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

IPC REVISION WORKING GROUP

**Seventh Session
Geneva, June 10 to 21, 2002**

ELABORATION OF CLASSIFICATION DEFINITIONS AND SUBCLASS INDEXES

Document prepared by the Secretariat

1. At its sixth session, held in December 2001, the IPC Revision Working Group agreed that a number of issues concerning classification definitions should be clarified during the meeting of the Definition Task Force in May 2002 and requested the Task Force to report on these issues to the Working Group at its seventh session in June 2002.
2. Annex I to this document contains the summary of discussions of the Task Force on Classification Definitions, held in May 2002.
3. Annex II to this document contains "Guidelines for Drafting Subclass Definition Proposals," which were approved by the Task Force.
4. Annex III to this document contains a proposal submitted by Sweden for definition of the scope of places in the IPC and for categorization and placement of references.

[Annexes follow]

ANNEX I

MEETING OF THE TASK FORCE ON CLASSIFICATION DEFINITIONS

held at the World Intellectual Property Organization (WIPO),
from May 8 to 10, 2002

Summary of Discussions

Participants

Mr. H. Wongel (EPO), Mr. A. Okelmann (Germany), Mr. L. Mailänder (Germany),
Mrs. V. Maksimova (Russian Federation), Mr. A. Bruun (Sweden),
Mr. R. Saifer (United States of America)

International Bureau

Mr. M. Makarov, Mr. A. Farassopoulos, Mr. G. Karetka, Mrs. N. Xu

General discussion

Items under discussion:

1. Experiences of Rapporteurs on definition projects
2. Rapporteur reports-proposals of projects D 001 to D 012
3. Presentation of the definitions on the basis of the demonstration module (“mock-up”)
4. Unified layout (template) for the introduction of new proposals.

EXPERIENCES OF RAPPORTEURS ON DEFINITION PROJECTS

Discussions were based on the papers submitted by Germany, Sweden, the United States of America and the European Patent Office (EPO). Having considered the questions that were asked in paragraph 9 of document IPC/WG/6/5, the participants gave brief explanations on their experience as rapporteurs on definition projects. The Task Force agreed that Guidelines and exemplifying definition proposals together with the IPC Definition Format would be very helpful for the Rapporteurs to draft definitions. Discussions under this item were general and were further detailed under the next item on rapporteur reports—proposals of individual projects.

The Task Force clarified the following issues indicated by the IPC Revision Working Group at its sixth session:

- (a) the appropriate length of definitions so that they were user-friendly;

The appropriate length is that which is necessary to give the user complete information about the subclass or group being defined. There is an optimum length for a definition, where it is long enough to give sufficient information, but still not so long that it discourages users. This optimum length depends on the presentation. A well laid-out document can be much longer than a badly laid-out one. A paperless document can also contain a lot more information before it gets too big, since different parts can be hyperlinked. Guidelines on how to draft definitions are given in Annex II to this document.

- (b) relationship between the definitions and notes in the IPC;

The notes defining the scope of the scheme must remain in the scheme. The content of the notes necessary for the definitions will be also included in the definitions, with their wording modified, if necessary for a better understanding. During the current revision period, due to lack of time for consideration, all notes will remain in the scheme. Unnecessary notes will be removed from the scheme during the next revision period, in the framework of the systematic maintenance of the IPC. Rapporteurs on definition projects should note in a separate document their recommendations for modifications in the scheme, which clarify the scheme without any intellectual reclassification of patent documents (e.g., changing the wording of titles, division of a subclass into distinct subclasses, rearrangement of notes or references). These recommendations will be used in the framework of the systematic maintenance of the IPC.

- (c) conditions for a reference to qualify as informative, in particular for references pointing from general to application places;

After extensive discussion, it was considered that, according to the definitions of limiting and informative references, references from general to application places should be considered as limiting and appear in section 4 of the definition format (limiting references). The same applies for references from residual places to specific places which are not evident. The references of those two types will appear grouped together under a common subheading (e.g. "references to application places," "references to specific places provided for elsewhere"). Sweden offered to submit by June 5, 2002, a proposal on the coverage of different types of places (e.g. general, application, residual), the types of references between those types of places and on possible consequences on the definition format. However, the Task Force, in view of lack of enough experience, was not able to take at this meeting a decision on which of those references could remain in the future in the scheme.

