

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

**Seventh Session  
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### **PCT ONLINE SERVICES**

*Document prepared by the International Bureau*

#### **SUMMARY**

1. ePCT now offers a wide range of services to applicants and Offices through a secure web browser interface. The International Bureau (IB) also provides services for integration with automated Office systems. Information is provided on intended developments.
2. If the service is to be of maximum benefit to applicants and Offices, it is important that as many Offices as possible in their capacity as receiving Office (RO), International Searching Authority (ISA) and International Preliminary Examining Authority (IPEA) agree to receive documents and data uploaded through or created by ePCT and to make timely information available in such a manner that it can be accessed by applicants and other Offices using ePCT.
3. Offices and Authorities are encouraged to try out the services available through ePCT and to discuss with the IB effective strategies for improving the quality and efficiency of processing and the services available to applicants, Offices and patent information users.

#### **AIMS OF EPCT**

4. ePCT aims:
  - (a) to increase the efficiency and consistency of processing within the PCT system;
  - (b) to provide effective online systems for filing, monitoring and prosecuting international applications to applicants from all Contracting States;

- (c) to allow PCT Offices to offer electronic services to their national applicants, irrespective of whether or not they support dedicated local IT systems for the purpose; and
- (d) to improve the quality of data available for processing, management and patent information purposes.

## **ACCESS TO ELECTRONIC FILING AND PROCESSING FOR APPLICANTS**

5. At the time of writing, only 28 out of 116 ROs accepted electronic filing of international applications. In some of these, this is limited to delivery of the international application to the Office on physical media (such as a CD-R) and not by online transmission. This means that applicants from many Contracting States are required to use the International Bureau as RO if they wish to file an international application online. ePCT aims to allow all national ROs to offer an equivalent level of service without the need to develop and maintain the necessary IT systems.

6. Similarly, few ROs or ISA/IPEAs offer online file inspection facilities or document upload services to allow interaction after filing. Communications with the RO or ISA/IPEA must be on paper. This can introduce delays of several weeks per communication for applicants based in countries distant from the Office or Authority. This is a disadvantage for applicants and provides difficulties to ISA/IPEAs in meeting the time limits for completing their responsibilities in certain cases.

7. ePCT seeks to overcome these issues by providing a common user interface, through which applicants can securely do all of the following:

- (a) draft an international application and file to ROs using existing e-filing servers maintained directly by the RO (no modification of that server should be required) or to a server hosted for the RO by the IB;
- (b) share access to drafts and the files of international applications with other users as required for each application;
- (c) view documents:
  - (i) on file at the IB;
  - (ii) on file at an RO using services hosted by the IB; or
  - (iii) transmitted to the IB by the RO or ISA/IPEA specifically to allow inspection by the applicant;
- (d) receive notifications when new documents of any of the above types become available;
- (e) upload documents to the IB or other Offices which have agreed to receive them either directly through use of the ePCT browser-based services for Offices or via PCT-EDI<sup>1</sup>;
- (f) provide data which can be used instead of traditional letters to directly drive processes at the IB and, in future, other Offices (referred to in the system as “actions”).

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<sup>1</sup> PCT Electronic Data Exchange – the main existing system for bulk exchange of PCT documents and data between the International Bureau and national Offices.

8. Similarly, it seeks to ensure that national Offices are able to offer their applicants a high quality of service, by providing access to information and processing services for Offices.

## **SCOPE OF PROJECT AND APPROACH TO DEVELOPMENT**

9. The public face of ePCT is a browser-based system offering services to applicants, Offices and, for the purpose of making observations, third parties to assist in processing of international applications. However, the project also involves managing the development of the IB's internal systems as well as processes for communication with Offices which maintain local IT systems for handling international phase processing.

10. Development has taken a step-by-step approach, building on and working with existing components. This has allowed relatively fast deployment of useful services and ensured compatibility with existing paper and electronic processes. It should therefore be easy for most Offices to work effectively with ePCT.

## **LANGUAGE POLICY**

11. The interface to ePCT has been developed in English, but the architecture was designed to support multiple languages. The aim is to support interfaces for all the core aspects of the system in all ten languages of publication, selectable by the user. This does not affect the languages in which applicants are required to correspond with any particular Office.

