

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

**Eleventh Session  
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### **PCT ONLINE SERVICES**

*Document prepared by the International Bureau*

#### **SUMMARY**

1. PCT online services are functioning reliably and cover a large majority of all transfers of documents between Offices. Further significant improvements require a move away from transferring images equivalent to traditional paper forms and towards consistent, well-shared and directly processable data with fewer delays resulting from batch processes being run at long intervals.
2. Current particular priorities include:
  - (a) effective full text processing, recognizing Office Open XML (DOCX) as a major drafting format;
  - (b) wider and better use of XML for key documents and data, most notably international search reports, written opinions and related documents;
  - (c) improving ePCT functionality for Offices, notably including “workflow” functionality, with the possibility of assigning tasks to individuals in larger teams;
  - (d) effective common tools and processes to minimize duplication of development efforts and divergence of key information standards;
  - (e) secure web services for machine to machine communication;
  - (f) improving the quality of national phase information.

## STATUS OF MAIN ONLINE SERVICES

### ePCT

3. The browser-based view of ePCT is now a stable production system, offering services to applicants, Offices and third parties. Since the previous session of the Working Group, a wide variety of minor functional improvements have been made for applicants and Offices alike.
4. ePCT has greatly extended the geographical availability of electronic services. At the start of 2010, fully electronic filing was available at only 21 receiving Offices (ROs). By the end of 2017, ePCT-Filing offered full electronic filing to 53 receiving Offices from all around the world and accounted for over 64 per cent of all international applications to receiving Offices at which electronic filing had not been available in 2010. Subsequently filed documents can be uploaded through ePCT for delivery to 64 Offices in their role as either receiving Office or International Searching and Preliminary Examining Authority (ISA and IPEA).
5. Seventy-six Offices now have access to ePCT Office services in their role as RO, ISA or designated or elected Office. Over 50 of these Offices use the browser-based Office services as their main tool for processing international applications as receiving Office. Five Offices have set up admin users, who are able to administer access rights for their staff directly without the intervention of the International Bureau.
6. A number of secure web services are now in use for small scale live tests with Offices and applicants, allowing near-real time machine to machine automation of certain services, equivalent to those available through the browser. Pilot projects are also under way with a number of receiving Offices to investigate the possibility of embedding ePCT services within national Offices' online portals, allowing those Offices to reduce their development and support costs and guarantee full consistency with current PCT Rules and standards, while retaining full control of their data within a portal integrated with that for their national services.

### eSearchCopy

7. The eSearchCopy service is now in use in 161 out of the 370 total possible pairs of RO and ISA where those roles are not played by the same Office. These routes represent almost 50 per cent of the total volume of transmissions of search copies between different Offices. Furthermore, a further 40 per cent of search copies transmitted between Offices are sent using pre-existing bilateral online services (which are expected to be moved to eSearchCopy in the course of 2018). Consequently, only around 10 per cent of search copies transmitted between different Offices are still sent by post (and some of these are sent on disc rather than on paper, at least eliminating scanning requirements).
8. The eSearchCopy routes now include those from the receiving Office of the International Bureau to all ISAs except two, which are testing the new system in parallel with the old. Once these two are transitioned the International Bureau will be able to decommission one of its legacy services, making the overall set of services easier to maintain. For seven ISAs, eSearchCopy delivers search copies from all other receiving Offices for which the ISA is competent. For a further eight ISAs, the service is enabled for all routes which were actually used by applicants during 2017, leaving only extremely rarely used options still, in principle, sending paper. Among all the ISAs, only three (EP, RU and US) have ROs for which they are competent but do not send search copies using eSearchCopy such that they should expect to receive more than 50 paper search copies per year. Consequently, most ISAs are now able to benefit from being able to automatically import most or all of the search copies received in a single, consistent format.

## DAS

9. The WIPO Digital Access Service for Priority Documents (DAS) was originally envisaged as a service primarily to support Paris-route applications but in fact is used largely for PCT purposes, delivering 29 per cent of all international phase priority documents.

10. The service provides an effective means of transmission. The mean time for receipt of the priority document by the International Bureau is under 19 days from the filing date, compared to around 52 days for priority documents supplied by the applicant in accordance with Rule 17.1(a) and 32 days for priority documents supplied by the receiving Office in accordance with Rule 17.1(b) (though this figure varies considerably between receiving Offices). 93 per cent of priority documents from DAS are delivered within 30 days from filing. Consequently, such documents will usually be available for inspection by the ISA if prior art found means that it is desirable to consider the validity of priority claims.

11. However, only 18 Offices currently participate in the service, several of which use it in very small volumes. Moreover, the largest use of the service (over three quarters of the PCT usage) is as a replacement for Rule 17.1(b) transfers (where the priority document comes from the Office which acts as receiving Office), rather than the case where the priority document came from a different Office. Consequently, it may become appropriate to investigate more PCT-specific improvements to the issue of priority document transmissions.

