as a whole more useful to applicants, Offices and third parties alike.

7. Some important steps have been taken, such as the decision to close down the PCT-EASY filing route from July 2015 and to concentrate on encouraging the availability and use of full electronic filing at all receiving Offices. The International Bureau continues to develop the services which it offers directly. However, the most important further improvements to the system involve the participation of national Offices, either by directly using browser-based services, or optimizing their local IT systems to take advantage of the new services offered, either to their own benefit or to the benefit of the applicants which use them as receiving Office or International Authority.

## STATUS OF SERVICES

### ePCT

8. ePCT offers a variety of services to applicants and Offices through a browser-based interface. Since April 16, 2015, that interface has been available in all 10 languages of publication, offering easier access to functions to file, monitor and prosecute the international phase of PCT applications for applicants and Offices from around the world.

9. At the time of writing, ePCT-filing offered the possibility of preparing and submitting international applications to 16 receiving Offices, with more Offices at various stages of testing. Ten of those Offices benefit from having their e-filing server hosted by the International Bureau, allowing them to offer fully online filing direct from ePCT, when previously they had only offered filing on physical media, by manual download of a package and re-upload to a separate server, or else on paper or paper and PCT-EASY diskette only. Fifty national and regional Offices in their roles as receiving Office, International Authority or designated Office had access to ePCT, using it variously as a primary processing tool, a support tool or simply for evaluating its possibilities.

### eSEARCHCOPY

10. The eSearchCopy service is now in operation for a small number of pairs of receiving Offices and International Authorities, as follows:

RO/SG	→	ISA/AT
RO/MY, RO/NZ, RO/PH, RO/SG	→	ISA/AU
RO/US	→	ISA/IL
RO/MY, RO/PH, RO/SG	→	ISA/JP
RO/EA	→	ISA/RU
RO/FI	→	ISA/SE

11. These pairs cover the main expected different uses of the service, with record copies being delivered both by PCT-EDI<sup>1</sup> batch and individually through ePCT uploads, and with confirmation of search fee payments made by delivery of lists covering multiple international applications, or else by selecting the relevant checkbox within ePCT, allowing most of the key functionality to be verified.

12. Preparations are under way to add a number of further pairs. Notably, ISA/EP is beginning a live pilot initially with just three receiving Offices, but a successful outcome would be of particular significance since the European Patent Office acts as International Searching Authority for 105 receiving Offices from all around the world.

## PRIORITIES FOR ACTION

13. The International Bureau will continue to improve the quality, range and ease of use of online tools available to applicants and Offices, but the largest benefits sought in the coming years require the participation of national Offices. A number of areas of work, as outlined below, offer the possibilities of particular benefits to applicants, Offices, or to the quality of patent information available from the system as a whole.

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<sup>1</sup> PCT-EDI is a SFTP-based service used for most international phase electronic communications between the International Bureau and national Offices.

## ePCT-FILING

14. The International Bureau invites receiving Offices which are not already receiving or working towards electronic filing through ePCT to work with the International Bureau towards opening up the service at their Office, hosted by the International Bureau, if preferred. While all applicants have the possibility of using online filing by choosing the International Bureau as receiving Office, it no longer requires significant investment by an Office to offer online services if it wishes to act as a receiving Office for its national applicants.

15. The PCT Assembly agreed to remove the fee reduction for PCT-EASY filings from July 1, 2015, mainly on the basis that it was now little used at most receiving Offices which offered online filing. Furthermore, the International Bureau offered hosted online filing services, permitting receiving Offices to offer a service which was more effective both for applicants and the national Offices which use the documents and data submitted in an application (see paragraphs 2 to 6 of document PCT/WG/7/15 and paragraphs 16 and 17 of document PCT/A/46/3).

16. ePCT-filing allows applicants to prepare and file international applications either to a server hosted directly by a receiving Office or to one hosted by the International Bureau on behalf of the receiving Office, using the same file formats and filing protocols as have been successfully used by many receiving Offices for some years. Where the server is hosted by the International Bureau, filed international applications can be processed by the receiving Office through the browser-based ePCT interface for Offices or can be imported using PCT-EDI for processing in a local system. Consequently, any receiving Office should now be able to offer an accessible online filing system, or open access to its existing system to filing from ePCT, without any additional cost in developing and maintaining local IT infrastructure.

