

# WIPO



IPC/CE/33/8  
ORIGINAL: English  
DATE: August 22, 2003

**WORLD INTELLECTUAL PROPERTY ORGANIZATION**  
GENEVA

**SPECIAL UNION FOR THE INTERNATIONAL PATENT CLASSIFICATION  
(IPC UNION)**

## **COMMITTEE OF EXPERTS**

**Thirty-Third Session  
Geneva, October 2 to 10, 2003**

### **IMPLEMENTATION OF THE RESULTS OF IPC REFORM**

*Document prepared by the Secretariat*

1. The IPC Reform Implementation Plan (see Annex X to document IPC/CE/32/12) includes several tasks relating to the implementation of the results of IPC reform in the Classification itself. These tasks are carried out by the IPC Revision Working Group. At its ninth session, held in June 2003 (see document IPC/WG/9/8), the Working Group completed consideration of two tasks on its program entitled “Introduction of Illustrating Structural Chemical Formulae in the Electronic Layer of the IPC” and “Checking of Notes and References in the Reformed IPC.”
2. Consideration of these tasks started at the fifth session of the IPC Revision Working Group, held in June 2001 (see document IPC/WG/5/3, paragraphs 16 to 19, and 25 to 26). With respect to the first task, the work was initiated by the collection of illustrating chemical formulae kindly provided to WIPO by the Korean Intellectual Property Office (KIPO). The second task resulted from the division of the IPC into the core and the advanced levels and the need for checking notes and references in the IPC pointing from core level entries to advanced level entries.

3. The results of the work on these tasks are reflected in the reports of the seventh to ninth sessions of the IPC Revision Working Group. Annexes I and II to this document contain relevant excerpts of these reports.

*4. The Committee of Experts is invited to take note of the contents of the Annexes to this document and to make decisions as necessary.*

[Annexes follow]

## ANNEX I

## INTRODUCTION OF ILLUSTRATING CHEMICAL FORMULAE IN THE ELECTRONIC LAYER OF THE IPC

Excerpt from document IPC/WG/7/7

“32. The Working Group noted the comments submitted by its members on the collection of illustrating chemical formulae provided by the Korean Intellectual Property Office (KIPO) and expressed its thanks to the industrial property offices participating in this project for the huge work done in reviewing the collection containing more than 5,000 formulae. The Working Group underlined that introduction of illustrating chemical formulae in the IPC would be beneficial not only for industrial property offices but also for the general public by facilitating access to the IPC for non-experts in chemistry.

“33. The Working Group noted that, in a significant number of formulae, estimated as from 30 to 50 percent of the whole set, a commenting office had indicated some clerical errors in the initial collection, such as missing chemical bonds or atoms, or had proposed other formulae as better illustrating classification entries in question.

“34. In discussing possible ways of completing the project, the Working Group considered a proposal submitted by Germany (see the Annex to document IPC/WG/7/5) to appoint an office-rapporteur for each area of the IPC where illustrating chemical formulae were available. The Working Group agreed that such a procedure, representing a simplified IPC revision procedure, would be sufficient for obtaining a collection of chemical formulae of high quality.

“35. The Working Group indicated that the task of the Rapporteur should be to review those parts of the collection of formulae where a commenting office indicated clerical errors in the formulae or disagreed with KIPO with regard to an example which should illustrate the IPC group and proposed another example. The Rapporteur should select the most appropriate example from those available.

“36. The Working Group designated offices-rapporteurs for each subclass included in the collection as shown in Annex J to this report.

“37. With regard to the presentation of illustrating chemical formulae, the Working Group came to the following conclusions on the basis of the experience accumulated in the project:

“(a) illustrating chemical formulae should serve only as examples of subject matter classified in IPC entries; general formulae could be given in exceptional cases. The user’s attention should be drawn to this function of illustrating chemical formulae;

“(b) the number of examples should be limited and one or two examples should normally be given for each IPC group;

“(c) for facilitating understanding of the examples, simple formulae should be used; 3-dimensional formulae could be included where necessary;

“(d) with respect to substituents, their structural presentation should be used as far as possible, and not their chemical names or trivial names;

“(e) formulae with the numbering of ring atoms in cyclic compounds should be included in main groups of the IPC when the numbering is used in the text of the groups;

“(f) when there is doubt as to which part of subject matter of the IPC group, covering, for example, a chemical process, an illustrating formula relates, additional indications should be made.

