

## Meeting of International Authorities under the Patent Cooperation Treaty (PCT)

**Twentieth Session  
Munich, February 6 to 8, 2013**

ePCT

*Document prepared by the International Bureau*

### SUMMARY

1. The ePCT system now offers a wide range of web browser-based services for applicant procedures before the International Bureau as well as a number of services for receiving Offices and International Searching and Preliminary Examining Authorities. Web-based online filing of international applications ("ePCT-Filing") will be made available over the course of 2013 and 2014, as well as other new services for both applicants and Offices.
2. It is also proposed to offer secure web services, allowing near real-time machine to machine interactions. A review of current PCT-EDI procedures will be carried out to ensure that Offices using batch processes are able to send and receive all the necessary document and data types easily and efficiently.
3. The key aims of development over the next two years are:
  - (a) Offer the applicant a single portal through which the entire international phase process can be managed, including interactions with as many receiving Offices and International Authorities as possible, in addition to the International Bureau. As much up-to-date information as possible should be available via the ePCT system regarding the status of processing of international applications in all of these Offices. Further improve the management of portfolios, including access rights management, for applicants handling multiple international applications. Offer centralized real-time credit card transactions for the payment of any type of PCT fee due and regardless to which authority the payment is to be made.

(b) Offer a complete service for receiving Offices that wish to use electronic services hosted on their behalf by the International Bureau to conduct their work. This includes the ability to offer their local applicants an e-filing service also hosted by the International Bureau on behalf of the national (or regional) Office.

(c) Offer machine to machine services allowing effective interaction with IB systems for receiving Offices and International Authorities using their own IT systems to manage their work, ensuring the ability to transfer documents and data effectively to permit efficient work by the Office.

(d) Offer services for integration with applicants' patent management systems, allowing documents and data to be exchanged automatically, reducing the time and risk of errors involved in copying files and information.

(e) As far as possible, eliminate postal delays and related costs and improve quality of processing by enabling official electronic transfer of documents and information between any two points in the system (applicant, receiving Office, International Bureau, International Authorities and third parties). Enable the use and reuse of machine readable information which can be used to automate processes and eliminate delays and errors caused by the need for transcription of information.

(f) Improve electronic access to information for designated Offices, especially in relation to cases of early national phase entry and for retrieval of documents which are not made available in PATENTSCOPE and PADOS, such as citations accompanying third party observations.

## **EXISTING APPLICANT AND OFFICE SERVICES**

### ePCT for Applicants

4. ePCT currently offers applicants the opportunity to conduct almost all their business with the International Bureau (including the receiving Office of the International Bureau) through a single electronic portal. The exceptions are:

(a) At the time of writing, electronic filing of international applications is generally only possible using PCT-SAFE or equivalent independent software installed on the applicant's computer. A closed pilot is under way of a service allowing electronic filing using the ePCT web browser interface ("ePCT filing"). This service is expected to be opened for general use for international applications at the receiving Office of the International Bureau during the first half of 2013.

(b) Certified copies of priority documents need to be forwarded to the International Bureau in their original paper (or in some cases CD) formats because the International Bureau would have no way of confirming to designated Offices that pages scanned by the applicant or files copied from the CD genuinely reflected the document which had been certified by the Office. (It is possible however for the applicant to make an online request to the International Bureau in ePCT to retrieve copies of priority documents from DAS by providing the access code in a dedicated interface.)

(c) Electronic payment of fees can currently only be paid electronically through a separate system, using codes passed to match the payment with the relevant required fee. During the course of 2013 real-time credit card transactions for the centralized payment of any type of fee due will be made available via ePCT.

5. Many of the significant interactions with the International Bureau can now be conducted using “actions” where the applicant enters data which is imported directly into the International Bureau’s systems to perform the required function, rather than needing the processing team to interpret and transcribe data from a letter. Even where a letter is uploaded, the applicant is invited to indicate the nature of the letter or its attached documents. This allows it to be directed immediately to an appropriate point of processing and may also, in some cases, trigger automated provisional measures. For example, if a letter is uploaded indicating that it is a withdrawal of an international application where preparations for international publication are under way but not yet complete, the close of technical preparations will be programmed for that international application in such a manner that it does not take place before the letter has been processed and it is confirmed whether or not the international application is to be withdrawn.