17. ePCT-filing has several benefits over the earlier electronic filing software in that it requires no special software to be installed by the applicant, the reference data and services for checking compliance with the requirements of the PCT are always up to date for all users, and the system is able to offer checks and previews which are delivered by the actual systems used by the International Bureau for its processing work, ensuring that the applicant is not surprised by inconsistencies at a later stage. Wide availability and acceptance of ePCT will allow the eventual decommission of the PCT-SAFE software, freeing the resources used to maintain that software to be deployed elsewhere.

## ELECTRONIC TRANSMISSION OF SUBSEQUENTLY-FILED DOCUMENTS FROM APPLICANTS

18. ePCT offers the possibility of uploading documents not only to the International Bureau, but to receiving Offices and International Authorities which are willing to receive them from this source. Depending on its local automation needs, the Office may choose to receive documents by batch transfer through PCT-EDI or by receiving a notification that a new document is available for viewing and download in the browser-based ePCT service for Offices.

19. Allowing this service to be turned on for all receiving Offices and International Authorities would greatly enhance the efficiency of the system, especially for those applicants corresponding with an International Authority in a different country, where the postal delays may be significant. Offices gain the advantage of receiving documents already in electronic format, coded with the international application number and document type, reducing the work required to import and correctly route incoming mail.

## TRANSMISSION OF ADDITIONAL DOCUMENT TYPES TO THE INTERNATIONAL BUREAU

20. At present, receiving Offices and International Authorities copy most documents reflecting the final outcome of a process conducted before that Office or Authority to the International Bureau. Such documents are visible to applicants in the ePCT file and most such documents are made visible in PATENTSCOPE. However, much of the interim correspondence is not copied to the International Bureau and is sent to the applicant only by conventional post. Delays in delivery can cause significant difficulties for applicants in meeting indicated time limits – in turn, this results in delays for the Offices, making it difficult to complete the relevant processes in a timely manner.

21. Where national Offices manage their correspondence using ePCT, such documents may already be visible to the applicant through ePCT, even though they are not formally transmitted to the International Bureau. However, more generally, it would be desirable for Offices to transmit a wider range of documents to the International Bureau in a manner which allows it to be automatically made available to the applicant through ePCT without any manual intervention by the International Bureau.

22. Particularly important candidates for this type of treatment include:

- (a) written opinions of the International Preliminary Examining Authority (PCT/IPEA/408);
- (b) invitations to pay additional fees due to lack of unity of invention (PCT/ISA/206 or PCT/IPEA/405);
- (c) documents cited in the course of the international search or preliminary examination (these would not be made available on PATENTSCOPE, but would be readily available to the applicant or designated Office in accordance with Article 20(3) without additional work or mailing costs for the International Authority);
- (d) other invitations to pay fees, request rectification, furnish documents, correct defects or specify a competent International Authority.

## eSEARCHCOPY

23. Most International Searching Authorities are competent to act for applications filed at several other receiving Offices in addition to applications filed with those Authorities in their capacity as receiving Offices, as shown in the table below.

ISA	AT	AU	BR	CA	CL	CN	EG	EP	ES	FI	IL	IN	JP	KR	RU	SE	US	XN
<b>Number of ROs</b>	<b>30</b>	<b>19</b>	<b>6</b>	<b>4</b>	<b>8</b>	<b>10</b>	<b>3</b>	<b>105</b>	<b>15</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>9</b>	<b>17</b>	<b>32</b>	<b>18</b>	<b>20</b>	<b>5</b>

24. eSearchCopy offers the prospect of reducing administrative overheads for International Searching Authorities, by delivering search copies in a consistent electronic format, irrespective of which Office acted as receiving Office, as well as eliminating delays in mailing and in importing paper search copies. The project needs to be evaluated to determine whether it is in fact meeting the expectations and, depending on the results, be improved or extended to a wider range of Office pairs.

## EFFECTIVE USE OF MACHINE-READABLE DATA

25. ePCT offers a number of “actions”, allowing applicants to enter information which is used directly in processing, instead of setting the instructions out in a letter. This allows more efficient processing and greatly reduces the risk of errors in transcription of information from the letter. At present, these actions all relate to processes before the International Bureau, such as requesting changes to names and addresses under Rule 92*bis*, withdrawing the international

application or specific designations, or retrieving a copy of the priority document from the WIPO Digital Access Service for Priority Documents. However, the International Bureau is willing to prepare equivalent systems for receiving Offices and International Authorities, provided that sufficient Offices would either implement systems to process the resulting information effectively, or conduct the processing through systems provided directly by the International Bureau.

