

Patent Cooperation Treaty (PCT) Working Group

**Fifth Session
Geneva, May 29 to June 1, 2012**

COLOR DRAWINGS IN INTERNATIONAL APPLICATIONS

Document prepared by the International Bureau

SUMMARY

1. It is proposed to amend the PCT Regulations so as to permit the filing of color drawings¹ as part of international applications filed in electronic form, provided that this is done in an electronic format permitted by the Administrative Instructions and accepted by the relevant receiving Office. All international phase processing of such color drawings, including international publication, would then be conducted entirely in color.

2. To satisfy the requirements of designated Offices which continue to require that drawings be in black and white, it would be permitted for the applicant to correct the international application by submitting to the International Bureau a black and white version of the color drawings at any time prior to 30 months from the priority date. In the absence of such a submission, the International Bureau would perform an automatic conversion of the color drawings as filed (or as amended or rectified during the international phase) to a black and white format.

¹ In the main body of this document, the term “color drawing” is used to mean equally color drawings, color photographs and any form of “black and white” drawing or photograph which may contain greyscales, rather than pure black lines on a white background.

3. The above system would take time to develop and in any case should not be brought into operation until all International Authorities are able to process color drawings for all their international phase responsibilities and until common systems used by several receiving Offices for handling the receipt of applications have been upgraded. In addition, the Working Group may wish to consider whether it would be desirable to require that a certain number of designated Offices must also be able to accept the use of color drawings for national phase processing before bringing the new system into operation.

4. A possible interim solution is also proposed under which record copies containing color drawings would be made more readily available to support international search and public information disclosure, as well as national phase processing before Offices which do accept color drawings for national phase purposes. Even in respect of designated Offices which did not accept color drawings for national phase purposes, this would at least ensure that such Offices were more readily able to assess the disclosure (based on the color drawings) which appeared in the international application as filed, even though the lack of compliance with formal requirements meant that it could not be properly represented in the international publication.

BACKGROUND

5. At its third session, held in Geneva June 14 to 18, 2010, the Working Group (see paragraph 197 of document PCT/WG/3/14 Rev.):

“recognized the value of photographs and color drawings in making a clear and effective disclosure of certain types of invention and agreed that it was desirable to progress quickly on this matter, but that further study was required on the technical and legal issues which would be involved in permitting the filing and processing of such drawings as part of international applications, including issues raised in the [comments set out in the report]” .

6. At the same session, the Working Group also concluded that (paragraph 201 of document PCT/WG/3/14 Rev.):

“The use of color should be limited specifically to the separate drawings section of the international application. There did not appear to be any need to permit color text or color drawings to be included in the description, claims or abstract. It would probably be appropriate to limit the filing of color drawings to electronically filed international applications in order to minimize the impact on receiving Offices.”

7. In Circular C. PCT 1317, dated November 15, 2011, the International Bureau sent to national Offices and user groups the results of an internal technical review of the effects which accepting color drawings would have on International Bureau systems, together with certain legal, administrative and technical issues for national Offices. Responses to that Circular were received from 25 national Offices, including Offices of all sizes and from most regional groups.

8. The responses can be summarized as follows:

(a) Some Offices are already accepting and processing color drawings, but others require technical or legal changes which are likely to take a significant period of time before they could accept color drawings. The timing of legal changes may be outside the hands of the Offices.

(b) Most Offices still agreed that it was important to move towards the use of color drawings, though one Office stated that it was reluctant to do so (in addition to those which indicated that it would require legislative or technical changes, which would take significant time).

- (c) The ability of some Offices to handle color drawings in their role as receiving Office may be dependent on the updating of tools maintained by other Offices.
- (d) As had been suggested by the Working Group (see paragraph 4, above), the use of color should be limited to the drawings section of the international application and only permitted for international applications filed in electronic form.
- (e) There are risks and additional costs for applicants in submitting color drawings for the purpose of the international phase if they need to provide black and white drawings for any Office where they intend to enter the national phase. The system should minimize additional burdens on applicants wishing to provide color drawings.
- (f) It would be desirable to limit the use of color drawings to international applications where they are important for understanding the invention since the larger file sizes and processing requirements for color documents would introduce demands on IT systems which went beyond merely the physical storage requirements.
- (g) When transmitting international applications electronically from the International Bureau to national Offices in their various capacities, it would be highly desirable for the package to include a clear indication that the documents included color drawings.

