

Patent Cooperation Treaty (PCT) Working Group

Fifth Session
Geneva, May 29 to June 1, 2012

PCT SEQUENCE LISTING STANDARD

Document prepared by the International Bureau

SUMMARY

1. Following developments in the process of drafting a future XML-based sequence listing standard, the International Bureau now considers that it may not be practical to leave the choice to applicants of whether to file sequence listings using existing WIPO Standard ST.25 or the new XML-based standard, as had been envisaged in the International Bureau's original proposal on the future relationship between current WIPO Standard ST.25 and the new XML-based standard presented to the fourth session of the Working Group (document PCT/WG/4/9).

2. A decision on how to best handle the changeover from the existing WIPO Standard ST.25 to the new XML standard would appear to depend on the outcome of a detailed analysis on how effectively it would be possible to convert sequence listings between existing WIPO Standard ST.25 and the new XML-based standard. The Meeting of International Authorities (PCT/MIA) recommended at its most recent session that this analysis should be carried out by the Task Force established by the Committee on WIPO Standards (CWS). Based on the conclusions reached by the Task Force, the appropriate PCT bodies should then commence a discussion on the most appropriate mechanism for transition from ST.25 to the new XML-based standard.

BACKGROUND

3. The fourth session of the PCT Working Group discussed a proposal by the International Bureau to take the opportunity arising from the development by the Committee on WIPO Standards (CWS) of a new XML-based sequence listing standard to review the relationship between the PCT Sequence Listing Standard and WIPO Standard ST.25 (and any future WIPO XML sequence listing standard). The proposal was to review that relationship with a view to

establishing, on the one hand, a general “filing-route neutral” WIPO Standard (or Standards, namely, ST.25 for sequence listings in text format and a proposed new standard ST.26 for sequence listings in XML) on the presentation of sequence listings in national, regional and international applications and, on the other hand, modifying Annex C of the PCT Administrative Instructions so that they only deal with PCT-specific issues related to the filing and processing of international applications containing sequence listings (see document PCT/WG/4/9 and the report of the fourth session of the PCT Working Group, document PCT/WG/4/17, paragraphs 180 to 188.

4. To illustrate the proposal, the Annex to document PCT/WG/4/9 contained a preliminary draft of a modified Annex C of the PCT Administrative Instructions, dealing only with PCT specific issues while otherwise referring to “filing-route neutral” WIPO Standards ST.25 (text format) and ST.26 (XML). Under Annex C as proposed to be modified, the applicant would have had the option, at his choice, to file a sequence listing either in compliance with current WIPO Standard ST.25 or in compliance with new WIPO Standard ST.26; a software tool (such as BISSAP, developed by the European Patent Office for the preparation and processing of sequence listings, or any equivalent tool which may be developed by other Offices or commercial vendors) would then convert the sequence listing, no matter in which format (ST.25 text format or ST.26 XML format) it had been prepared and filed, into whatever format was acceptable to the competent International Authority and the designated/elected Offices concerned.

5. This proposal was based on the assumption that the move into the XML environment would not affect the requirements as to contents and structure of a sequence listing filed in the ST.26 XML format. That is, the assumption was that new WIPO Standard ST.26 would only differ from the current WIPO Standard ST.25 in matters of essentially presentation, representing the same data as XML instead of by simple groupings of characters, but that ST.26 would not include any new functionality which could not be represented in ST.25. Consequently, it should have always been possible to take a listing initially provided in ST.26 format and to represent it in ST.25 format (and *vice-versa*). However, this assumption no longer appears correct.

CURRENT STATE OF DEVELOPMENT OF NEW STANDARD

6. At the time of writing the present document, work by the CWS Task Force was still ongoing. However, the latest draft of the proposed new WIPO Standard ST.26 shows that the Task Force has not limited its work to only defining a way of representing in XML the information which is currently provided in ST.25 format, but rather has taken the opportunity to modify and improve the Standard. At present, it would appear that, if adopted, the new ST.26 XML standard would in essence create a standard which would be substantively different from the existing WIPO Standard ST.25. And while it might be possible to reliably convert the substantive parts of ST.25 listings into the proposed new XML format, it would appear that ST.26 XML listings which took advantage of the new features could not be reliably converted into the existing ST.25 format.

7. Apart from the substantive aspects of the sequence listings which can be represented, there also would appear to be differences in the bibliographic information which is expected to be presented as part of the listing, such that in this respect it may not even be possible to convert from ST.25 to the proposed ST.26 XML format without leaving gaps in the information. This might cause problems relating to added subject matter in some jurisdictions if a conversion from one format to the other was required for the purposes of national phase processing.