12. At the time of writing, translation of the text used in the interface was complete or near complete in all languages of publication and testing of the system had begun in several languages. By the time that the Working Group convenes, it is expected that several of these languages will be available for public review in the Demo system and some may be ready for use in the live service<sup>2</sup>.

## **CURRENT ePCT BROWSER-BASED SERVICES FOR OFFICES**

13. Depending on the roles played by an Office and the role of a particular user within that Office, a user's account can be assigned the roles of RO, ISA, IPEA and/or designated or elected Office<sup>3</sup>. The user will then be able to view information on international applications in accordance with what roles the Office has for any particular international application.

14. The ePCT system currently allows Offices, amongst other things, to:

- (a) receive new international applications from ePCT-filing (if enabled for that RO);
- (b) create records of new international applications in the IB's systems and transmit record copies to the IB for both paper and electronic filings;
- (c) exchange documents with the IB;
- (d) receive documents uploaded by the applicant through ePCT (if enabled for that RO/ISA/IPEA);

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<sup>2</sup> While the web interface itself works effectively in Arabic, it has been discovered that a number of important standard components used within the system cannot handle right-to-left languages and will need to be replaced or bypassed before Arabic services can be offered.

<sup>3</sup> Services for designated Offices are expected to become available September–October 2014.

- (e) receive notifications when new international applications or documents are sent to the Office;
- (f) prepare and transmit certain forms to the IB;
- (g) enter data for certain processes which may either directly update the IB's records, or which can be transmitted to the IB for direct use (referred to as "actions", equivalent to those for applicants referred to in paragraph 7(f), above); and
- (h) view a wide range of information about the Office, including users able to access ePCT in different roles and the settings selected for the Office in ePCT and other document transmission systems.

## RECEPTION OF SYSTEM

15. Offices which have tried it have found the system mostly easy to use. For two way transmission between the Office and the IB, the system is very effective. In several cases, paper document transmission between the Office and the IB has been eliminated overnight.

16. While inevitably there is some confusion because of differences of approach between ePCT and equivalent national systems, applicants have also found ePCT to be easy to use and well-attuned to the needs of applicants using the PCT system (which are not always the same as those seeking only national protection, particularly with regard to sharing access rights to the files).

## INTENDED IMPROVEMENTS

17. While the system already provides useful functionality to both applicants and Offices, a range of enhancements are being developed. Notably, the functions for Offices are being developed to increase ease of use and to allow all normal RO functions to be performed entirely within the system, eliminating the need to upload certain forms prepared outside of the system.

18. The Annex sets out a provisional timetable for delivery of some of the main improvements which are under way to the browser-based system as visible to applicants, third parties and Offices.

19. A wide range of other improvements are also intended. These fall into categories including:

- (a) Security improvements – The system has been built from the outset with security as a key design feature, but features are continually being added to further reduce the risk of inappropriate use of the system, using procedures which are transparent to the end user.
- (b) Identity management system – It is intended to replace the existing identity management system, if possible by the end of 2014. This should be largely transparent to existing users. The change seeks to reduce costs, make it easier to offer machine authentication for secure web services, and allow new authentication methods to be introduced as a more user-friendly, but equally or more secure alternative to digital certificates.
- (c) Web services – It is intended to offer web services to applicants and Offices to assist automation of processes. The timing and scope of this is dependent on implementation of the new identity management system and discussion of requirements with Offices wishing to pursue locally automated solutions and companies providing automated services for patent applicants.

(d) Services for ISA/IPEAs – Development of the browser-based system for Offices has focused on the needs of ROs, assuming that Offices which act as ISA/IPEAs will have automated their own systems, at least as required by examiners. Once the RO systems are further developed, it will be possible to reassess this point.

(e) Related services – ePCT is being developed to work effectively with other systems, both within the PCT (such as eSearchCopy – see document PCT/WG/7/8) and more broadly (such as the WIPO Digital Access Service for Priority Documents).

