WIPO

WORLD
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ORGANIZATION

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

Fifty-Fifth Session
Geneva, March 11 to 13, 2024

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-fifth session in Geneva in hybrid format from March 11 to 13, 2024. The following members of the Committee were represented at the session: Australia, Austria, Belarus, Brazil, Canada, China, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Israel, Italy, Japan, Kazakhstan, Kingdom of the Netherlands, Mexico, Norway, Peru, Portugal, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Saudi Arabia, Spain, Sweden, Switzerland, Ukraine, United Arab Emirates, United Kingdom, United States of America (35). 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. There were 33 onsite participants at the session.

2.   The session was opened by Mr. K. Fushimi, Director, International Classifications and Standards Division, Infrastructure and Platforms Sector, the World Intellectual Property Organization (WIPO), who welcomed the participants.

OFFICERS

3.   The Committee unanimously elected Mr. Fergal Brady (Ireland) as Chair and re-elected 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.

REPORT ON THE TWENTY-SIXTH SESSION OF THE IP5 WG1-WORKING GROUP ON CLASSIFICATION

7.   The Committee noted an oral report by the United States of America on behalf of the FiveIPOffices (hereinafter referred to as "the IP5 Offices"), on the twenty-sixth session of the IP5 Working Group on Classification (IP5 WG1).

8.   It was highlighted that the twenty-sixth session of the IP5 WG1 was the first physical meeting since the Covid pandemic with hybrid component for possible participation remotely.

9.   The IP5 Offices agreed to promote three IP5 projects (F projects) to the IPC phase, all of which were from the IPC Revision Roadmap (hereinafter referred to as "Roadmap") candidate areas. One more F project might be promoted to the IPC phase upon electronic approval among IP5 Offices. The IP5 Offices also agreed to promote six P proposals to the IP5 F-phase.

10.   It was noted that the USPTO, on behalf of the IP5 Offices, had posted to the IPC e-forum under project CE 456, the updated lists of all ongoing IP5 projects and proposals (see Annex 46 to project file) to avoid overlapping between the IPC revision requests and the IP5 ongoing revision activities.

11.   The IP5 WG 1 discussed how to identify and catalogue New Emerging Technologies (NET), as well as establish processes for maintaining the NET catalogue. The IP5 WG1 would further consider integration of the NET catalogue with the Roadmap in the future.

12.   The IP5 Offices and WIPO also shared their experiences on AI-assisted pre-classification, classification and reclassification.

REPORT ON THE PROGRESS OF THE IPC REVISION PROGRAM

13.   The Committee noted a comprehensive status report in Annex 23 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.

14.   The Committee noted that the total number of revision projects per year has remained consistent in recent years. Notably, the report included information on projects related to the Roadmap and new emerging technologies (NETs), showing the IPC's adaptability to evolving technological landscapes.

15.   In addition to the IP5 Offices, offices such as Brazil and Canada submitted revision requests under the framework of the updated Roadmap. The number and status of all projects within the framework of the Roadmap and/or related to NETs were included in the status report.

16.   The Committee expressed its great satisfaction and appreciation with the Working Group's efficiency, particularly evident in the average IPC-phase period, and invited the Working Group to seek a solution for dealing with the removal of non-limiting references from the scheme in a reasonable period, with regard to the ongoing revision projects.

17.   Recognizing the importance of maintaining high quality alongside quantity, the Committee prompted the Working Group to take into account both aspects in future revision activities. 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 the quality would be achieved.

18.   The Committee noted the intention of the International Bureau, to resume regular submitting of the report on IPC reclassification as from the next meeting of the Committee.

REPORT OF THE EXPERT GROUP ON SEMICONDUCTOR TECHNOLOGY (EGST)

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

20.   The Committee was informed that 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. Three more projects namely, C 514, C 515, and C 516, containing three new subclasses H10D, H10F and H10H, were under discussion on the IPC e-forum targeting for IPC 2025.01. Two more subclasses, i.e. H10P and H10W, were in progress under the envelope of project CE 481, which were already in the pipeline as candidate C projects.

21.   It was noted that during the ninth session of the EGST that took place in INPI (Brazil), the EGST discussed all pending issues concerning subclasses H10P and H10W, as well as issues with ongoing C-projects C 514, C 515, and C 516 relating to subclasses H10D, H10F and H10H.

22.   The Committee joined the EGST in thanking Brazil for hosting the ninth session of the EGST.

23.   The Committee noted that the next EGST meeting would be held in Geneva in the week before the fifty-first session of the Working Group and noted that the EGST intended to publish all the EGST projects by IPC 2026.01.