#### ePCT for Offices

6. The system offers receiving Offices and International Authorities the opportunity to view the latest bibliographic data and documents in the International Bureau’s files for international applications where the Office acts in the relevant role, and to upload new documents related to an international application directly into the International Bureau’s files. New features which are currently being tested and should be available prior to the meeting include “actions” for the transmission of record copies and priority documents, and for the withdrawal of the international application or priority claims.

#### Key Features

7. The system has the following key features:

- (a) The system has been built with security as a primary design requirement from the outset.
- (b) The applicant and all Offices with an international phase role (receiving Office or International Authority) can access live information from the files of the International Bureau, including documents, bibliographic data, status information and calculated timelines using the same views.
- (c) Applicants and Offices can upload documents directly to the files of the International Bureau where they are visible immediately, including information on their status of processing by the International Bureau (not yet processed, processed, business error detected).
- (d) For an increasing range of processes the applicant no longer needs to write a letter (or an Office prepare a paper form), but can instead enter data which is used directly by the International Bureau’s systems, eliminating a variety of delays and potential errors of understanding and transcription.
- (e) Entered data is validated before submission using the same business rules database as that used for the International Bureau’s internal systems.
- (f) The applicant assumes control and responsibility for who (in addition to the competent Offices) has access to the international application – three different levels of access are provided (eViewer can only see files and information; eEditor can also upload documents and perform “actions”; eOwner can also delegate access rights to other account holders). This gives a flexible system for allowing appropriate access for applicants, inventors, office colleagues and counsel in States where national phase entry is intended. The International Bureau retains the ability to suspend or remove access when necessary at the level of users or of international applications.

(g) To allow more effective local file management, applicant users can enter their own personal “comments” (visible only to themselves) or group “warnings” (appear as a pop-up dialog box when an international application is opened by any person with eViewer, eEditor or eOwner access) which are not part of the file and are not visible to the International Bureau or other Offices.

(h) ePCT Message functionality permits the quick and efficient exchange of electronic messages between applicants and the International Bureau based on secure “e-mail”.

(i) Tools are provided to assist effective portfolio management, including searching portfolios by various different criteria and sending notifications when selected events occur, including processing events (such as new documents) or time limits approaching.

#### Availability and Use of the System

8. At the end of December 2012, ePCT applicant services were in use by over 5,000 applicants or their representatives from 99 countries, managing portfolios ranging from one to over 400 international applications and including international applications filed at 28 different receiving Offices.

9. At the same time, 12 Offices in their capacity as receiving Office had access to the services, five of which also had access in their capacity as International Searching and Preliminary Examining Authority. Five more Offices were in the process of setting up accounts.

10. It is expected that use of the system will grow significantly once ePCT-filing becomes generally available.

#### **THIRD PARTY OBSERVATIONS**

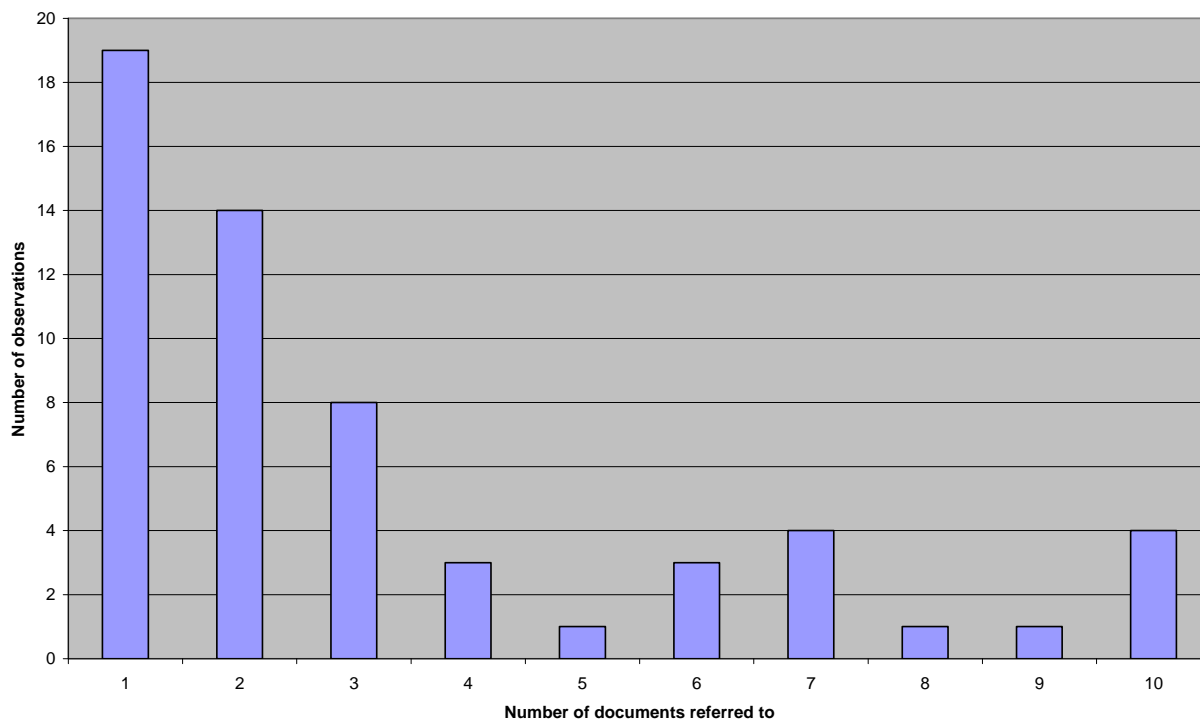
11. Since July 2012, the ePCT system has offered a third party observation service in accordance with Part 8 of the Administrative Instructions, together with equivalent functionality for applicants to indicate close prior art. A link is provided from PATENTSCOPE for international applications from the date of international publication until 28 months from the priority date. Any person (up to a maximum of 10 in total) is then able to list up to 10 pieces of prior art, upload copies of that prior art and indicate briefly how it is relevant to novelty and inventive step.