(f) Underlying systems – Apart from the initial import of bibliographic data from electronic filing and the results of “actions” developed for ePCT, most processing is highly dependent on black and white images which are essentially equivalent to paper-based processes. The underlying systems are being developed to make greater use of full text and structured information, which will enable delivery of services which are not currently possible. Consideration is also being given to supporting the use of additional file formats to handle color drawings (see document PCT/WG/7/10).

20. Contracting States and users of the PCT system are invited to provide comments on the above or proposals for additional useful services, either during the Working Group or at any time by email to [pctbdd@wipo.int](mailto:pctbdd@wipo.int).

21. However, it should be noted that main purpose of the system is to enable effective collaboration between *all* parties with a role in the international phase. The biggest improvements to the system require the active participation of Offices which act as ROs and ISA/IPEAs, as indicated below.

## **RECOMMENDED USE BY OFFICES**

22. The system can be used by Offices in two main ways:

(a) For Offices with no existing automated systems for processing international applications and communicating with the IB, it can act as the primary tool for processing international applications as RO, or as a means of transmitting and receiving documents for smaller ISA/IPEAs (the lack of options for integration with other Office systems makes it less suitable for high volume use in circumstances which require large numbers of documents to be imported from or exported to other systems).

(b) For any Office, including those maintaining their own IT systems for processing international applications, it can be a useful reference tool to assist with queries from applicants or for troubleshooting problems since it shows the current state of the IB's documents and data for a particular international application and presents the data in a manner equivalent to that which can be seen by the applicant.

23. The IB invites national Offices to review the system and consider how ePCT might be used to the best advantage of the Office and its customers. Offices are invited to contact [pcticd@wipo.int](mailto:pcticd@wipo.int) for further information on setting up accounts. Demonstrations will be available during the period of the Working Group or on request at other times. Once suitable accounts have been set up, an operational demo environment is available for conducting detailed evaluation.

24. Those Offices which have their own IT systems should consider the extent to which they are able to receive documents from applicants or other Offices uploaded to ePCT and transmitted on to them by PCT-EDI. These documents would be transmitted according to the same protocols as documents from the IB, differing in essence only by the use of different “minspec” filenames to identify the source and document type concerned.

25. With the assistance of ePCT hosted filing where necessary, the IB hopes that a large majority of ROs will be able to offer their applicants electronic filing by the time that the PCT-EASY service is withdrawn in July 2015 (see document PCT/WG/7/15).

26. It is strongly preferred that Offices which choose to use the system for processing use it for all transmissions of documents between the IB and the Office in any particular international phase role. This minimizes the risk that documents will be routed incorrectly, fail to be transmitted or have duplicate copies sent. Offices which act as ISA/IPEA can use different approaches for their work as RO and as ISA/IPEA without difficulty.

## **ISSUES FOR CONSIDERATION IN THE NEAR FUTURE**

27. In addition to those issues already set out in other documents for consideration by the Working Group, a variety of other issues related to ePCT will require consideration over the coming months, including the following.

### Effective Fee Management

28. The current version of ePCT allows fee management only to the extent required to indicate the correct fees to users in ePCT-filing and for the RO to indicate that a search fee has been paid to trigger the sending of the search copy once the eSearchCopy service becomes available. Some improvements are planned, but the extent required will depend on other issues concerning the effective management of fees collected by one Office for the benefit of another (including the international filing fee, the search fee and the supplementary search fee).

### Reducing Printing and Mailing Costs

29. One significant issue is the ability for Offices to make savings by reducing the printing and mailing of paper documents. ePCT can be used immediately as the sole method for transmitting documents to the IB. In combination with the eSearchCopy project and improvements to the ePCT interface expected later in 2014, it should soon offer the possibility of eliminating transmission of paper to other Offices.

30. It is intended to introduce an option for applicants to indicate that documents may be transmitted to them solely via ePCT from the IB or Offices which make their documents available in that way. This could be of significant benefit to Offices, as well as applicants (especially those living in countries a long way from their ISA), but requires careful consideration of procedures to ensure that documents continue to be transmitted reliably to those applicants who wish to continue to receive paper.

