

## **Special Union for the International Patent Classification (IPC Union) Committee of Experts**

**Fifty-Fourth Session  
Geneva, February 22 and 23, 2023**

### **REPORT**

*adopted by the Committee of Experts*

### **INTRODUCTION**

1. The Committee of Experts of the IPC Union (hereinafter referred to as “the Committee”) held its fifty-fourth session in Geneva in hybrid format on February 22 and 23, 2023. The following members of the Committee were represented at the session: Argentina, Australia, Austria, Brazil, Bulgaria, Canada, China, Croatia, Czech Republic, Democratic People’s Republic of Korea, Denmark, Egypt, Estonia, Finland, France, Germany, Ireland, Israel, Japan, Kyrgyzstan, Mexico, Netherlands, Norway, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Saudi Arabia, Serbia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, United States of America (37). Singapore, the Eurasian Patent Organization (EAPO), the European Patent Office (EPO) and the European Law Students’ Association (ELSA International) were also represented. The list of participants appears as Annex I to this report.

2. The session was opened by Mr. Ken-Ichiro Natsume, Assistant Director General, who welcomed the participants.

## OFFICERS

3. The Committee unanimously elected Mr. Anders Bruun (Sweden) as Chair and Ms. Magalie Mathon (France) and Mr. Christopher Kim (United States of America) as Vice-Chairs.
4. Ms. XU Ning (WIPO) acted as Secretary of the session.

## ADOPTION OF THE AGENDA

5. The Committee unanimously adopted the revised agenda, which appears as Annex II to this report.
6. As decided by the Governing Bodies of WIPO at their tenth series of meetings held from September 24 to October 2, 1979 (see document AB/X/32, paragraphs 51 and 52), the report of this session reflects only the conclusions of the Committee (decisions, recommendations, opinions, etc.) and does not, in particular, reflect the statements made by any participant, except where a reservation in relation to any specific conclusion of the Committee was expressed or repeated after the conclusion was reached.

## MODIFICATION OF THE RULES OF PROCEDURE OF THE COMMITTEE OF EXPERTS

7. Discussions were based on a proposal by the International Bureau in Annex 3 to project file [CE 549](#), concerning modifications to the Rules of Procedure of the Committee (Rules of Procedure).
8. The Committee noted that Rule 9 (2) of the General Rules of Procedure of WIPO had been amended by shifting the officers' terms of office from the beginning of the session immediately after their election to the final meeting of the session during which they are elected. However, building upon the experience with the electoral cycle for officers of the IPC Committee of Experts, its subcommittees and working groups, it was proposed to keep the current practice for the IPC-related bodies, i.e. the officers' terms of office would begin immediately after their election.
9. The Committee further noted that the proposed modifications to the Rule 7 (1-3) related to further clarification of the electoral cycle of officers. In addition, certain modifications were also proposed to the Rules of Procedure for the purpose of alignment of terminology to the WIPO General Rules of Procedures, which do not alter the substance of the rules themselves.
10. The Committee adopted the modified Rules of Procedure as proposed in Annex 3 to project file [CE 549](#) and as shown in Annexes 3 and 4 to project file [CE 000](#).
11. The Committee further decided to mandate the changes to take immediate effect from next meeting of the session.

## REPORT ON THE PROGRESS OF THE IPC REVISION PROGRAM

12. The Committee noted a status report in Annex 20 to project file [CE 462](#) prepared by the International Bureau concerning activities of the IPC Revision Working Group (hereinafter referred to as "the Working Group"), in particular on the IPC Revision Program.
13. The Committee noted that the total number of revision projects per year remained at the same level in recent years. The Committee also noted that the number of projects concerning new emerging technologies (NETs) had been included in this status report.

14. The Committee also noted that the total number of new entries per project type was higher in C projects than in F projects, while the major part of the new entries in C projects that entered into force in IPC 2023.01 were from the newly created class H10 which contained the approved first batch of projects promoted to the IPC from the Expert Group on Semiconductor Technology (EGST).