## PCT-EDI

12. PCT-EDI continues to support the largest proportion of documents exchanged between national Offices and the International Bureau (including providing the infrastructure for many of the transactions of eSearchCopy and DAS). This is a well-proven and reliable system, but relies on batch processes. This may be an advantage in that communications are not dependent on systems being available at all times at both Offices, but can also result in delays in processing and differences in data between the two Offices, especially in the case where batches are sent only weekly. It also means that the International Bureau is aware only of (and can only make available to applicants or other Offices) documents which are explicitly transmitted by the national Office, meaning that applicants are dependent on the provision of a file inspection service by the national Office in addition to ePCT in order to see the complete state of an application file.

## WIPO CASE

13. The WIPO CASE (Centralized Access to Search and Examination) system plays no direct role in international phase processing, but should be noted for the access which it offers to both international and national phase search and examination reports for designated Offices. Thirty-one Offices now participate in the system, 14 of them providing documents.

## **NEXT STEPS FOR ePCT**

14. The ePCT system will continue to be improved for the benefit of both applicants and Offices. Some of the key areas of work in the coming year include:

- (a) Improvements to workflow for Offices, allowing individual pieces of work to be assigned to specific users and assisting the identification of follow-up tasks;
- (b) Improvements to the browser-based arrangements for generating XML versions of international search reports, written opinions and related documents (such as the partial search reports which may be associated with Form PCT/ISA/206 in the case of an invitation to pay additional fees), including easier and less duplicative entry of information both within a particular set of reports and between stages (invitation to pay additional fees, to international search report and written opinion, to written opinion of the IPEA, to international preliminary examination report);

- (c) Extension of the web services for wider adoption of near-real time machine to machine services for Offices and integration with applicants' patent management systems;
- (d) Further ease-of-use improvements to the login system, including support for even easier second authentication factors for login for all users and management of accounts and roles for Office users (subject to successful completion of technical and security reviews); and
- (e) Improving the consistency of services with those offered by other parts of WIPO, including taking opportunities to reduce costs or improve experience by sharing services as part of the Global IP Platform project (see Annex II to document WO/PBC/27/9).

15. In addition to this, work will restart on determining ways in which ePCT might be used to assist national phase entry. A pilot service currently deployed in the Demo system to assist collaborative search and examination is expected to be brought into a live pilot. Also, the pilot on netting of fees will be closely monitored to determine whether centralized payments can be enabled for services by Offices other than the International Bureau, provided through ePCT.

## **USE OF XML**

### XML for Application Bodies

16. The original aim of the PCT e-filing standard was to have applications filed and processed in full text format. For many years, XML applications have only been received in significant numbers from the receiving Offices of China, Japan and the Republic of Korea. There is an increasing desire by other Offices to move ahead in this area, with at least the United States Patent and Trademark Office and the European Patent Office developing converters to transform Office Open XML (DOCX) to ST.36 or ST.96 XML, in addition to the one which has been available in ePCT for several years.

17. The International Bureau is working with the European Patent Office and others to prepare a proposal for modification of the PCT Administrative Instructions to allow effective filing and processing of full text application bodies using DOCX format as the official source document. This should develop towards an arrangement where all Offices working with DOCX use a common conversion tool (with options to direct output to ST.36 or ST.96 formats in a manner which ensures the possibility of reliable conversion between the two later on) and where all international phase actions using the application body are conducted in a consistent way, ensuring that the results can be shared effectively between different Offices.

### XML for International Search Reports and Written Opinions

18. The International Bureau has been receiving international search reports and written opinions in XML format for some time from three ISAs (the European Patent Office, the Korean Intellectual Property Office and the State Intellectual Property Office of the People's Republic of China). Although reports from all three are created in compliance with the same DTDs provided for the purpose, a wide variety of difficulties meant that it has taken a great deal longer than expected to be able to import and use the XML effectively. However, the main problems have now been overcome. The XML has contributed to formalities examination of international search reports and written opinions at the International Bureau. The formalities examination has been automated for approximately 70 per cent of international search reports and 90 per cent of written opinions of the ISAs. This has allowed the IB to maintain productivity and timeliness in processing these documents. The XML has also begun to be used to assist translation and both the original and any translated XML should become available to designated Offices and patent information users shortly.

19. The International Bureau hopes to release a variety of new services in ePCT and PATENTSCOPE for international applications where the international search report and written opinion are available in XML, including effective machine translation (using the relevant language stylesheets for a “perfect” translation of the boilerplate text) and links to cited patent documents.

