

C. PCT 1536 April 13, 2018

Madam, Sir,

Use of National Classification Symbols in International Applications

1. This Circular is addressed to your Office in its capacity as a receiving Office, International Searching Authority and International Preliminary Examining Authority and/or designated or elected Office under the Patent Cooperation Treaty (PCT). It is also being sent to certain non-governmental organizations representing users of the PCT System.

## Summary

2. This Circular proposes two options for International Searching Authorities to transmit Cooperative Patent Classification (CPC) symbols and other national patent classification symbols assigned to an international patent application to the International Bureau for the purposes of international publication in PATENTSCOPE. Transmission could either be performed by including the classification symbols in the international search report transmitted to the International Bureau in XML, or by transmitting the symbols in machine-readable format in a separate file at the same time as the international search report. Any transmission would be optional, and should only be performed where the International Searching Authority has experience of using the CPC or national classification.

## Background

3. The PCT Working Group, at its ninth session, held in Geneva from May 17 to 20, 2016, discussed a working document submitted by the Republic of Korea titled "Specifying National Classifications on the Front Page of Published International Applications" (document PCT/WG/9/26). This working document proposed that, in addition to International Patent Classification (IPC) symbols, national classification symbols assigned by the International

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Searching Authority and indicated in the international search report could be included in the information set out on the front page of published international applications. It is understood that this would apply primarily to classification using the CPC. Paragraphs 198 to 214 of the Report of the session (document PCT/WG/9/28) give details of the discussion.

- 4. After the initial discussion, the International Bureau issued Circular C. PCT 1488, dated November 30, 2016. Paragraphs 13 to 16 of this Circular suggested the following way forward with regard to this proposal:
  - "13. Taking into account the aims of the proposal by the Republic of Korea and main requirements for effective sharing of patent classification information, the International Bureau suggests the following approach:
    - (a) Where the International Searching Authority has experience with classifying subject matter of patent applications using the CPC as a national classification, the Authority may transmit any CPC symbols to the International Bureau. Transmission of CPC data on international applications should only be performed by those Authorities with this experience. International Searching Authorities which use a national classification scheme other than the CPC would also, in principle, be able to transmit such classification data to the International Bureau.
    - (b) All CPC and other national classification data must be transmitted in a machine-readable format including appropriate identifications of classification type and version, either as part of the classification contained in an XML international search report or, where this is not possible, as part of a separate machine-readable data element. The International Bureau will not re-type any classification codes that it receives in international search reports which are not in XML format.
    - (c) The International Bureau will import and store national classification information which is in machine readable format and for which the classification scheme is readily available to the public as described in paragraph 11 [of Circular C. PCT 1488], above. The International Bureau will perform an automated validation of the CPC symbols applied to an international application and contact the International Searching Authority if any discrepancies are found, such as a code being used that is no longer applicable. The International Bureau would not expect to be able to carry out any such validation in respect of any other national classification symbols.
    - (d) Any CPC and other national classification data imported will be published on PATENTSCOPE in a machine-readable format, including in the XML data associated with the international publication, but will not appear on the front page of the published international application.
  - "14. International Authorities wishing to include classification information other than the International Patent Classification in international search reports and international preliminary examination reports would need to specify the classification system in the Agreement under PCT Articles 16(3)(b) and 32(3)(b) (see paragraph 6 [of Circular C. PCT 1488], above).
  - "15. It would seem that this approach could be implemented without any amendment of the PCT Regulations and with only minor changes to the Administrative Instructions (Appendix I of Annex F), ensuring that the XML formats for the international search report and published international application are suitable to hold the classification data in structures which allow it to be validated and imported effectively.

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"16. Consideration will also need to be given to the processes for maintaining CPC version information in order to ensure that validation can always be performed correctly."