15. In addition to the FiveIPOffices, offices such as Brazil, Canada, Germany and the United Kingdom submitted revision requests under the framework of the updated IPC Revision Roadmap (Roadmap). The number and status of all projects within the framework of the Roadmap were included in the status report. The high number of maintenance projects represented those for the removal of non-limiting references from the scheme.

16. The Committee expressed its great satisfaction and appreciation with the work achieved by the Working Group, in particular with the improved efficiency in knowing the decreased average IPC-phase period, i.e. from the submission of IPC revision request to scheme completion in both English and French.

17. The Committee further stressed that quality was as important as quantity in terms of efficiency of the IPC revision. The Working Group was invited to take equally both respects into account in the future revision process. The Committee invited more offices to actively participate in the revision under the Roadmap, bearing in mind that the more participation in the revision, the more issues would be raised, and then the better quality would be achieved.

#### **REPORT ON THE PROGRESS OF THE CPC AND FI REVISION PROGRAMS**

18. The EPO made a joint presentation on behalf of the United States of America, on the recent developments of the CPC; Japan delivered a report on the progress and updates of FI/F Term.

19. The Committee noted that, as of January 1, 2023, almost 68.7 million patent documents were classified in the CPC, including 1.5 million NPL documents. As far as the revision was concerned, it was stressed that, for major revision, e.g. in areas of new emerging technologies (NETs), the revised scheme should first apply in the IPC in a timely manner before their integration into the CPC. The Committee was further informed about the full commitment of the EPO and the USPTO in the timely integration of the new version of the IPC into the CPC, e.g. on January 1 of the IPC official publication. The Committee expressed its gratitude to the EPO and the USPTO for their commitment in that respect.

20. The Committee was informed about the availability of an information exchange platform called "External Classification Portal" which would allow, for example, the alignment of the CPC and the IPC in a more systematic way; and very soon the platform would include a CPC Text Categorizer to assist classifiers in the CPC classification practice.

21. The Committee recalled and noted the FI revision reform, i.e. starting from 2023, each FI revision would be aligned with the IPC revision, i.e. the new FI revision would enter into force in January at the same time as the IPC publication of the new version. The Committee also noted that the alignment of the FI with the latest version of the IPC had reached 99.80% as of April 2022, and the Committee expressed its gratitude to Japan for its efforts to improve the alignment between the FI with the latest IPC.

22. The Committee was further informed about the availability of a "Green Transformation Technologies Inventory (GXTI)", published by Japan, which allowed for search of patent documents in the areas relating to Green Transformation Technologies by using the IPC.

23. The Committee reconfirmed the shared understanding that the coherency between the IPC and other Classifications was important and the efforts to enhance and maintain such coherency should be continued, and in particular in the areas of NETs.

#### **REPORT OF THE EXPERT GROUP ON SEMICONDUCTOR TECHNOLOGY (EGST)**

24. The Committee noted a status report made by the EPO, the leading office of the EGST.

25. The Committee was informed that the first batch of projects emanating from the EGST, which contained three new subclasses under the new class H10, i.e. H10B, H10K and H10N, had been approved and entered into force in the IPC 2023.01. Furthermore, the new class and its subclasses had also been made available in the CPC and FI.

26. The Committee also noted that the second batch of three C projects, namely, [C 514](#), [C 515](#) and [C 516](#), was launched under the IPC e-forum in October 2022, targeting for IPC 2024.01. Two more subclasses were already in the pipeline as candidate C projects of the third batch before end of 2023.

27. The Committee expressed its deep and sincere appreciation to all the EGST members, and in particular to the EPO, the leading office of the EGST, for the considerable outcome achieved up to now.

28. The Committee decided to endorse the latest EGST Roadmap in Annex 382 of project [CE 481](#) and on the continuation of the project, as well as on the EGST activities.

29. The Committee also encouraged in-person participation in the future EGST meetings in view of the complexity of the subject matter and in-depth technical discussions foreseen.