20. As noted above, work is underway to improve the means for preparing XML international search reports and written opinions within ePCT. As a result of that and the efforts to import XML noted in paragraph 18, above, the International Bureau has become aware of certain differences in the ways that the current standards are implemented between Offices as well as that the data structures for equivalent information between different forms (such as PCT/ISA/206, 210, 237 and PCT/IPEA/408 and 409) are not always as well aligned as might be hoped. It is hoped that the standards and their use can be improved towards the following key end results:

(a) it should always be easy to reuse data from one stage of search and examination as a starting point for the next stage (national search report – partial international search – international search report and written opinion – Chapter II reports – national phase reports);

(b) citation data should be sufficiently rich and consistent to allow effective comparison and use of the information between different stages without difficulty in determining whether two citations are the same (or come from the same patent family);

(c) it should not be necessary for an examiner to enter equivalent data twice at the same stage (different formats for unsearchable or non-examined claims between Forms 210 and 237; need to enter citation information into Forms 210 and 237 in different formats in certain cases).

21. Ideally, the ongoing work on defining ST.96 standards for search and examination reports should be taken as an opportunity to ensure that reports can be created and reused efficiently and that examiners never need to enter equivalent data twice because of different data structures. In this context, Offices should be prepared to modify the ST.36 and paper PCT search and written opinion forms if a better result for reuse of information between national and international phases can be achieved.

## **OTHER ISSUES**

### Global IP Platform

22. WIPO has started an initiative aimed at introducing a single common IT platform (“Global IP Platform”), which connects the multiple IT platforms supporting the WIPO Global IP systems (PCT, Madrid, Hague and Lisbon), as well as the services of the WIPO Arbitration and Mediation Center and various other WIPO systems. The Global IP Platform will provide a single entry portal to users of all of these services via a single WIPO account for each user and implement a user-friendly navigation policy with a common user interface and a central payment portal. Access to the system will be based on a single sign-on account with capabilities in mapping individual users of WIPOs Global IP Protection Services with the entity they represent. These common services should offer applicants and Offices a wider range of services, delivered in a simpler and more consistent manner.

23. As key stakeholders in the Global IP Platform, national Offices IPOs are requested to explore means of supporting the interoperability of their account management and authentication systems with the Platform, as well as to consider how the system could offer them better support, including by means of new APIs and services to ensure that data is exchanged effectively with national systems, taking into account issues which may be in common with designs and marks, as well as patents.

### Color Drawings

24. The “interim solution” outlined in paragraphs 11 to 15 of document PCT/WG/9/19 is now available for some filing routes and receiving Offices. Electronic applications made to certain receiving Offices using PCT-SAFE or ePCT-Filing now have the option of checking a box to indicate that the application as uploaded in XML or PDF format contains color images. If this box is checked, a notice appears on the front page of the published application indicating that the original document contained color and is available for download from PATENTSCOPE. The technical details required for receiving Offices wishing to implement this arrangement in other software were set out in document PCT/EF/PFC 17/003.

25. It should be noted that this interim solution does not affect:

- (a) the requirement that, in principle, drawings are still supposed to be provided as black and white line drawings;
- (b) the fact that any color images (including greyscale) which are received are still converted to black and white for the formal publication; or
- (c) the right for designated Offices to require black and white line drawings in the national phase.

26. The purpose of this interim step is not to encourage color images, but to recognize the fact that many international applications in fact do contain color images and to allow designated Offices which permit color drawings in their national phase to more easily access the original document. Applicants submitting color images need to be aware that it may frequently be difficult or impossible to provide suitable replacement sheets in black and white for the national phase without facing objections concerning added subject matter.

27. The goal of the International Bureau remains to offer full color processing of international applications throughout the international phase with an effective legal framework to ensure that color drawings can be recognized for the national phase. However, the technical challenges involved are considerable and would be expensive to implement in isolation. This work is ongoing in the context of a broader review of arrangements for receiving, processing, modifying and publishing application bodies, also taking into account the desire for effective full text processing.

### National Phase Entry

28. The response to the amendment to PCT Rule 95, requiring the regular provision of national phase entry information, has resulted in only 43 Offices submitting information in the six months following the entry into force of the amended Rule on July 1, 2017. Of these, less than half have provided updates on at least a monthly basis and many of the batches of information received have been impossible to process fully automatically. The International Bureau is working closely with many of the designated Offices concerned to resolve the issues. A more detailed review is contained in document PCT/WG/11/10.

### Sequence Listings

29. The PCT Sector is cooperating closely with the development of new tools to support the forthcoming XML-based WIPO Standard ST.26 for sequence listings.

### Fax

30. The International Bureau has recently become aware that faxes may be lost or corrupted without warning to the sender where any part of the chain of connection has moved to fax over IP (FoIP). This has become an increasing problem as more individual companies or national

telecoms providers have switched off analogue services. Since January 1, 2018, the International Bureau's telecoms provider has ceased to provide analogue services. Consequently, the International Bureau strongly recommends that applicants and Offices cease to send documents to the International Bureau by fax. Consultations will begin shortly on a proposal to withdraw fax services for PCT communications to the International Bureau at the end of the year.

*31. The Working Group is invited:*

*(i) to note the developments in PCT online services;*

*(ii) to comment on the proposed priorities for further development by the International Bureau; and*

*(iv) to identify other issues which should be given priority in PCT online services to assist the work of International Authorities.*

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