- 5. For consideration by the Working Group at its tenth session, the International Bureau had prepared a document which discussed the responses to Circular C. PCT 1488 (document PCT/WG/10/4). This document indicated that the International Bureau would make a proposal to allow for the possibility for International Searching Authorities to transmit CPC symbols and national classification symbols to the International Bureau, provided the data had been validated by the International Searching Authority and was transmitted in a machine readable format, as explained in paragraphs 13 to 16 of Circular C. PCT 1488 (reproduced in paragraph 4, above), taking into account the responses to this Circular and comments made at the Meeting of International Authorities and PCT Working Group in 2017.
- 6. Paragraphs 183 to 198 of the Report of the session (document PCT/WG/10/25) give details of the discussion; paragraphs 196 to 198 summarize the discussion and outline the follow up agreed by the PCT Working Group:
  - "196. The Chair summarized that there was general agreement on the proposals in the document except that some delegations wished to leave the option open of including national patent classification symbols on the front page of the international publication. The Delegation of India had also asked for the International Bureau to provide more details of the benefits of including the Cooperative Patent Classification (CPC) on the front page, particularly for Offices not using the CPC.
  - "197. The Secretariat indicated that the International Bureau would be willing to present further information concerning the benefits of publishing the Cooperative Patent Classification (CPC) on the front page, particularly for Offices which did not use that classification. The International Bureau would also consult with Offices through a Circular on the appropriate technical standards which would be required for effective exchange of national classification symbols, both from the International Searching Authorities to the International Bureau and from the International Bureau to patent information users. A suitable warning would be required for changes to the format of any existing data exchanges to which the new information was to be added. The International Bureau also indicated that it would be willing to work with the Delegation of the Republic of Korea and other interested Offices in development of the proposal. Furthermore, the Secretariat acknowledged that the proposal was not limited to the CPC and could include national patent classification schemes such as the Japanese FI terms.

"198. The Working Group agreed that the International Bureau should issue a Circular to Offices and user groups to consult on the next steps, as outlined in paragraph 197, above."

<u>Inclusion of Cooperative Patent Classification (CPC) on the Front Page of Publications of International Applications</u>

Cooperative Patent Classification (CPC)

7. The CPC is the product of a collaboration that began between the European Patent Office (EPO) and the United States Patent and Trademark Office (USPTO) to provide a harmonized system between the EPO and the USPTO. Further information is available on the CPC website: https://www.cooperativepatentclassification.org/index.html.

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8. The CPC is co-owned by the EPO and USPTO and is based on the IPC, administered by WIPO. As of May 2017, 19 Offices classified patent applications using the CPC, and it was used for search purposes by more than 45 Offices (see paragraph 191 of document PCT/WG/10/25). The IPC remains the only international patent classification system used worldwide by more than 100 national or regional industrial property Offices.

9. In comparison to the IPC, the CPC is more detailed. It therefore aims to improve patent searching. The EPO and USPTO make a dynamic concordance table from the CPC to the IPC available on the CPC website, and some subdivisions of the CPC serve as a source for future IPC revisions. Another difference is that the CPC is updated more frequently. A new version of the IPC enters into force on January 1 each year with the new scheme compilation and revision concordance files being made available for downloading or consultation six months in advance. By contrast, in 2017, updated versions of the CPC came into force in January, February, May and August. The EPO and USPTO have agreed that updates will take effect on the first day of these months in 2018, with the updates to each new version being pre-released on the first Tuesday of the month preceding the date of entry into force. Furthermore, while the authentic versions of the IPC are English and French, translations are available in many other languages, including 12 languages through the "bridge" function of the Internet publication of the IPC, the CPC is provided on the website in English only, though some Offices using the CPC may have translated the CPC for internal use.