12. To the end of December 2012, the service was used for 61 attempted third party observations and two applicant observations. All but three of the observations were accepted. Of the three which were rejected, two contained statements disputing the inventorship and entitlement to make the international application in addition to or rather than details concerning novelty and inventive step (contrary to Section 802(vii)). One of these was resubmitted shortly after its rejection without the inadmissible portions and is counted a second time in the above figures. The third rejection appears to have been an error, where the only cited document was the publication of the international application itself, with the “brief explanation” not providing any indication of how or why this was intended to be considered prior art. There have been no cases which suggest deliberate attempts to abuse the system in order to inconvenience applicants or Offices using large quantities of prior art of likely low relevance. 98% of the documents referred to in the third party observations were uploaded with the observation.

13. All but nine of the third party observations have been submitted anonymously. Four international applications have had two observations made; no more than two observations have been made on any single international application. A large majority of observations have been submitted in English, but observations have also been submitted in French (1), German (2) and Japanese (2).

14. Four observations have been submitted before the receipt by the International Bureau of the international search report. Four observations have been submitted on international applications where international preliminary examination had been demanded but the international preliminary examination report had not yet been received by the International Bureau.

15. The distribution of number of cited documents included in the accepted third party observations is shown in the chart below.



16. Feedback from those making third party observations has been generally positive. The main request for improvement, received from almost all those commenting, is that longer “brief explanations of relevance” should be permitted, since in many cases 500 characters is insufficient to properly explain the relevance, especially when many claims are involved. In response to other comments, a preview function will be released shortly to allow third parties to see how their observation will appear before it is submitted, noting that there is no possibility to edit it afterwards.

17. Other improvements which are intended include the ability to save a draft observation and automatic labeling of the uploaded copies of prior art to allow easier matching of the documents with the relevant parts of the observation.

## FUTURE DEVELOPMENT

18. A wide variety of improvements are planned in the near future to ePCT for applicants, including the deployment for full scale use of ePCT-filing as referred to in paragraph 4(a), above, better integration of electronic payment services, and a variety of improvements to “actions” and portfolio management. It is also intended to offer “web services” allowing a degree of integration of ePCT services with patent management or docketing systems. However, most of the “headline” plans for development over the next two years involve either services for Offices or else allowing the applicant to interact with Offices other than the International Bureau.

### Services for Receiving Offices

19. It is intended to offer a complete service for receiving Offices hosted by the International Bureau and accessed through a secure web browser connection. This has begun by offering the functions noted in paragraph 6 and will continue in stages, gradually deploying new functions which can be used in isolation before the complete receiving Office management service is available.