#### **AMENDMENTS TO THE *GUIDE TO THE IPC* AND OTHER BASIC IPC DOCUMENTS**

30. Discussions were based on project file [CE 531](#), concerning the addition of a new paragraph for secondary scheme in the *Guide to the IPC* (hereinafter referred to as the "*Guide*"), and in particular a rapporteur proposal submitted by the EPO in Annex 2, and comments in Annexes 3 to 6, submitted respectively by the Russian Federation, the Republic of Korea, Sweden and China. The Committee adopted, with some modifications, the amendments in Annex 2 of the project file, which were also compiled in Annex 75 to project file [CE 454](#), together with other amendments (see paragraphs 31 and 32, below).

31. The Committee invited the Working Group to review and harmonize the notes in the secondary classification places throughout the IPC and decided to create project [M 831](#) with the EPO as Rapporteur for that purpose.

32. Discussions were also based on Annex 75 to project file [CE 454](#) containing a compilation of proposed amendments with comments to the Guide, in particular in Annexes 69 to 74, 76 and 77 to the project file, submitted respectively by the Russian Federation, the International Bureau, Ireland, the EPO, the United Kingdom and the Republic of Korea.

33. The Committee adopted, with some modifications, the amendments to the heading on the first page, paragraphs 19, 20, 21, 22, 28, 42, 72, 74bis, 92bis, the header of Chapter IX, 107bis (new), 156, 182bis (new), 183 and 187 of the Guide, which appear in Annexes 78 and 79 to the project file. These amendments would be included in version 2023 of the Guide.

34. Discussions were also based on Annex 90 to project file [CE 455](#), containing a compilation of proposed amendments with comments to the Guidelines for Revision of the IPC (hereinafter referred to as the "*Guidelines*"), submitted respectively by the EPO, the International Bureau, Sweden, Brazil and China in Annexes 85 to 89 to the project file.

35. The Committee adopted, with some modifications, the amendments to heading on the first page, paragraphs 23, 38bis (new), 61, 67, 70, 86bis, 122, 123, 126, 126bis of the Guidelines, the amendments to paragraph 1 of Appendix I, paragraph 2 of Appendix II, paragraphs 8 and 8bis of Appendix IV and the Guidelines for Drafting Classification Definitions of Appendix VI, which appear in Annexes 91 and 92 to the project file.

### **THE NEED FOR A NEW TYPE OF UNIVERSAL INDEXING/TAGGING SCHEME COVERING CROSS-CUTTING TECHNOLOGIES**

36. The Committee noted on an oral overview made by the EPO, as one of the two co-rapporteurs of project [CE 502](#). It was informed that it would not be feasible to develop a new type of universal indexing or tagging scheme covering cross-cutting technologies, building upon their experience with the Y section of the CPC.

37. The Committee also noted an oral statement from China, co-rapporteur of the project, proposing a new type of “Multiple Indexing Scheme” to apply for cross-cutting technologies together with proposed project approach and its revision roadmap. China was invited to post the written proposal to the project under the e-forum for further review and discussions.

38. The Committee invited the members of the Experts Group of this project to actively participate in the discussion.

### **SURVEY ON THE USE OF THE IPC IN TERMS OF CLASSIFICATION LEVELS AND OTHER ISSUES RELATED TO THE IPC WORKING LIST MANAGEMENT SOLUTION (IPCWLMS)**

39. Discussions were based a summary of the results of a survey on the use of the IPC in terms of the classification levels prepared by the International Bureau (see Annex 27 to project file [CE 492](#)).

40. In total, 24 replies were received from Member States of the IPC Union and from the EPO.

41. In summary, 23 offices that use the IPC for classifying national patent publications use the full level of the IPC, and 13 out of 24 offices reclassify national patent publications upon revision of the IPC. In nine offices, reclassification is conducted intellectually; four offices conduct a combination of the intellectual and automated reclassification depending on the technical fields.

42. It was informed that the results of the survey would be used for updating the information in the Distribution Algorithm.

43. The Committee invited the International Bureau to continue collecting replies in an appropriate way in order to obtain broader inputs from offices.