24.   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.

25.   The Committee encouraged in-person participation in the next EGST meeting in view of the complexity of the subject matter and in-depth technical discussions foreseen; meanwhile electronic discussion between the physical meetings should also be enhanced in order to achieve the target of complete introduction into IPC 2026.01.

REPORT ON THE PROGRESS OF THE CPC AND FI REVISION PROGRAMS

26.   The EPO and the United States of America made a joint presentation on the recent updates of the CPC; Japan delivered a report on the recent progress and developments of FI/F-term.

27.   The Committee noted that, as of January 1, 2024, almost 72.8 million patent documents were classified in the CPC, including 1.5 million NPL documents. The Committee was further informed about the integration of the IPC 2024.01 into the January 1, 2024-release of the CPC, for the first time. The Committee expressed its gratitude to the EPO and the USPTO for their efforts and their commitment in that respect for the future.

28.   The Committee also noted the reclassification efforts at the EPO and USPTO targeting completion within one year after the publication date of the respective CPC releases.

29.   The Committee was informed that the FI/F-term were revised on a yearly basis since 2023, which allowed the publication of the FI revision and the IPC new versions at the same time, i.e., on January 1; the FI revision in 2024.01 covered 287 main groups while F-term revision related to 18 themes in 2023. The Committee noted that, since July 2023, the FI/F-term had been made available in WIPO Patentscope Database for searching for national Japanese collections.

30.   The Committee further noted a quantitative analysis by the JPO on FI/F-term in terms of "ratio of unique FI (RUFI)"; the higher the ratio is in a specific technical area, the more usefulness to use FI to search for JP documents in the area. The Committee expressed its gratitude to the JPO for its efforts to improve the alignment between the FI with the latest IPC, while addressing the differences between the two classification schemes in search for Japanese documents.

31.   The Committee reconfirmed the shared understanding that the coherency between the IPC and IPC-based classification schemes was important and the efforts to enhance and maintain such coherency should be continued, and, in particular, in NET-related areas.

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

32.   Discussions were based Annex 94 to project file CE 454, containing a compilation of proposed amendments, with comments, to the *Guide to the IPC* (hereinafter referred to as the "Guide"), in particular in Annexes 84 to 90 and 92, 93 to the project file, submitted respectively by the International Bureau, the Russian Federation, Germany, Republic of Korea, the EPO, Japan and China.

33.   The Committee adopted, with some modifications, the amendments to the heading on the first page and to paragraphs 3, 13(d), 15(a), 39, 40, 41, 50, 66, 85(a), 85(b), 98, 100, 107bis, 174, 183 and 187 of the Guide, which appear in Annex 95 and 96 to the project file. These amendments will be included in version 2024 of the Guide.

34.   Discussions were based Annex 99 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 International Bureau, the EPO, Israel, China and Japan in Annexes 94 to 96 and 98, as well as in the remark to the project file.

35.   The Committee adopted, with some modifications, the amendments to the heading on the first page and to paragraphs 27bis, 28, 37bis, 51, 67bis, 69, 73, 76, 82, 109bis and 110, the amendments to the French version of paragraph 7(a) of Appendix I, paragraph 7 of Appendix II and Appendix VI, which appear in Annexes 100 and 101 to the project file.

INTEGRATION OF NEW EMERGING TECHNOLOGIES (NET) INTO THE CANDIDATE AREAS FOR REVISION UNDER THE IPC REVISION ROADMAP

36.   Discussions were based on a proposal by the International Bureau in Annex 3 to project file CE 559, concerning the integration of NET-related areas into the IPC candidates for revision under the IPC Revision Roadmap.

37.   The Committee noted a common understanding shared among offices that future revision in NET-related areas should be considered as equally important to the revision in the areas under the current Roadmap. The Committee agreed, in general, with the concept of the proposal by the International Bureau with respect to the promotion of transparency and visibility of the NETs in the context of Roadmap. Consequently, this would help visualize the revision activities by the Working Group in the NET-related areas.

38.   The Committee also noted concerns expressed by certain offices about the possible mis-categorization of NETs in the absence of an objective criteria for their identification. The Committee decided to create a new project CE 551, with the International Bureau as Rapporteur, to further discuss the proposal by the International Bureau on the integration of the NETs into the Roadmap and to consider potential objective criteria for identification of the NETs.