26. Outside of ePCT, there are other opportunities for usefully passing structured information instead of paper-style forms. For example, at an administrative level, notifications of receipt of the search copy (traditionally Form PCT/ISA/202) can be fully automated using a data stream. On a more substantive level, several International Authorities have begun to send international search reports and international preliminary reports on patentability in XML format (those from the State Intellectual Property Office of the People's Republic of China are now in production; those from the European Patent Office and the Korean Intellectual Property Office are expected to enter production later this year). Receipt of this data offers the possibility of reducing the cost of translation, and improving the services available to users, potentially including on-demand machine translation into a range of different languages.

27. The International Bureau would welcome discussions with any Office interested in exchanging data in machine readable form where that can be used to reduce costs or improve the quality of service delivered.

#### MACHINE TO MACHINE TRANSMISSIONS

28. At present, the only option for full automation of processing between the International Bureau and receiving Offices, International Authorities and designated Offices is to exchange documents and data using PCT-EDI. This has the advantage of being simple to implement and very robust, since a temporary system outage at either end will merely delay processing, rather than there being any risk of documents or data being lost. However, the batch processes are typically run only once per day and, in some cases, only once per week. Consequently, it is not possible to reliably implement real-time services using this system.

29. Preliminary work has begun on secure ePCT web services, which could allow near-real-time automated services, including provision of common core services or on-demand retrieval of required documents where this is preferred to transmission of complete document sets. Deployment of such services is dependent on the implementation of a new identity management (IDM) system at the International Bureau, which is better adapted to authentication of automated systems. The International Bureau will consult on these matters once details of the new IDM are available, but in the meantime welcomes general comments on what services would be useful.

#### OTHER ISSUES

30. A number of issues affecting online services are the subject of other papers to this Working Group, including national phase entry using ePCT (document PCT/WG/8/19), color drawings (document PCT/WG/8/21), delays and *force majeure* for electronic communications (document PCT/WG/8/22) and languages for communication with the International Bureau (document PCT/WG/8/23). In addition, the following issues are ones of which national Offices should be aware, though not currently being a priority for specific action.

#### FULL TEXT APPLICATION BODIES

31. The International Bureau would like to encourage the filing and processing of international applications in full text format. However, the take-up of traditional XML filing has been limited at Offices which offer the choice of PDF as an alternative. There are a variety of reasons for this, but one is that applicants have found the XML authoring or conversion tools less convenient to

use than direct conversion to PDF from a word processor, or even scanning to PDF from paper printouts. ePCT-Filing now offers the option of uploading an Office Open XML (.docx) format document created directly from Microsoft Word or other word processors. This is automatically converted to the XML format specified in Annex F of the PCT Administrative Instructions. Warning messages indicate features which may not have been converted reliably and previews are generated to show how the application will appear in the International Bureau's electronic systems and ultimately when published. The original word processor document is retained as a "pre-conversion format" file according to Section 706 of the PCT Administrative Instructions, allowing correction of any conversion errors which are discovered at a later date.

32. National Offices and user groups are invited to evaluate this tool and discuss how this or other tools and services might contribute towards a system based on full text processing of the application body.

#### CENTRALIZED PAYMENT OF FEES

33. ePCT presently offers the possibility of online payment of fees due to the International Bureau, using either credit cards or a WIPO current account. It is possible that the same facilities might be extended to permit a centralized payment option at some stage in the future, but at present, it will remain necessary for receiving Offices accepting electronic filings through ePCT or International Authorities which act for applicants outside their own country to continue to ensure that effective payment systems are in place for the use of those applicants.

34. A detailed proposal in this area may be made following further discussion concerning "netting" arrangements as referred to in document PCT/WG/8/15 and Circular C. PCT 1440. However, the International Bureau would welcome indications from receiving Offices and International Authorities whether such a facility would be considered useful if it is found to be practical, and to indicate any issues which ought to be taken into account in the evaluation.

#### DISCUSSING USE OF SERVICES BY NATIONAL OFFICES

35. In addition to any comments made in the Working Group, national Offices, members and observers of the Working Group are invited to make comments at any time on the development of services to the PCT Business Development Division at [pctbdd@wipo.int](mailto:pctbdd@wipo.int). Furthermore, bilateral discussions on technical requirements, timetables, development and testing requirements for beginning to use new services can be begun by contacting the PCT International Cooperation Division at [pcticd@wipo.int](mailto:pcticd@wipo.int).

36. *The Working Group is invited to comment on the issues set out in this document.*

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