### **AI-BASED IPC RECLASSIFICATION – A POTENTIAL REPLACEMENT OF “DEFAULT TRANSFER”**

44. The Committee noted a brief information report on the AI-based reclassification service in IPCWLMS initiated by the International Bureau aiming at patent families remained to be reclassified at Stage 3 within IPCWLMS, as an alternative to the current Default Transfer (see project [CE 532](#)).

45. The initial study focused on presenting a production system to reclassify patent documents from versions 2009 to 2016, which include nearly two million families and about four million symbols for reclassification. The final capacity of the system would allow for processing versions from 2009 to 2016, which include 100 projects, at a rate of two projects per week, to be completed in less than one year.

46. The International Bureau was invited to continue collecting test results and to share the relevant documentation for comments by offices. Offices were invited to consider their active participation in testing, which would contribute to the final evaluation and validation of AI-based reclassification service for consideration and decision by the Committee at later stage.

## **OTHER ISSUES**

47. The Committee agreed to suspend project [CE 523](#) relating to “framework of technical competencies for patent classification”, in view of lack of activities.

## **REPORT ON IPC-RELATED IT SYSTEMS**

48. The International Bureau delivered a presentation of an overview of ongoing developments in the IPC-related IT systems and, in particular, on technical changes related to IPCPUB/IPCCAT, IPCRMS, IPCWLMS and WIPO Common Look and Feel.

49. The Committee noted the status of the current IPC/CPC/FI dataset published in IPCPUB. The Committee was also informed about the publication of IPC 2009.01 to 2016.01 in active mode, which allowed for both extended searching in IPCPUB and selecting symbol in IPCWLMS.

50. The Committee also noted that the legacy PDF preparation tool was discontinued in favor of a new feature in IPCPUB V.9, which allowed for producing a better PDF rendition of the IPC scheme.

51. It was further informed that IPCCAT and IPCWLMS would be retrained with patent documents reclassified in IPC 2023.01.

52. The Committee noted that the Polish, Portuguese, Serbian, Slovak and Spanish languages would be added to the IPCRMS translation assistance system.

53. The Committee agreed that project [CE 522](#) relating to “Divergence in IPC Allocations” would be suspended.

54. Discussions were based on Annex 8 to project file [CE 501](#), related to definition master files and the timing for the publication of definitions in the IPC.

55. The Committee noted an issue with language-independent illustrations for definitions in IPC master files reported by the International Bureau, and endorsed a change which would allow for language-dependent illustrations to be used in the master files.

56. The International Bureau was invited to prepare a proposal of new master files to be approved by the Committee electronically before early publication of the next version of the IPC.

57. The Committee confirmed the two official publication dates for IPC definitions, i.e. on July 1 and January 1, which would allow for the definitions approved in the fall session of the Working Group to be integrated into the official publication of the IPC on January 1 of the following year.

## **EXPERIENCE FROM OFFICES ON COMPUTER-ASSISTED (E.G., AI-BASED) CLASSIFICATION**

58. The Committee noted presentations on the experience with computer-assisted (e.g. AI-based) classification at respective offices given by the following offices: the EPO, France, Japan and the United Kingdom.

59. The Committee noted that, in addition to the use of the tools for patent classification and examination management, e.g. routing patent applications to the relevant examination divisions, most of offices had advanced the development of their tools in the use of prior art search, in assisting patent classifiers and examiners in their daily work, and furthermore, in supporting reclassification.

60. In thanking the above-mentioned four offices for sharing their experience in the development of computer-assisted classification tools, the Committee acknowledged the importance of the exchange of information in this field and invited more offices to share their experience with the development of in-house with computer-assisted classification tools at its next session. It was informed that all the presentation materials, including the past ones, are made available on the IPC e-forum under project [CE 524](#).

## **CLOSING OF THE SESSION**

61. The Chair closed the session.

*62. This report was unanimously adopted by the Committee of Experts by electronic means on March 20, 2023.*

[Annexes follow]