20. The exact order in which functions will be developed has not been finalized and certain items are only at the stage of testing a “proof of concept”, but the approach in general terms is intended to be:

- (a) Allow inspection of IB files and upload of documents to IB (already available).
- (b) Provide “actions” for automating the processing of common functions, eliminating the need for manual preparation of associated forms and explanatory notes (for example, upload of record copy, to be delivered soon).
- (c) Allow the receiving Office, if it wishes to do so, to accept electronic filings from the ePCT web filing service without the need for any local IT systems other than a computer with a conventional browser and an internet connection. This will allow all receiving Offices to offer their applicants the benefits of fully electronic filing. Consequently, the International Bureau will be able to decommission the legacy PCT-EASY services for providing an electronic request form but submitting the application body on paper.
- (d) Allow preparation of conventional receiving Office forms as PDF documents with some pre-filling from bibliographic data on file (as a transitional measure until tools are available for creating forms – or data to serve equivalent purposes – in properly machine processable formats for all required purposes).
- (e) Provide “actions” for further functions, seeking to generate directly processable information as far as possible, with conventional style forms being produced only to the extent necessary for traditional file records or processing by the applicant.
- (f) Wrap file views and complete set of actions into a case management system with views of documents and actions which have not yet been fully processed and the ability to assign tasks to different users within an Office.

21. For Offices which wish to use their own local systems for their work as a receiving Office:

- (a) The “minspec” protocol<sup>1</sup> will be reviewed to ensure that the PCT-EDI service for batch transmission of documents is sufficient to support the wider range of document and data transmissions which are envisaged to allow use of the new functionality which will be offered by the system.
- (b) The major functions of the system should be made available using secure web services for Offices which wish to implement the processes as a near real time system.
- (c) The ePCT-filing service offers a direct replacement for the content and workflows provided by PCT-SAFE. It is already able to transmit international applications to e-filing servers in a transmission mode and format identical to that used by PCT-SAFE for the types of content which it supports. Additional content types (languages, validations relevant to receiving Offices other than RO/IB and special package types such as that

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<sup>1</sup> *PCT Minimal Specifications for Transmitting Documents to the International Bureau*, available from the WIPO website at <http://www.wipo.int/patentscope/en/pct-edi/>.

expected by the USPTO's EFS-Web system) will be added over the coming months. Receiving Offices will then receive electronic filings prepared by the ePCT-filing service, which can be processed without any changes to existing systems.

#### Services for International Authorities

22. It is not currently intended to offer a complete web browser-based service for International Authorities since it is assumed that Offices which take on this responsibility will have significant IT capabilities of their own and, at least for the production of international search reports, written opinions and international preliminary reports on patentability, will wish to use tools which are well integrated with their main search tools.

23. Consequently, while some services developed primarily for receiving Offices (such as administrative form preparation tools) may be adjusted for use by International Authorities if there is sufficient demand, it is currently envisaged that the main browser-based services developed specifically for International Authorities will be management tools, allowing better tracking of work items (primarily international search reports and international preliminary reports on patentability, but also abstracts and classifications) believed by the International Bureau still to be outstanding. As well as providing a potentially useful supplement for International Authorities' own tracking systems, this also offers the possibility of reducing delays by more effective reconciliation of lists, quickly identifying cases where work has been done by the International Bureau or an International Authority but not properly transferred or registered in the system.

24. It should also be noted that, while the services may not immediately be implemented in browser-based ePCT, the International Bureau is seeking to develop tools such as improved stylesheets and data feeds to assist International Authorities in implementing consistent international search reports, written opinions and international preliminary reports on patentability in a manner which minimizes the maintenance involved in updating forms in response to changes to the Rules and Administrative Instructions. It is hoped that the use of such tools will allow an improvement in translation quality and consistency, while reducing costs for both the International Bureau and International Authorities.

#### Services for Designated and Elected Offices

25. It is intended to offer designated and elected Offices browser-based document upload and file inspection services equivalent to those currently available for receiving Offices and International Authorities. This will provide access to documents which are never made available through PATENTSCOPE and PADOS, such as cited documents uploaded with a third party observation. This service is awaiting review of which parts of the files should be visible to a particular Office:

- (a) from the date of international publication,
- (b) from 30 months from the priority date, and
- (c) at earlier times if the International Bureau is notified that the applicant has requested national phase processing to begin early.