8. Of course, it might be possible to revise WIPO Standard ST.25 so that it too could represent the new features and so as to more closely align the bibliographic information. However, noting that part of the intended benefit of proposed new ST.26 XML standard is its close alignment with industry standards for representing sequence listings so that more generic tools can be used with little or no conversion required, it would probably take as long for national Offices to prepare their systems to recognize the new features as to simply change to be able to use the XML format.

9. Clearly, the new developments would have an impact on the International Bureau's original proposal referred to in paragraphs 3 and 4, above. It would make it impossible, as had been envisaged, to give the applicant the choice of using the ST.25 or the new ST.26 XML format and then for the International Bureau to prepare conversions for the benefit of International Searching Authorities or designated Offices whose searching systems were set up only to accept the other format. While this might work in some cases, there would be other international applications where the conversion would simply not work and it might be difficult or even impossible to prepare an alternative listing which adequately disclosed the invention without also adding subject matter.

DISCUSSIONS IN THE PCT MEETING OF INTERNATIONAL AUTHORITIES

10. The Meeting of International Authorities, at its most recent session held in Canberra in February 2012, discussed the issues outlined above and agreed that it would be preferable if the CWS Task Force, before concluding its work on the development of the new ST.26 XML standard, would also look into the issue of whether it will be possible for any tool to be developed which would allow for the easy and complete conversion of sequence listings filed in one format (ST.25 or ST.26 XML) into the other. It further recommended that, based on the conclusions reached by the Task Force on the issue of the feasibility of developing a conversion tool, the appropriate PCT bodies should commence a discussion on the most appropriate mechanism for transition from ST.25 to the new ST.26 XML standard (see the Summary by the Chair of the session, document PCT/MIA/19/13¹).

11. At the time of writing the present document, discussions in the CWS Task Force on the issue of whether it would be possible to convert sequence listings between existing WIPO Standard ST.25 and the new ST.26 XML standard were ongoing. The International Bureau will present an update on the most recent developments to the Working Group, either orally during the session or by way of an Addendum to the present document.

POSSIBLE WAY FORWARD

12. Pending the outcome of the analysis by the CWS Task Force, the Working Group may wish to consider how to proceed should it be confirmed that it will effectively not be possible to convert sequence listings between existing WIPO Standard ST.25 and the new ST.26 XML standard. Consequently, in order to maintain the goal of allowing the applicant to draw up a single sequence listing which is acceptable for the purposes of both international and national phase processing, it would appear to be necessary to make a clean transition from current WIPO Standard ST.25 to the new ST.26 XML standard.

13. One possible way to do so would be to adopt the new XML standard but to have it enter into force for PCT purposes only as of a particular date in the future, say, two or three years after its adoption, upon which all sequence listings would have to be filed in compliance with the new ST.26 XML standard and no longer with Standard ST.25, which (for PCT purposes) would cease to exist, save for the continued processing of international applications which had already been filed. The purpose of this transition period would be to give all International Authorities and designated/elected Offices sufficient time to prepare themselves to be able to receive and process sequence listings filed in compliance with the new Standard.

¹

Available on the WIPO website at : http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=197617

14. This approach should provide little difficulty for applicants, a large majority of whom use the same tool for preparing sequence listings (at present PatentIn, but in the process of being replaced by BISSAP, which currently supports both existing ST.25 and a draft version of the new ST.26 XML standard, though of course other Offices or commercial vendors may wish to provide alternative tools). It would merely require them to know that, from a certain date, they would need to begin to use a different output option. Even for applicants who use alternative tools, with sufficient notice it is to be expected that those tools could be updated reliably. The essential question will therefore be from what date International Searching Authorities and those designated Offices which make searches of sequence listings in the national phase would be ready to use the new format.

15. The International Bureau therefore proposes to issue a Circular to all receiving Offices, International Searching Authorities and designated Offices, making reference to the new ST.26 XML standard and providing links to sample sequence listings in XML format, including both sequences which can be represented in ST.25 format and other sequences which make use of new features which are available only in the new ST.26 XML standard. The Circular would ask Offices which conduct searches on sequence listings to assess the new format and to provide an estimate of when they would be able to update their systems to receive, process and search sequence listings in a format similar to that defined in the new ST.26 XML standard. It would also ask receiving Offices whether they would need to make any changes to their systems for receiving, processing and forwarding sequence listings to support the new format.

16. *The Working Group is invited:*

- (i) to comment on issues set out in this document, including on the proposed way forward set out in paragraphs 13 to 15, above; and*
- (ii) to comment on whether there are any other issues which would need to be taken into account to make a successful transition from the use of WIPO Standard ST.25 to a new XML-based standard for sequence listings in both the international and national phases of the PCT.*

[End of document]