

WIPO



IPC/CE/30/5
ORIGINAL: English
DATE: January 17, 2001

E

WORLD INTELLECTUAL PROPERTY ORGANIZATION
GENEVA

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

COMMITTEE OF EXPERTS

Thirtieth Session
Geneva, February 19 to 23, 2001

DETERMINATION OF THE MOST APPROPRIATE
CONTENTS OF THE CORE LEVEL OF THE IPC

Document prepared by the International Bureau

1. At its twenty-ninth session held in March 2000, the Committee of Experts discussed the contents that the core level of the reformed IPC should have, namely whether the core level should correspond to the classification part of the current IPC or should represent its restricted version. The Committee was not in a position to take a decision concerning the contents of the core level, in particular because it felt that it was necessary to reach consensus on this question, critical for the IPC reform process.
2. The Committee decided to entrust the ad hoc IPC Reform Working Group with the Task "Determine the most appropriate contents of the core level of the reformed IPC" and assigned this Task the highest priority (see document IPC/CE/29/11, paragraphs 20 to 28).
3. At its third session, held in May 2000, the ad hoc IPC Reform Working Group has started consideration of the Task. The Working Group noted different factors which should be taken into account in determining the most appropriate contents of the core level and agreed that the core level being a restricted version of the seventh edition of the IPC would provide higher benefits for the users in the light of those factors.

4. The Working Group considered the proposal by the European Patent Office (EPO) on establishing the restricted core level of the IPC based on an automated procedure using file size of IPC groups as a main parameter, and requested the EPO to deliver the results of the application of the proposed procedure to the whole section A of the IPC (see document IPC/REF/3/2, paragraphs 9 to 18).

5. At its fourth session, held in October/November 2000, the ad hoc IPC Reform Working Group considered the results of the study conducted by the EPO in relation to section A of the IPC and noted that the distribution of IPC groups between the core and advanced levels resulting from the applied procedure would lead to the inclusion of approximately 70% of groups of the current IPC in the core level.

6. The Working Group felt that inclusion of as much as 70% of IPC groups in the core level would not ensure the necessary stability of the core level and that further investigations, in this respect, were needed. The Working Group agreed that, in conducting further investigations, a potential size of national patent collections not belonging to the PCT minimum documentation should be taken into account and that this factor would allow applying stricter quantitative criteria in the automated analysis. The Delegation of the EPO volunteered to submit the results of the further study based on the above-mentioned criteria (see document IPC/REF/4/4, paragraphs 41 to 47).

7. The results of the new study conducted by the EPO in relation to all sections of the IPC and obtained with the use of different parameters of file size of IPC groups appear in the Annex to this document.

8. The Committee of Experts is invited to take a decision concerning the most appropriate contents of the core level of the IPC.

[Annex follows]

ANNEX/ANNEXE



**Europäisches
Patentamt**

GD1

**European
Patent Office**

DG1

**Office européen
des brevets**

DG1

Principal Directorate Documentation

HP/00.223/hp

COMMITTEE OF EXPERTS

Establishment of the restricted core level

Document prepared by the European Patent Office

1. As agreed upon during the fourth session of the ad hoc Reform Working Group the procedure, proposed in the document IPC/R 14/00 Annex 9 for the establishment of the restricted core level, should be applied in more depth by changing the parameters until a maximum of 10000 documents for the file size of the core level.
2. The results of the tests are to be available before end 2000, which should allow the members of the Committee of Experts to express their opinion on the size of the restricted core level during the meeting of this Committee in February 2001.

USE OF THE ALGORITHM

3. The algorithm used in the automated procedure has a maximum file size for the core level and a minimum file size for the advanced level. Although not discussed during the ad hoc IPC Reform Working Group sessions the EPO felt that the relation between both parameters should not be changed at least not for these series of tests.
4. In addition the EPO wanted to test in how far the main structure of the IPC could be maintained in the core level. It is obvious that as a minimum all main groups should belong to the core level regardless of their file size. Interesting is to see if the same can be said for the one dot level.