“38. The Secretariat informed the Working Group that the comments submitted in the framework of this project are collected on the IBIS site at the following address: “<http://www.wipo.int/IBIS/temp/chem-2002-jun/>”, and that offices-rapporteurs were allowed to use any format for the presentation of chemical formulae but ISIS Draw and Chemsketch formats were preferable. Chemical images could be embedded in the Word-format document. The Secretariat also informed that standardization of the presentation of chemical formulae in the IPC could be later carried out under the CLAIMS project.

“39. Offices-rapporteurs were invited to send their reports to the IPC revision list server and to include in the subject line of the e-mail message the string “chemical formulae” and the subclass covered, for easy selection of messages relating to illustrating chemical formulae. The Secretariat informed of the availability of the IPC Webforum (<http://webforum.wipo.int/ipc>) for informal discussions of IPC-related matters and encouraged the members of the Working Group to use the Webforum for exchanging views on the selection of appropriate chemical formulae under this project.

“40. Finally, the Working Group requested the offices-rapporteurs to submit their reports by November 1, 2002, for discussion of the results of the project at its next session.”

Excerpt from document IPC/WG/8/8

“59. The Working Group noted the current status of the project relating to the introduction of illustrating chemical formulae in the electronic layer of the IPC, as shown in document IPC/WG/8/6 and Annex thereto. The Working Group realized that for many chemical areas of the IPC additional comments on rapporteur reports had been submitted by participating offices.

“60. Having noted that a very large amount of material had been submitted in the course of the project by participating offices in the form of comments and rapporteur reports and the significant work that the review of the material would require, the Working Group considered possible ways for completing the project in a practical manner. The Working Group agreed that a simplified procedure elaborated at the seventh session of the Working Group (see document IPC/WG/7/7, paragraphs 34 and 35) would be sufficient for the successful completion of the project.

“61. The Working Group instructed the offices-rapporteurs responsible for various chemical areas to review corresponding parts of the original collection of chemical formulae provided by the Korean Intellectual Property Office (KIPO) and all the comments and proposals made in relation to those parts, and to select the most appropriate formulae from those available. The distribution of work relating to chemical illustrating formulae and the material available are shown in Annex J to this report.

“62. The participating offices were requested to avoid submitting further comments on the collection of chemical formulae, except when absolutely necessary, for example, when evident errors were discovered.

“63. The Secretariat informed the Working Group that, in order to provide support to the work of the offices-rapporteurs, the International Bureau would prepare and publish on the IBIS Web site, by January 15, 2003, consolidated information in tabular form, showing, for each chemical area involved, formulae originally provided by KIPO for each IPC group and all corrected or newly proposed formulae submitted by the participating offices at different stages of the project. Those consolidated tables should be used by the offices-rapporteurs in making a final decision with regard to the formulae to be selected.

“64. The offices-rapporteurs were invited to submit their proposals by May 1, 2003, so as to allow the Working Group, at its next session, to select the parts of the collection of chemical formulae which were ready for introduction in the IPC.

“65. The Working Group reviewed the rules for the presentation of chemical formulae, compiled at its seventh session (see document IPC/WG/7/7, paragraph 37) and agreed on certain changes to those rules based on the experience accumulated. The updated rules for the presentation of chemical formulae are given in Annex K to this report.

“66. The offices-rapporteurs were reminded that it was allowed to use any chemical drawing program for the preparation of the structural formulae, that the formulae should be presented in structural format and that other image formats should be avoided.

“67. The Secretariat informed the Working Group that standardization of the presentation of chemical formulae in the IPC would be later carried out under the CLAIMS project. Since some textual information could be included with certain formulae, the International Bureau was requested to provide the possibility of displaying this information in the IPC separate from the formula.

“68. The Working Group agreed that currently the scope of the project should be limited to the original collection of formulae provided by KIPO, so as to obtain a comprehensive collection of formulae on time for the publication of the next edition of the IPC, although the offices-rapporteurs could propose illustrating formulae for those IPC groups where they were missing in the original collection by KIPO.

“69. Finally, the Working Group indicated that it would be desirable in the future to provide chemical illustrating formulae for more IPC groups where it was felt necessary.”

Excerpt from document IPC/WG/9/8

“56. The Working Group noted the current status of the project relating to the introduction of illustrating chemical formulae in the electronic layer of the IPC, as shown in document IPC/WG/9/5 and Annex thereto. The Working Group realized that, for all of those chemical areas of the IPC where the original collection of chemical formulae was provided by the Korean Intellectual Property Office (KIPO), final rapporteur reports had been submitted by the offices-rapporteurs, taking into account all the comments and proposals made by participating offices as well as the original collection of chemical formulae provided by KIPO.

“57. The Working Group agreed with the opinions of offices-rapporteurs that their final submissions were considered complete and were ready to be incorporated in the electronic layer of the IPC.