9. Given the legal and technical barriers involved, the International Bureau considers it extremely unlikely that amendments to the Regulations could be agreed which required all designated Offices to accept color drawings for national phase purposes and to bring those amendments into force in the foreseeable future without including the option for Offices to submit notifications of incompatibility with applicable national laws, which would be very widely used. The proposal set out in the following paragraphs is thus based on the assumption that applicants will in most cases have to provide black and white drawings at some stage if the international application is pursued in the national phase before national Offices which continue to require black and white drawings. Any arrangements for this should be made as simple as possible.

UTILITY AND TIMING OF PROPOSAL

10. There appear to be at least two main issues which need to be addressed when considering whether to amend the Regulations to allow for the filing of international applications containing color drawings.

11. The first issue to be addressed is whether accepting color drawings in the international phase is worth the cost if this is not reflected by national laws of at least a significant number of designated Offices permitting color drawings to be used for the purpose of the national phase processing.

12. In previous discussions, Offices have been essentially unanimous in the view that color drawings (and, in the view of many, other types of disclosure, such as 3D computer models and animations) are *in principle* a desirable objective, both for aiding applicants in drafting their applications in certain cases and for allowing third parties to understand the invention more readily. However, given the relatively small number of designated Offices which have so far indicated that they are already today able to accept color drawings, or that they expect to be able to update their laws and IT systems in the near future, it is not clear whether seeking to allow the filing of color drawings in international applications first, before introducing necessary changes to national laws, will be beneficial. Explicitly accepting color drawings to be contained in international applications in the international phase without this also being guaranteed for national phase purposes may lead to misunderstandings and/or the following risks:

(a) Applicants will file international applications containing color drawings where it is not absolutely essential, only to be confronted with the extra task of having to supply black and white drawings later on for the purposes of national phase processing.

(b) Even if a considerable number of Offices will accept color drawings for national phase purposes, as long as there remain a substantial number of Offices which do not, applicants may still consider it to be easier to continue to use black and white drawings exclusively from the outset.

13. It would thus appear essential for the proposal to go ahead that at least a substantial number of designated Offices with a substantial number of national phase entries per year will be able and willing to move to the use of color drawings in the short to medium future (say, 5 years). The Working Group may wish to consider what those numbers should be. Only once a sufficient number of designated Offices with a substantial number of national phase entries have declared that they are able and willing to make such a move should a decision be taken to go ahead with the project. The International Bureau would wish to have a clear idea of the required starting date before committing resources to developing IT systems to support it. Furthermore, it seems likely that many designated Offices will similarly only be prepared to commit legal and IT resources to this project if a clear date for PCT use is given as an incentive.

14. The second main issue to be addressed is readiness of *all* International Authorities to make the required changes to their internal systems. To keep this proposal as simple as possible, it relies on the support of all International Authorities to permit the processing to be carried entirely out in color for the whole of the international phase. Consequently, in addition to the considerations about designated Offices set out above it is suggested that any set of amendments agreed by the Working Group should only be submitted to the PCT Assembly for adoption after *all* International Authorities have been able to specify a date by which they would guarantee to be able to make any required changes to their systems.

15. The International Bureau would be able to assist in this matter for some International Authorities, since by the time that the International Bureau's systems could be ready, it should also be possible to give access to systems through ePCT for International Authorities to retrieve and view color drawings and to receive and approve rectifications and amendments for color international applications, should the International Authority not wish to make provision for these actions within their own local systems.

PROPOSAL

16. The following proposal to amend Rules 11, 48 and 51 *bis*, and to add new Rule 46 *bis*, as set out in the Annex, is thus made on the assumption that Contracting States continue to wish to permit the use of color drawings in international applications under the PCT, that at least a significant number of designated Offices are or will be (in the short to medium term) willing and able to accept color drawings for national phase purposes, and that all International Authorities will be able, prior to entry into force of those amendments, to make any required changes to their internal systems and thus be able to process color drawings.

17. Under proposed Rule 11.13(a) and (o), receiving Offices would be permitted to accept electronic filing of international applications containing color drawings as long as they met the appropriate criteria prescribed in the Administrative Instructions (most likely, this would involve specifying acceptable versions of the JPEG and PNG file formats).