Benefits and Disadvantages of Inclusion of CPC on the Front Page of the Publications of an International Application

- 10. Inclusion of CPC symbols on the front page of the publication of an international application would have the following advantages:
  - The front page of the international publication would include the CPC symbols, making the CPC more visible to the public.
  - The CPC symbols would become part of the information to be listed in paragraph 2.2 of Annex D to the Administrative Instructions and therefore, in accordance with PCT Rule 86.1(i), to be included in the Gazette and thus published in the PCT Bibliographic Data for the international application on PATENTSCOPE. The CPC symbols would therefore be made searchable under the "Front page" search option, which covers multiple fields, in addition to through a specific classification search.
  - Offices not receiving XML data could obtain the CPC symbols more easily than if they were only transmitted as a separate XML data package. This would facilitate the work of these designated Offices that classify the application using the CPC in the national phase.
- 11. On the other hand, inclusion of the CPC symbols on the front page of the publication of an international application would have the following disadvantages:
  - International Searching Authorities that apply the CPC may include these symbols in the international search report under PCT Rule 43.3(a). Where this information is included in the international search report in a machine-readable format, the information can be automatically extracted and used as a search field without the need to include the symbols on the front page of the international application. In such cases, there would be little value to duplicating the search report classification on the front page of the published international application.

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 Designated Offices that use the CPC for classification of patent applications in the national phase could obtain the CPC symbols from the international search report, international preliminary report on patentability or as part of a separate data package. It is therefore not essential that the CPC is included on the front page of the international application to perform national phase classification based on CPC codes.

- The IPC and CPC are similar and largely duplicative. There are 72,137 entries in the IPC, of which only 17,916 (around a quarter) have sub-divisions within the CPC and only 111 symbols within the CPC which have no IPC equivalent. Inclusion of both classifications could therefore create confusion. In some cases, the extra symbols would bring limited added-value to the classification information available.
- The CPC is currently updated four times a year. While details of the different versions are available on the CPC website, a classification code can quickly become out of date.
- As the CPC is updated on a regular basis and is not administered by the International Bureau, any external factors not under the control of the International Bureau may have an impact on the publication process.
- The space on the front page of an international application is limited, and it is
  desirable that the information, including the abstract and drawing, is included in a
  single page. Most international applications have only a small number of IPC
  codes applied, but around 15 per cent have five or more and a few include 50 or
  more. Allowing for the inclusion of the CPC symbols would result in more
  international applications requiring a second front page.
- Not all International Searching Authorities apply the CPC. This would therefore lead to inconsistencies in the classification information on the front page between those Authorities using the CPC and those applying the IPC only.
- As the CPC is used by a subgroup of Offices, inclusion of the CPC would not be relevant to all Offices or users.

## Proposal

- 12. While the inclusion of CPC symbols on the front page of the publication of international applications has some advantages, enabling an International Searching Authority to provide CPC and other national classification symbols for inclusion in PATENTSCOPE and other databases would achieve the objectives of making publications easier to search using CPC symbols and allowing for designated and elected Offices to use the CPC symbols for classification in the national phase independently of the content of the front page. By requiring any national classification symbols to be transmitted in machine-readable format, processing at the International Bureau to make the classification information available to Offices and patent information providers would be automated.
- 13. The International Bureau therefore proposes that International Searching Authorities should have the option to transmit national classification symbols to the International Bureau in two ways, either by including the information with the international search report in XML format, or by transmitting it as a separate data package. To facilitate comprehension by Offices and users of any national classification information, the import of national classification symbols would only be undertaken where the International Searching Authority had made a classification key freely available online at least in the English language.

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14. International Searching Authorities that decide to transmit CPC symbols in a machine-readable format should have experience with use of the CPC. While it is not possible for the International Bureau to verify the accuracy of the CPC classification applied or decide on a minimum level of experience, it is understood that only those Authorities using the CPC as a classification for international or national patent applications should be transmitting CPC symbols to the International Bureau.