“58. The Secretariat informed the Working Group that the International Bureau would introduce the complete collection of those final submissions by the offices-rapporteurs to the IBIS system and would make it available on the IBIS website in Autumn 2003. Offices would be able to propose to the International Bureau any corrections or improvements to be introduced in the published collection of chemical formulae.

“59. The Working Group agreed that the project relating to the introduction of illustrating chemical formulae in the electronic layer of the IPC was completed.”

[Annex II follows]

## ANNEX II

## CHECKING OF NOTES AND REFERENCES IN THE REFORMED IPC

Excerpt from document IPC/WG/7/7

“20. The Working Group recalled its decision, taken at the sixth session of the Working Group, to carry out automatic repointing of references from core level entries to advanced level entries, by their repointing to hierarchically superior places in the core level, with the exception of references for which the intellectual correction was required. The Working Group noted that, following its request, the International Bureau had conducted automatic repointing of all references from core level entries to advanced level entries and made the results available for review on the IBIS site at the address “[www.wipo.int/IBIS/outpointers/](http://www.wipo.int/IBIS/outpointers/)”. The Working Group agreed that, for certain redirected references, some amendments of their wordings would be desirable in the future.

“21. The Working Group noted that the International Bureau had compiled a list of complex cases, including IPC hierarchical entries and notes, where intellectual consideration of the wordings or references was necessary. This list appears in Annex G to this report. The Working Group agreed on the following distribution of work relating to the list among volunteering offices:

“Sections A and C : Ireland;  
 “Sections B, D, E and F: Sweden;  
 “Sections G and H: EPO.

“22. The Working Group requested the volunteering offices to submit results of their work on the correction of notes and references by October 1, 2002. Comments on the submitted results were invited by November 1, 2002.

“23. The Working Group noted that the International Bureau, when carrying out automatic repointing of references from core level entries to advanced level entries, had identified two special types of redirected references, namely, X-type references and P-type references and compiled these references in separate tables available on the IBIS Web site. The Secretariat explained that X-type references represented the situation where the redirection resulted in an IPC entry which was identical to the source entry or was the hierarchically parent entry of the source entry, and that the P-type references represented precedence references.

“24. It was noted that some P-type references included in the table did not belong to precedence references because the string “take(s) precedence” used by the selection program could appear in the sequence of several references and that many P-type references represented at the same time X-type references.

“25. The Working Group agreed that all X-type and P-type references required careful consideration and requested its members to conduct a review of those references and to submit results of the review by October 1, 2002. Comments on the results of the review were invited by November 1, 2002.

“26. The Working Group agreed that possible solutions for X-type references would be their deletion or move of respective IPC groups between the core and the advanced levels, and for P-type references their conversion to appropriate limiting references or the moving of respective groups between the levels.”

Excerpt from document IPC/WG/8/8

“34. The Working Group considered the results of checking of complex cases of redirected references, carried out by Ireland, Sweden and the EPO (see document IPC/WG/8/5) and noted that a major part of complex cases could be solved by moving of respective entries between the core and advanced levels of the reformed IPC. The Working Group also noted that the list of complex cases, prepared by the International Bureau, was incomplete.

“35. The Secretariat informed the Working Group that, following the results of studies of the distribution of IPC groups between the core and the advanced levels in the last place rule and the first place rule areas, conducted by the EPO and the International Bureau and approved by the ad hoc IPC Reform Working Group (see document IPC/REF/8/2, paragraphs 30 to 37), the International Bureau would carry out the rearrangement of groups in those areas.

“36. Thereafter, the International Bureau would repeat the procedure of automatic repointing of references from core level entries to advanced level entries and would make the results available on the IBIS Web site in January 2003. In addition to the complete table of redirected references, tables containing special types of redirected references, namely, X-type references and P-type references (see document IPC/WG/7/7, paragraph 23) would also be presented. The Secretariat explained that the number of redirected references was expected to be smaller than the number resulting from the first application of the procedure of automatic repointing, as had been reported to the seventh session of the Working Group.

“37. The Secretariat indicated that a list of complex cases would be reconsidered and completed using comprehensive searching in the text of the IPC and that the International Bureau would propose solutions for each complex case on the basis of the recommendations made by Ireland, Sweden and the EPO (see paragraph 34, above).

“38. With regard to X-type references, the Working Group agreed that they could be retained in the core level of the IPC, with the exception of references which, after the redirection, pointed to the source entries themselves or represented, at the same time, P-type references. The Working Group agreed that the former type references should be deleted in the core level and that a solution for the latter type references could be the moving of respective entries between the core and the advanced levels or the conversion of P-type references into limiting references. The Working Group indicated that X-type references retained in the core level should have a special marking and their existence in the core level should be reflected in the Guide to the IPC.