18. All international phase processing of drawings filed in color would then be carried out in color. This would include the international search, international publication, international preliminary examination and all translations, corrections, rectifications and amendments. Rule 48.2(b)(ix) as proposed to be amended would require the fact that an international application contained color drawings to be recorded in machine-readable bibliographic data and recorded on the front page of the published international application (which could itself contain a color drawing to accompany the abstract). This would ensure that the fact that color drawings were included was readily visible, even if the international application had been printed or otherwise converted into a black and white format.

19. To assist entry into the national phase before multiple designated Offices which continued to require black and white drawings, at any time before 30 months from the priority date, the applicant would be permitted to correct the international application in respect of those Offices by submitting a complete set of drawings in black and white (proposed new Rule 46*bis*), together with a statement that the black and white version of the drawings corresponded to the color drawings contained in the international application as filed or else as amended or rectified during the international phase. If no such black and white version of the drawings was submitted, the International Bureau would make an automatic conversion of the color drawings contained in the international application as filed (or as amended or rectified during the international phase) into a black and white format.

20. Designated Offices which continued to require black and white drawings would then be able to select for themselves whether they wished to use the black and white versions of the drawings made available by the International Bureau or whether they wished to invite the applicant to furnish new black and white drawings. Rule 51*bis* as proposed to be amended would explicitly maintain the right to request new black and white drawings after national phase entry instead of relying on the International Bureau's automatic conversion, though it is hoped that this would only be acted on in cases where there was clearly a deficiency in the automatic conversion. In any case, the disclosure in the application as filed would be determined on the basis of the color drawings and any assessment of whether the correction made by the applicant under proposed new Rule 46*bis* to meet national black and white drawing requirements of certain designated Offices met requirements that they should not go beyond the disclosure in the application as first filed should take the color version into account.

21. One possible arrangement for Offices which were in principle able to accept color drawings but whose IT systems did not allow them to be effectively processed during the national phase would be to include a statement on the front page of any national publication that the publication was in black and white, but that the original color version was available on request either from the national Office or from PatentScope as part of the international publication in electronic form.

FEES

22. The proposal does not include any provision for special fees, which would be the only practical form of active control on filing of color drawings, noting that receiving Offices would not be in a position to judge whether the use of color drawings is "essential" for effective disclosure of an invention. For the reasons set out above, the fact that a significant number of designated Offices are likely to retain the requirement for black and white drawings in the national phase would likely be sufficient incentive to only use color drawings where it was important to do so. This could be reviewed at a later stage if the level of use of color drawings were such as to cause problems for the technical infrastructure at the International Bureau or national Offices.

ACCESSIBILITY

23. The facility to file color drawings should be open to applicants from all Contracting States, not only those whose receiving Offices currently operate their own electronic filing systems. This will be addressed in a number of ways:

- (a) Applicants from any PCT Contracting State may (subject to meeting national security restrictions) file their international applications directly with the receiving Office of the International Bureau, which will accept color drawings from the date that the changes to the Regulations enter into force.
- (b) Before proposing a definite date for entry into force, the International Bureau will consult with Offices which currently supply software to national Offices to assist with electronic filing to determine when they are likely to be able to make any necessary updates to allow the receiving Offices which use that software to accept color drawings.
- (c) As part of the ePCT system, the International Bureau intends to offer a system which will allow receiving Offices to offer electronic filing to their applicants where the Office needs only a web browser and not to maintain a full receiving Office IT infrastructure. This is expected to become available during the course of 2013, earlier than it would be possible to complete the work on the central systems required to support color drawings for the whole of the international phase processing at the International Bureau itself.

INTERIM ARRANGEMENTS

24. The above arrangements will inevitably take several years before they come into effect. In the meantime, it may be possible to achieve many of the benefits in a more administrative manner.

25. In many cases, applicants already today file applications including color drawings and the International Bureau receives a copy of the color drawing as part of the record copy, but this information is essentially lost since the drawings are usually converted to black and white for the purposes of all further processing, including for all documents which appear on PATENTSCOPE. In theory, the International Bureau is able to provide color copies of the record copy on request, but this is a manual process and can only be done if it is known to be necessary.

26. The following interim arrangements are proposed to assist processing in the interim of international applications whose record copy contains color drawings.