### Improved Use of Full Text Documents and Structured Data

31. Exchanging paper-equivalent documents electronically reduces delays and errors. To achieve significant benefits in terms of improved quality of patent information available to third parties and to designated Offices to assist in national phase examination (as well as to achieve greater efficiencies in international phase processing), it is important to seek greater and more consistent use of full text documents and structured (XML) data.

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

[Annex follows]

## ANNEX

PROVISIONAL TIMETABLE FOR IMPROVEMENTS  
OF THE BROWSER-BASED SYSTEMJune 2014

## 1. For Offices:

- (a) a more effective arrangement for handling documents already within the system, allowing an Office to change the indicated type of a document (if it was incorrectly indexed by the applicant or when it was first scanned in from paper), to set its status to indicate that processing is complete and/or to indicate that it should be considered as transmitted to the IB without creating a duplicate copy;
- (b) a clear distinction in file view between documents for the attention of the RO, ISA, IPEA, or for the IB;
- (c) allow an RO to stop the processing of an international application for which an online record has been created without intervention by the IB in cases such as where the Article 11 requirements are not met or if the application file was created in error.
- (d) improved notifications, for example allowing a distinction between documents sent to the Office as a primary recipient and those merely copied to the Office.
- (e) allow receipt of “ePCT messages” from the IB (currently the Office can send informal messages to the IB, but not *vice versa*);
- (f) improved information concerning eSearchCopy processes (see document PCT/WG/7/8);
- (g) improved information on the Office’s profile (including details of permitted filing methods and dates which have been notified to the IB as closed dates for the Office or sub-Offices).

## 2. ePCT-filing:

- (a) permit filing of application bodies in XML format as an alternative to PDF;
- (b) allow filing of description, claims and abstract in a single PDF file;
- (c) improve provisions relating to search fee reductions;
- (d) procedures for submitting corrections to an international application on the day of filing.

## 3. Other features for applicants and third parties:

- (a) extend “save as draft” to third party observations and declarations;
- (b) provide previews for remaining “actions” which do not already offer this before submission;
- (c) clear indication that electronic signature of the person uploading a document is not required because the signature requirements are met by content in the uploaded document(s);
- (d) demand for IPEA to be extended to remaining publication languages.

September–October 2014

4. For Offices:

- (a) initial services for designated Offices;
- (b) ability to enter bibliographic data for international applications filed on paper (opens possibility of fully ePCT-generated forms for these cases before transmitting the record copy to the IB);
- (c) wider range of RO forms to be available as part of ePCT “actions”;
- (d) improved information on payment of fees;
- (e) private file notes;
- (f) improved possibilities and information for routing documents between Offices, including documents which need to be sent simultaneously to more than one Office.

5. ePCT-filing:

- (a) allow real time credit card payments for fees payable to the RO of the IB;
- (b) allow filing using OOXML (.docx) word processor files<sup>4</sup>;
- (c) copy information from earlier international applications in the applicant’s workbench, or draft international applications for use as the basis of a further draft;
- (d) further improvements to validations.

End of 2014 (Tentative)

6. Replacement of the identity management system – the main intended visible change will be the option to use more modern and suitable technology than digital certificates for second authentication factor for login. The new system will also allow secure web services to be deployed more easily, permitting improved automation options.

Through 2015

7. A review process has begun, which is expected to lead to a thorough overhaul of the interface during 2015 to improve presentation, clarity and consistency of information and actions. Other detailed improvements on which work has begun include:

8. For Offices:

- (a) enhanced workflow functionality, offering greater assistance to less frequent users in understanding what needs to be done as a result of documents and data received or time limits which have expired;
- (b) “actions” to create or replace forms for the outstanding ROs functions which can be relevant to international applications processed by ePCT;

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<sup>4</sup> Subject to tests confirming the reliability of conversion of contents to XML file formats to be used in processing; may also be extended to OpenDocument Format (ODF).



9. ePCT-filing:

real time credit card payment to be opened to ROs other than the IB with which appropriate agreements on financial procedures are in place.

10. Other features for applicants and third parties:

simultaneous actions on multiple international applications, such as Rule 92*bis* changes or requests for early publication.

[End of Annex and of document]