39.   The Committee confirmed that the current revision practice for NETs should continue to be implemented and applied when submitting new revision requests by using IPC revision template. The International Bureau would take necessary steps to make those requests or projects visible on the IPC e-forum.

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

40.   Discussions were based on Annex 12 to project file CE 502, containing a proposal by China.

41.   The Committee noted that the proposal focused on how to better present the classification symbols in the IPC that could not be listed first when assigned to patent documents. China would propose to present those IPC symbols in the unified format, e.g., in using expressions such as "schemes for supplementary classification".

42.   The Committee noted the concerns from offices about the considerable potential changes to the current IPC practice, since the indexing schemes and schemes for secondary classification, as well as multiple classification, have been applied in the IPC classification practice for many years. The proposed changes would also have potential impact on IT systems in offices.

43.   The Committee acknowledged the efforts by China on the initiative, which could serve as a good basis or starting point for attracting further brainstorming ideas. The Committee decided to create a new project CE 552, with China as Rapporteur, to further discuss on the representation of supplementary classification in the IPC.

44.   In view of the change to the scope of the new project from the existing project CE 502, where the EPO and China acted co-Rapporteurs, the Committee decided to consider project CE 502 completed.

AI-BASED IPC RECLASSIFICATION – A POTENTIAL REPLACEMENT OF "DEFAULT TRANSFER"

45.   Luminess, the contractor selected by WIPO for the implementation IPC Working Lists Management Solution (IPCWLMS), delivered a presentation on AI-based reclassification solutions in IPCWLMS.

46.   The Committee took note of the presentation covering the history, objectives and constraints, AI principles, training data, evaluation and possible improvements. The International Bureau explained that the solutions were based on adapting the existing IPCCAT service to reclassification and the intended scope of the project was to provide for an alternative solution to default transfer at Stage 3 of the IPC reclassification cycle.

47.   The International Bureau was invited to continue collecting test results and to share the relevant documentation for comments by offices under project CE 532. 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 a later stage.

OTHER ISSUES

48.   The Committee took note that the proposal by the International Bureau in Annex 3 to project CE 559 has been discussed under the agenda "Integration of NETs into the IPC Candidate Areas under the IPC Revision Roadmap" (see paragraphs 36 to 39 above).

REPORT ON IPC-RELATED IT SYSTEMS

49.   The International Bureau delivered a presentation and a demonstration of the IPC Revision Management Solution (IPCRMS) and its services for Rapporteurs and Translators of IPC revision projects, as well as explanations on how IPCRMS could be used to follow the IPC Revision at various stages, such as before making each IPC version publicly available as its early publication or before its entering into force.

50.   The International Bureau described possible scenarios for tracking the revision and maintenance of the IPC scheme, the Revision Concordance List (RCL), definitions and catchwords in both authentic languages, as well as in other language versions in which the IPC is available. Features of the IPCRMS facilitating preparation of IPC revision proposals as well as an integrated tool to assist their translation, i.e., WIPO Translate were also presented. Dedicated training was offered to offices to make better use of the tool in the IPC revision and maintenance program.

51.   The Committee took note of the presentation and invited offices to make best use of the tool in the IPC revision program. The Committee was informed that training or guidance on the use of the tool for preparation of IPC revision or maintenance projects would be provided by the International Bureau upon request from offices who act in various roles in the projects, such as rapporteur offices, translator offices or commenting offices.

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

52.   The Committee noted, with gratitude, presentations on the experience with computer-assisted (e.g., AI-based) classification at respective offices given by China and the EPO.

53.   The Committee noted that the use of the tools focused on diverse scenarios in patent classification, including pre-classification, classification of patent applications and reclassification of published patent documents.

54.   Notably, not all the results based on AI were presented as ideal, in which cases retraining would be necessary. It was noted that only the use for pre-classification reached the practical level and the key for other practical uses was rather how the feedback/correction by examiners could be learned and reflected by AI. The potential of AI in assisted reclassification instead of generally applicable solutions for different technology areas was discussed, e.g., in view of the absence of pre-trained commercial models that would fit patent classification. Quality checks and human validation of AI-based classification and reclassification were also discussed as an important part of machine learning which would need to perform in each individual reclassification project.

55.   The Committee acknowledged the importance of the exchange of information in this field and invited more offices to share their experience with the in-house development of 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

56.   The Chair closed the session.

57.   This report was unanimously adopted by the Committee of Experts by electronic means on April 3, 2024.

[Annexes follow]