- (d) whether informative references appearing in the definitions may be retained in the IPC scheme;

The Task Force decided that informative references should be removed from the scheme. Due to the workload remaining for the current revision period, the implementation of this removal will begin at the next revision period in the framework of the systematic maintenance of the IPC.

- (e) order of presentation of references, in particular of long lists of references;

As already mentioned in point (c), above, the references to “application places” and the references to “specific places” should be grouped together. Furthermore, in case of long lists of references, references covering the same subject matter should be grouped together under a common technical subheading.

The Task Force noted an important difference in the style of the wording of the definitions. It was noted that the harmonization in wording could be solved in the future by an “editorial board” taking into account the experience of the USPTO. In the meantime, it was agreed that the Secretariat was authorized to introduce editorial amendments that would not change the technical aspects of the projects. However, if these amendments were substantial, they should be introduced in agreement with the respective Rapporteur.

It was also agreed that there will be only one set of Definitions based on the advanced level of the IPC.

Considering the procedure used for the discussion of definition projects, the Task Force reminded the Rapporteurs that they may initiate a round of comments on particular issues and set intermediate deadlines. For this purpose they may use the “message part” of the e-forum and warn the Secretariat in order to modify the “project index” of the e-forum.

Following the previous discussion and the discussion on individual projects, the Task Force decided to propose some amendments to the definition format. Furthermore, the Task Force agreed on some general recommendations to the Rapporteurs for drafting definition proposals. The “Guidelines for Drafting IPC Definitions” appearing in Annex II to this document were obtained by merging these recommendations with the revised definition format.

RAPPORTEUR REPORTS-PROPOSALS OF PROJECTS D 001 TO D 012

The Task Force noted that none of the projects was formally approved using the “e-forum procedure.”

Rapporteur reports-proposals on projects D 001 to D 012 were discussed one by one in detail regarding the way of presentation of each section of the definition format, the wordings used in drafting the definitions, the borderlines between sections. The Task Force agreed that Rapporteurs should redraft their proposals using the “Guidelines for Drafting Subclass Definition Proposals” and the particular recommendations agreed on individual projects. The particular recommendations will be submitted to the e-forum. The presentation of the redrafted proposals should be based on the amended template that will be provided by the Secretariat (see below). These proposals could serve as models for the projects that were not discussed.

It was further agreed that no project would be presented for approval to the seventh session of the IPC Revision Working Group next June. Furthermore, it was agreed to set deadlines for the submission of the redrafted proposals and to postpone the deadline for submission of proposals on new Definition projects (projects D 033 to D 051).

PRESENTATION OF THE DEFINITIONS ON THE BASIS OF THE DEMONSTRATION MODULE (“MOCK-UP”)

The Secretariat made a demonstration of the “mock-up” illustrating how definitions and other information material would be presented to the user in the context of the electronic version of the IPC. During the discussions that followed the presentation, the Task Force members expressed the opinion that the synchronized version of the definition presentation was too complicated and expressed their preference for a presentation with a limited number of links from the scheme (demo 5). Furthermore, concerning the presentation of the references in the definitions, the Task Force agreed not to repeat in each reference the title of the destination subclass, but to show on demand the path view of the destination place in a “pop-up” window.

UNIFIED LAYOUT (TEMPLATE) FOR THE INTRODUCTION OF NEW PROPOSALS

The Secretariat indicated that the submitted unified layout (template) was provisional and should be replaced in the future by a Data Entry Interface (DEI). The general principles of the template were approved and the Secretariat was requested to prepare an amended version, taking into account the general recommendations for drafting and other remarks expressed during the meeting. Rapporteurs should use the new template for (re)drafting their proposals until the DEI is available.

[Annex II follows]

ANNEX II

GUIDELINES FOR DRAFTING SUBCLASS DEFINITION PROPOSALS

GENERAL RECOMMENDATIONS

The paragraphs in the different sections of the definitions should not be numbered. Numbered lists should be replaced by bulleted lists. Care should be taken in the text to avoid references to such numbered paragraphs.

Numbers should be avoided to indicate different items in a phrase. In the case of long phrases bulleted paragraphs should be used instead.

TITLE

The title is as indicated in the classification scheme but does not include any references.

The title consists of a concise and complete phrase that describes the subject matter appropriate for the classification place.