“39. With regard to P-type references, the Working Group agreed that they could be retained in the core level. The Working Group indicated, however, that they should be carefully checked, since their retention could lead to a potential risk of distorting the scope of affected entries.

“40. The Working Group noted a potential problem with references between advanced level entries, identified by several offices, which, after the division of the IPC into the core and the advanced levels, could lead to the incompatibility of the two levels, since core level entries corresponding to advanced level entries would have a different scope than in the current IPC. The Working Group requested the International Bureau to investigate the possibility of the automatic detection of such references and to prepare a report for consideration at the next session of the Working Group.

“41. Finally, the Working Group expressed its thanks to Ireland for having done significant work on checking of all redirected references in sections A and C and invited its members to submit comments on the conclusions made by Ireland, taking into account the results of the second procedure of automatic repointing of references from core level entries to advanced level entries.

“42. A plan of actions with respect to checking of notes and references in the reformed IPC, approved by the Working Group, appears in Annex H to this report.”

Excerpt from document IPC/WG/9/8

“21. Discussions were based on document IPC/WG/9/3 containing, in its Annex I, the initial proposal by the International Bureau, the comments submitted and the rapporteur report concerning complex cases of outpointers and X, P-type outpointers.

“22. The Working Group approved the rapporteur’s proposal, with some amendments, which appears in Annex H to this report.

“23. With regard to Annex III to document IPC/WG/9/3, containing a proposal for simplification of the core level of subclass G02F submitted by the EPO, the Working Group approved the new distribution of core level groups in that subclass as proposed. This distribution is included in the said Annex H.

“24. Having considered and reviewed the decisions made by the Working Group during this session, as well at the previous session and the status of the project concerning checking of notes and references, the Working Group agreed that most of the problems relating to typical references and notes from the core to the advanced level, such as X-type references, P-type references, X, P-type references and complex cases of redirected references and notes, had already been solved (see document IPC/WG/8/8, paragraphs 34 to 42, and paragraph 22 above). The Working Group requested the International Bureau to implement the approved rearrangement of core and advanced level groups and introduce minor amendments of references and notes into the IPC based on the decisions made and make it available on the IBIS website by the end of 2003.

“25. Bearing in mind the short time available for the completion of the project until the publication of the next edition of the IPC, the Working Group authorized the International Bureau to make any further minor adjustments if necessary, that is rearrangement of groups between the core and advanced levels or modifications of wordings of notes and references, in order to achieve compatibility of the two levels. The Working Group also authorized the International Bureau to make such adjustments and modifications, if necessary, available directly on the IBIS website and agreed that they should be considered as minor amendments to the IPC.

“26. Discussing a study provided by the International Bureau (see Suppl.1 to document IPC/WG/9/3), the Working Group noted problems related to limiting references in entries of the advanced level of the IPC. Whenever such a limiting reference refers out subject matter to a place in the IPC which is not located in the same hierarchical branch as the place where the reference occurs, this also affects the scope of the corresponding core level entry.

“27. The Working Group also noted that due to the limited population of the advanced level entries, only a small percentage of documents to be classified in the core level would eventually be affected. The Working Group however agreed that, in order to provide assistance for precise classification at the core level, it would be necessary to inform the user of the core level about the potential limitation of the scope of a core level entry resulting from references in its advanced level subgroups.

“28. While an automatic algorithm could identify all possibly affected advanced level entries, it was agreed that considerable effort by experts would be required to judge which of these references are limiting and how the relevant limiting references should be taken into account in the core level entries. An estimated total of 7200 individual references would have to be considered.

“29. In view of this high workload the Working Group concluded that for the eighth edition of the IPC (IPC-2005) a limited solution only could be envisaged warning the user about a potential problem in the respective places and requested the International Bureau to prepare a proposal indicating possible solutions by August 1, 2003.

“30. The Secretariat informed the Working Group that an automatic sorting, locating and listing algorithm according to Annex III of Suppl.1 to document IPC/WG/9/3 had already been implemented and preliminarily tested under the CLAIMS project. The Working Group requested the International Bureau to make the final results of this procedure, in the form of a list of potentially affected core level entries, available on the IBIS website as soon as possible for further consideration by the Working Group during its next session.

“31. The Working Group finally agreed that the problem of references in the advanced level of the IPC should be reconsidered in the course of the next IPC revision period with the objective of finding a more comprehensive solution.”