26. The only web-based "actions" currently envisaged for the normal work of designated and elected Offices (but see also paragraph 34, below, concerning quality feedback) are notification of national phase entry and upload of national phase documents such as search and examination reports by Offices which are willing to supply such information but are not able to

automate these processes<sup>2</sup>. Notification of national phase entry will permit access to the full file before the usual dates in the event of an early national phase entry and will also permit “push” notifications of new documents which the Office is interested in becoming available after they have downloaded an initial set of documents at the time of national phase entry. This could, if sufficient demand existed, be supplemented by a facility to upload national phase search and examination reports, which could be made available for the public on PATENTSCOPE and whose availability could be notified to national Offices which had notified of national phase entry.

27. Assuming that designated Offices agree to supply their national phase search and examination reports for use with such an arrangement, it is envisaged that ePCT could offer notifications when new reports become available from other Offices in relation to an international application where a national phase entry has been notified but no grant, withdrawal or refusal has yet been notified. Such notifications could, at the option of the Office, take the form of a notification that the document exists for retrieval through the ePCT web interface or web services, or else an automated delivery of the documents using PCT-EDI.

28. Again, it is also intended to offer equivalent functions through secure web services, allowing designated Offices which currently retrieve documents automatically from PATENTSCOPE to extend the range of documents to include ones which are never made available through that public service.

#### Interaction Between Applicants, Receiving Offices and International Authorities

29. At present, the ePCT service allows applicants and Offices to communicate actively only with the International Bureau (including the receiving Office of the International Bureau). Other parties to the international phase processing can see most of the documents and data involved if they look, but there is no means to use the service to “push” information between any two points, such as applicant to receiving Office, receiving Office to International Searching Authority or International Preliminary Examining Authority to applicant, ensuring that the information will be seen and acted on. Communications between two Offices or between the applicant and an Office other than the International Bureau can only be brokered by the service where there is a specific arrangement for message forwarding, such as the forwarding of search copies from the receiving Office to the International Searching Authority (for which trials will begin shortly between pilot Office pairs) or obligations to forward documents, such as Rule 59.3 concerning forwarding of demands submitted to Offices other than the International Preliminary Examining Authority.

30. It will be a primary aim to develop the system to allow applicants and Offices to use the system as an official means of communication with any other party to international phase processing. This includes both transmitting individual documents and pieces of data and seeing as large a part as possible of the file and status information held by receiving Offices and International Authorities. Such developments will seek to gain the following benefits:

- (a) Reduction of postal costs and delays in communication.
- (b) Reduction in rework costs due to work being done unnecessarily or incorrectly as a result of using old data, having not yet received a relevant update.

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<sup>2</sup> The preferred method for automating delivery of national phase information also allows for other status information, such as withdrawal, refusal, publication, grant and expiry. Details can be found on the WIPO website at: [http://www.wipo.int/patentscope/en/data/national\\_phase/procedures.html](http://www.wipo.int/patentscope/en/data/national_phase/procedures.html).



(c) Greater use of data provided directly by the source of the communication, eliminating work and errors involved in understanding transcribing information from paper forms and letters.

(d) Certainty of receipt of documents and data.

(e) More clear and complete picture of the state of processing of international applications for all concerned parties.

31. Such developments would be fairly simple if they could become effective for all applicants and Offices simultaneously. The delay in introducing this service depends primarily on finding a reliable way of ensuring that communications are not “lost” because the sending party relies on the service, but the party intended to receive the communication has not agreed to receive it that way (see “Issues to be Addressed”, below).

### Collaboration Tools

32. The service currently offers various tools to assist collaboration between different groups of people who may need to work closely together:

(a) Informal “warning” notes can be left by an applicant which are invisible to Offices (including the International Bureau), but which pop up when any applicant user opens the international application (users can choose an option to be sent an e-mail when such warning messages are added or modified).

(b) Each international application view shows the telephone number of the processing team responsible for handling the international application at the International Bureau and offers a secure messaging service, allowing quick informal contact to assist queries.

33. The International Bureau will consider how such tools could be improved and adapted to assist collaboration between users in different Offices or between the applicant and different Offices without overcomplicating the interface.

### Quality Feedback System

34. The 19th session of the Meeting of International Authorities agreed to establish a system for allowing designated Offices to provide quality feedback to an International Authority by uploading a PDF or Word document with a particular document code (paragraph 6 of document PCT/MIA/91/3) via PCT-EDI, which the International Bureau would route via supplied e-mail addresses to the appropriate section of the relevant International Authority. On further reflection by the International Bureau, it seemed that few designated Offices would find value in undertaking the automation work to integrate such a system for comments which would be expected to be sent in only a limited proportion of cases. Consequently, while the International Bureau intends still to offer that arrangement for any designated Office which wishes to use it, it is now proposed to offer this service as a function within ePCT to avoid the need for any automation work by national Offices. The desire for general information on additional documents found during national phase processing will be addressed by encouraging designated Offices to make available national phase search reports (see, for example, paragraph 26, above).