5. In annex is a table reflecting the impact of the parameters on the size of the restricted core level for the section A with two different conditions. From the tests can be deduced that it is not possible to create a reasonable restricted core level when all main and one dot groups are part of the core level.

6. If the condition is limited to the main groups the set of parameters with the maximum file size of 5000 documents gives as outcome a restricted core level of around 30 %. This figure has already been mentioned by some Offices as a tentative figure.

7. The decision to be taken covers the complete IPC and should not be based on section A only. Therefore the EPO applied the algorithm with the same set of parameters on all the sections of the IPC. The combinations of parameters used are marked as P1, P2,....P5 respectively with a maximum size starting from 500 to 10000.

8. The results for the complete IPC are only expressed in percentages to limit the size of the table. The same set of parameters gives different results per section. It brings up the question of maintaining the same set of parameters for the complete IPC or to try to have the same percentage for the core level through all the sections of the IPC.

SIZE OF THE CORE LEVEL

9. It has been felt that reasoning is needed to define the size of the core level. Reference was already made to the size of a national collection. It can be expected that an Office searching his own collection broadens it to other collections for which there is no language barrier. It means that the core level should allow to search in 1 to 2 million documents.

10. The PCT minimum documentation contains roughly 20 million filings taking into account all classes given and after removal of the corresponding documents. It corresponds with an average of 285 documents per IPC group. As the ideal size of a search group was always set on 100 to 150 documents it explains why further subdivisions were made as with FI in JPO and ECLA in the EPO.

11. By using the ideal size for national collections and applying the same multiple classification factor the core should contain between 10000 and 20000 groups. Therefore it is suggested to work with 30% as the percentage for the core level.

ALGORITHM VERSUS OTHER METHODS

12. The algorithm has been used as it is based on the size of the groups. It has already been recognised that the result needs some verification and correction in view of the last place rule. This is still time consuming and a lot of work.

13. Therefore it is proposed to use an other method for creating the core level. It uses the percentage for the core level as decided upon. This percentage is applied on the number of groups present in the subclass. It keeps all the groups with the same number of dots in the core level and due to this rule there is no problem with the last place rule.

14. As example is used A01B. With 30 % as starting point the core level could contain 63 groups from the 212. In A01B there are 35 main groups, 75 one dot, 57 two dots, 37 three dots and 8 with four dots. It means that all main groups are belonging to the core level. If the one dot groups are added we reach more than 50%.

15. A combination of the two methods could be envisaged namely use the algorithm for all subclasses where no last place rule is mentioned and apply the percentage method for the rest of the subclasses.

Annex

Condition: Main and one dot groups in the core level

Maximum size	Minimum size	Entries in Section A	Number adv. groups	% adv. groups	Number core groups	% core groups
500	100	8278	1594	19,5	6684	80,5
1000	200	8278	2075	25,4	6203	74,6
2500	500	8278	2693	33,0	5585	67,0
5000	1000	8278	3096	37,9	5182	62,1
10000	2000	8278	3380	41,4	4898	59,6

Condition: Main groups in the core level

	Max. size	Min. size	Entries in Section A	Number adv. groups	% adv. groups	Number core groups	% core groups
P1	500	100	8278	2545	31,1	5733	68,9
P2	1000	200	8278	3485	42,6	4793	57,4
P3	2500	500	8278	4781	58,5	3497	41,5
P4	5000	1000	8278	5650	69,2	2628	30,8
P5	10000	2000	8278	6247	76,5	2031	23,5

Complete IPC with main group in the core level - core level %

Param	A	B	C	D	E	F	G	H	Total
P1	68,9	65,7	68,3	60,3	69,6	63,3	73,5	74,8	68,1
P2	57,4	53,5	55,1	44,6	55,3	50,5	65,1	64,4	56,0
P3	41,5	36,6	37,1	28,1	36,2	33,8	49,8	48,2	39,2
P4	30,8	26,0	26,2	19,7	23,7	24,0	38,2	35,9	29,3
P5	23,5	18,8	18,4	15,6	17,2	18,1	27,9	24,9	20,6

[End of Annex and of document/
Fin de l'annexe et du document]