- (a) The front page should contain an indication that the record copy of the international application contains color drawings (whether they were filed in electronic form or not). This could be authorized by making an appropriate Administrative Instruction under Rule 48.2(b)(i) ("Subject to paragraph (c), the front page shall include ... data taken from the request sheet and such other data as are prescribed by the Administrative Instructions").
- (b) The record copy should be made available in its original color form on PATENTSCOPE in the same section as the published international application. This could be done without any changes to the legal framework. The International Bureau could certainly do this for record copies of international applications which had been filed in electronic form and would consider also introducing color scanning of color record copies which were received on paper.

(c) The record copy containing color drawings should be made available as a new document type in electronic systems for making data available to national Offices, such as PADOS and the DVDs containing communications under Article 20 and Rule 87. This would require simply suitable advance warning of the new document type and any associated changes to XML bibliographic information to the users of the relevant systems and products.

27. *The Working Group is invited to comment on:*

- (i) whether the level of ability to recognize color drawings in the national phase is likely to be sufficient to make PCT support desirable;*
- (ii) the proposals set out in paragraphs 16 to 23, above; and*
- (iii) whether the interim arrangements set out in paragraphs 24 to 26, above, would be of value.*

[Annex follows]

ANNEX

PROPOSED AMENDMENTS TO THE PCT REGULATIONS²

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² Proposed additions and deletions are indicated, respectively, by underlining and striking through the text concerned. Certain provisions that are not proposed to be amended may be included for ease of reference.

Rule 11

Physical Requirements of the International Application

11.1 to 11.12 [No change]

11.13 *Special Requirements for Drawings*

(a) ~~Drawings~~ Subject to paragraph (o), drawings shall be executed in durable, black, sufficiently dense and dark, uniformly thick and well-defined, lines and strokes without colorings.

(b) to (n) [No change]

(o) Where the international application is filed with a receiving Office which has notified the International Bureau in accordance with Rule 89bis.1(d) that it is prepared to receive international applications in electronic form, the applicant may file drawings which include photographs, colored lines or colored regions, including shades of grey ("color drawings"), provided that the color drawings are submitted in an electronic file format prescribed by the Administrative Instructions and accepted by that receiving Office.

11.14 [No change]

Rule 46bis

Submission of Black and White Version of Color Drawings

46bis.1 Submission of Black and White Version of Color Drawings

(a) Where an international application contains one or more color drawings, the applicant may, prior to the expiration of 30 months from the priority date, correct the international application by submitting a replacement set of drawings in compliance with Rule 11.13(a) for the purposes of national processing before Offices which do not accept color drawings.

(b) The drawings submitted under paragraph (a) shall be accompanied by a statement that the black and white drawings are equivalent to those in the international application as filed, as amended under Article 19 or 34, or including any rectifications which have been authorized by the International Searching Authority or International Preliminary Examining Authority, as the case may be.

[COMMENT: If no such replacement drawings were submitted, the International Bureau would prepare an automatic conversion of the drawings (including any amended or rectified drawings) to black and white format. Designated Offices which required black and white drawings would be encouraged to use these drawings for the purposes of their national phase processing. However, noting that detail may be lost as a result of such automatic conversions, the designated Office would retain the right under Rule 51bis.1(a)(viii) to require a set of replacement sheets to be furnished directly by the applicant.]

Rule 48

International Publication

48.1 [No change]

48.2 *Contents*

(a) [No change]

(b) Subject to paragraph (c), the front page shall include:

(i) to (vii)

(viii) where applicable, an indication that the applicant has, under Rule 26*bis*.3(f), furnished copies of any declaration or other evidence to the International Bureau;

(ix) where applicable, a statement that the international application contains color drawings.

(c) to (k) [No change]

48.3 to 48.6 [No change]

Rule 51bis

Certain National Requirements Allowed under Article 27

51bis.1 Certain National Requirements Allowed

(a) [No change] Subject to Rule 51bis.2, the national law applicable by the designated Office may, in accordance with Article 27, require the applicant to furnish, in particular:

(i) to (vi) [No change]

(vii) any missing indication required under Rule 4.5(a)(ii) and (iii) in respect of any applicant for the designated State~~s~~:

(viii) where the international application contains color drawings and no replacement set of drawings has been submitted under Rule 46bis.1, replacement sheets containing drawings in compliance with Rule 11.13(a).

(b) to (f) [No change]

51bis.2 and 51bis.3 [No change]

[End of Annex and of document]