### Services for Third Parties

35. The more timely, accurate and complete information offered by the above developments will also serve to benefit third parties, although it should be noted that third party information services will continue to be offered primarily through PATENTSCOPE, which relies on a separate copy of the public part of the information available through ePCT, updated daily, rather than accessing the live data directly.

### Interaction with the WIPO Digital Access Service for Priority Documents

36. ePCT already offers some basic interactions with the WIPO Digital Access Service for Priority Documents (DAS), including offering electronic requests to make an international application filed at RO/IB available to DAS (which partly automates the relevant processing) or to retrieve a priority document from DAS (which fully automates the relevant processing). Improved services are being developed to give more detailed and immediate feedback on DAS requests. For example, it will become possible for applicant in most cases to check whether a request to retrieve a priority document from DAS will be successful when selecting that option in ePCT-filing, even before the international application is filed.

### System Languages

37. At present, the system interface and documentation is in English only. However, the system is designed for multilingual use and it is intended eventually to offer both applicant and Office services in the 10 PCT languages of publication, to the extent that there is demand. A small scale trial of this is planned in the first half of 2013 using the relatively stable portions of the web browser-based services for Offices. This will be used to confirm that the multi-language features work correctly and to verify that the formats of data files can be used properly by the translation services both to provide high quality initial translations and to allow efficient version control once the system is in full multi-lingual use.

## **ISSUES TO BE ADDRESSED**

38. The main technical issues which need to be addressed with the participating national Offices relate to the fact that the system needs to be able to handle documents and data from a variety of sources in different formats with different time delays and different levels of completeness, as well as documents being generated for the benefit of applicants and Offices who may not be using ePCT. The sources may include:

- (a) paper documents sent by mail;
- (b) documents produced by local systems of a national (or regional) Office and transmitted as part of a daily or weekly batch by PCT-EDI;
- (c) in the future, similar documents transmitted by web services in near real time;
- (d) documents generated by ePCT and the original copy hosted on a system maintained by the International Bureau for an Office which uses ePCT as its primary processing system;
- (e) documents generated by ePCT or uploaded through ePCT by an Office which usually uses its local (paper or electronic) systems, but conducts occasional transactions through ePCT, for example for urgent matters such as withdrawals or for unusual situations which have not been provided for in a local system.

39. The most immediate issue in this category lies in ensuring that the system will ensure that communications do not simply “disappear” because a sender believes that it will be delivered by ePCT, but the recipient has not agreed to accept communications in the relevant manner. For

example, the system should allow the International Searching Authority to reduce mailing costs by allowing it to request delivery of international search reports to the applicant through ePCT instead of on paper. However, where the applicant has not agreed to receive communications that way, it is essential that the International Searching Authority should be aware that it is still responsible for sending the paper copy. This needs to be handled on a “per international application” basis.

40. Similarly, the applicant should be able to send any relevant type of document to the receiving Office or International Searching Authority through ePCT by uploading a file or using an “action” to generate the necessary instructions. This appears to involve:

(a) ePCT being “aware” of the extent to which a particular Office has agreed to accept communications from applicants and other Offices through the system and how they should be delivered (for example, by notification that a document is available on ePCT or by active delivery of that document through PCT-EDI); and

(b) suitable arrangements being in place to ensure that international applications are known to ePCT from the earliest moment possible and can be associated with the correct applicant account even before the record copy is delivered to the International Bureau.

41. It is also necessary to ensure that information is transmitted in formats which can be processed effectively. Where machine-processable formats are used, it is essential that the details are accurate and presented according to consistent standards. Where scans of paper documents are transmitted, it is essential to ensure that the copies are complete and of a quality which is sufficient for the relevant purpose without the risk of having to refer back to the original.

42. The International Bureau will discuss these issues with national Offices informally and through PCT Circulars in order to find solutions which give the best results for applicants and Offices alike. Comments are welcome at any time to *pctbdd@wipo.int*.

43. *The Meeting is invited to note the contents of this document.*

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