Transmission of National Classification Information as part of the International Search Report

- 15. The present legal framework already allows for national classification symbols to be included as part of the international search report in addition to the IPC. Where an International Authority wishes to include classification symbols other than the IPC, this is provided for in Article 6 of the respective Agreement under PCT Articles 16(3) and 32(3)(b) between the Office and the International Bureau in relation to its operation as an International Searching and Preliminary Examining Authority. Under the agreements which entered into force on January 1, 2018, five International Authorities have provided for the inclusion of the CPC in their respective agreements. No other classification systems are specified for use by International Authorities in their international search reports and international preliminary examination reports.
- 16. Among the five International Authorities that provide for the inclusion of CPC symbols in their agreements with the International Bureau, only the European Patent Office transmits international search reports to the International Bureau in XML format which could allow the CPC symbols to be extracted automatically without any retyping by the International Bureau. The International Bureau encourages other International Searching Authorities that wish to transmit CPC and national classification symbols on an international application for inclusion in PATENTSCOPE to produce and transmit international search reports and written opinions in XML format and include this information within the report along with the IPC symbols.
- 17. To allow for easy and reliable import of the CPC symbols, the relevant DTDs for preparation of XML search reports and written opinions would require modification to allow for input of the CPC symbols in a structured format. A more basic verification of national classifications other than the CPC might also be developed for those Authorities that would be interested in including other national classification symbols with the international search report. This would require details from the interested International Searching Authority on the structure of the national classification system.
- 18. One way of transmitting international search report data to the International Bureau in XML is by using the ePCT portal to prepare the international search report. At the moment, the IPC symbols are validated in ePCT when entering the classification code, but other classification symbols are currently entered as free text only.
- 19. The International Bureau therefore proposes to make changes to ePCT to enable CPC symbols to be entered in a machine-readable format in the international search report, which could be validated against the most recent version of the CPC. For any International Searching Authority using ePCT to prepare international search reports, the International Bureau could explore the possibility of allowing for entry of their national classification symbols in a structured format, while retaining the option for any classification symbols to be entered as free text.

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Separate Transmission of National Classification Symbols to the International Bureau

20. It is desirable that any national classification symbols are included as part of the international search report alongside the IPC. However, where it is not possible for an International Searching Authority to include the national classification symbols in an XML international search report, the International Bureau proposes to allow for separate transmission of CPC and national classification symbols in a machine-readable format.

- 21. The possibility for CPC and national classification symbols to be transmitted separately from the international search report would be intended as an alternative to inclusion of the classification symbols in an XML international search report. It would therefore not be possible to submit CPC and national classification symbols both in the XML international search report and in a separate data package, unless a correction of the classification symbols was required before international publication.
- 22. The International Bureau therefore intends to allow the transmission of a separate data package containing CPC and other classification symbols only up to the time of transmission of the international search report. Where CPC and national classification symbols have been received, these will be available for international publication or re-publication in cases where the international search report is published after publication of the international application.

Accessibility of National Classification Codes from the PATENTSCOPE Database

23. As explained in paragraph 12, above, the International Bureau intends to make the CPC or other national classification symbols received on an international application available through the PATENTSCOPE database, both in the browser-based search facility and for subscribers to the bulk data services. In this regard, one possibility would be for PATENTSCOPE to include a file containing the IPC and any national classification symbols produced by automated extraction at the time of international publication of the symbols from the international search report and any separate file containing the CPC and national classification symbols.

## Responses to this Circular

- 24. The International Bureau invites your Office to provide comments on the proposals for transmission of CPC and national classification symbols, as discussed in paragraphs 12 to 23, above. Comments should be sent by May 31, 2018, preferably by email to the PCT Business Development Division: pctbdd@wipo.int. Any comments received by this date will be summarized in an oral update during discussions of the proposal at the eleventh session of the PCT Working Group, to take place from June 18 to 22, 2018.
- 25. After discussions at the PCT Working Group, the International Bureau intends to consult further with International Authorities on the technical changes that would be required to implement the proposal, including any changes to the Minimal Specifications for Electronic PCT Document Exchange and on the Standard for the Filing and Processing in Electronic Form of International Applications (Annex F of the Administrative Instructions under the PCT) and its appendices.

Yours sincerely,

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**Deputy Director General** 

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