The words in the title should be those which best define the appropriate subject matter.

The title should *not* be capitalized to improve readability. Multipart titles should be presented in separate paragraphs e.g.:

Vehicle brake control systems or parts thereof;
Brake control systems or parts thereof in general.

DEFINITION STATEMENT

The definition statement is a more detailed explanation of the subject matter appropriate for the classification place.

The scope of the title and definition statement must be the same.

The definition statement may be as long as needed to give the user complete information. However long, complicated phrases should be avoided, e.g. phrases containing many of the following items at the same time: i.e., e.g., ordered lists, items between brackets.

The definition statement may use words, which are alternatives to those used in the title, in particular relevant words and phrases found in the patent documents classified in this place. However, this should be done when it is helpful for a better understanding of the content of the subclass. It should be avoided to systematically use alternative wordings, since this may confuse non-native English speaking users. If the content of notes or titles existing in the scheme is clear enough, they may even be used without any change.

The definition statement should provide a positive description of the subject matter appropriate for the classification place, rather than a negative description of the subject matter excluded from that place. It should begin with the phrase: “This subclass covers:”. The appropriate classification places for excluded subject matter are found under “Limiting References” (see below).

In the case of subclasses with a big number of main groups, or of subclasses with a multipart title covering distinct technical fields, the definition statement should reflect the structure of the subclass. When parts of the title correspond to distinct technical subject matter, then each part should be defined by a separate statement.

The definition statement may include explanatory notes and graphics which represent subject matter appropriate for the classification place. The explanatory notes clarify or address special or complex issues. The graphics, e.g. chemical formulae, drawings, are positioned where useful to aid comprehension.

RELATIONSHIPS BETWEEN LARGE SUBJECT MATTER AREAS (E.G., SUBCLASSES)

When the scope of the subclass is generally affected by its relationships with other large subject matter areas (e.g., other subclasses), those relationships are stated here.

This section includes special rules of classification between subclasses, e.g. multiple classification in two subclasses

This section should only explain relationships that cannot be expressed in the form of references. The term “see ...” is imprecise and should not be used. The text should not mention “the relevant subclass” without a list of examples.

Graphics may be used where needed.

LIMITING REFERENCES

Limiting references are needed when subject matter otherwise covered by the classification place is collected elsewhere. Limiting references must indicate where this subject matter is classified.

This section contains all the limiting references, existing or not in the scheme, with further explanation if needed. It begins with the phrase: “This subclass does not cover:”.

In this section only limiting references concerning the whole subclass or several main groups are mentioned. A reference concerning only a particular main group or subgroup appears in the corresponding section of the definitions of that particular group.

Precedence references are a type of limiting reference.

References from general (function-oriented) to application-oriented places are considered as limiting and should appear in this section. They are grouped together under the subheading “References to application places.”

References from residual subclasses (defined as such in the title of the subclass or the definition statement) to other places covering the same subject matter are also considered as limiting and should appear in this section. They are grouped together under the subheading “References to non-residual places.”

In case of big number of references or in case of references concerning distinct subject matters (e.g. in subclasses with multipart titles covering distinct technical fields), the references concerning the same subject matter should be grouped together under a common technical subheading.

The limiting references within those groupings should be listed in the alphanumeric order of the places.

The references are presented in two columns; in the left one appears the wording of the reference and in the right the place to which the reference points.

Graphics may be used where needed.

INFORMATIVE REFERENCES

An informative reference is any reference that indicates the location of subject matter that could be of interest for searching, but is not within the scope of the classification place where the reference occurs. Informative references are not part of the classification scheme itself. However they will remain in the scheme of the eighth edition of the IPC. They will then be removed in the framework of the IPC maintenance.

In this section only informative references concerning the whole subclass or several main groups are mentioned. A reference concerning only a particular main group or subgroup appears in the corresponding section of the definitions of that particular group.

This section begins with the phrase “Attention is drawn to the following places, which might be of interest for search:”.

The references are presented in two columns; in the left one appears the wording of the reference and in the right the place to which the reference points.

In case of long lists, the references are grouped together according to common subject matter, if possible, under a technical subheading.

Within each list the references are presented in alphanumeric order.

Graphics may be used where needed.

SPECIAL RULES OF CLASSIFICATION

This section contains special classification rules, which apply within the subclass, such as the last place rule or uniform precedence rule.

Special classification rules, which affect only one main group within a subclass, are stated in the definitions of that particular main group.

The rules indicated in this section are rules applying only within the subclass and not between subclasses.

Numbering of paragraphs should be avoided. Subheadings are allowed.

GLOSSARY OF TERM

This section consists of definitions for significant words or phrases found in the titles or definition statements. This is particularly useful when the terms are used in a more precise or restricted manner than their common usage. When provided, a glossary is generally only included at the subclass level.

This section begins with the phrase: “In this subclass the following terms (or expressions) are used with the meanings indicated.”

Terms found exclusively in patent documents or in technical literature, but not in the scheme or the statement, should appear in the next section.

The terms in the glossary should be preferably in singular in order to help finding them in the scheme for linking.

Graphics may be used where needed.

SYNONYMS AND KEYWORDS

This is an optional section intended to be used for establishing synonyms and keywords from terms used in the patent documents themselves or in technical literature. This will aid in formulating search queries in electronic searching in this technical field. For example, in B 60 T 8/00, the keywords “anti-lock” and “anti-skid” would be useful to a searcher.

This section may include definitions of such terms when they do not appear in the scheme.

[Annex III follows]

Swedish Patent and Registration Office

IPC Definition Task Forces

May 30th, 2002

Proposal for definition of the scope of places in the IPC and for categorisation and placement of references

Background

During the Definition Task Forces meeting the categorisation and placement of references, especially in residual places and between function-oriented and application places, was again discussed. The discussion also mentioned a possible third kind of references apart from limiting and informative references: references that prescribe classification in another place, and therefore are not merely informative, but do not remove matter from the place where they are placed, and therefore are not limiting.

The categorisation of references has to be seen in the light of the scope of different types of places - before the scope is defined, there is no way of telling whether a reference is limiting or not.

During the Definition Task Forces meeting I offered to submit a paper on the question - this is it. The main purpose of the paper is to describe the present situation in the IPC, in order to serve as a baseline for discussions. However, there are also conclusions that should be of use for the discussion on "where to classify", the future Guide and for finalising the Definition Format.

1. What is the scope of a place?

The present Guide does not give very detailed information on this. Paragraphs 43 - 48 describe the scope from a formal point of view, in view of hierarchy and notes and references. However, there is little in the way of descriptions of the scope in terms of types of "things", except for some rules on how to classify in special situations, for example for classifying categories of invention for which no place exists (paragraphs 62-68).

I would like to propose the following definition of the scope of a place, which has been "reverse-engineered" from the schemes of the present IPC and from the use of references in the schemes. When the use of references between certain types of places is inconsistent I have taken it as an indication that references between these types of places are considered redundant for classification, i.e. informative. My conclusion is that there is consensus that these types of places represent different aspects that do not conflict.

Proposal for a general definition of the scope of a place:

Disregarding hierarchy, references, notes, etc., a place covers:

- **The things defined by its title.**
- **Details, parts or accessories that are specially adapted for the things defined by its title.** (The practice for "details or parts" varies somewhat, but since "details" groups are so

frequently placed as subgroups to groups for "whole things" it must be considered to be the standard rule. Subclasses for "whole things" almost always contain main groups for "details". A further argument is that paragraph 69 of the Guide prescribes classification of details together with whole things. The practice for "accessories" varies considerably, but I believe the rule stated is the most common.)

- **Combinations of the things defined by the title with other things, with the exception stated in the second sentence of paragraph 70 of the Guide.** (The use of references to combination places is inconsistent.)

A place for things does not cover "arrangements of" things, for example the incorporation of a thing into a larger system. (Although the "arrangement of" a thing could often be considered a combination of the thing with something else, a place does not, because inventions should be classified as a whole, cover "arrangements of" the things defined by its title. The use of references to or from "arrangement of" places is inconsistent.)

What is the scope of a "general" or "function-oriented" place?

When talking about "**a thing in general**" I do so in the meaning of paragraph 53(a) of the Guide, i.e. a thing that is *"characterised by its intrinsic nature or function; the thing being either independent of a particular field of use or technically not affected if statements about the field of use are disregarded"*.

When talking about things that are "**specially adapted**" I do so in the meaning of paragraph 53(b) of the Guide, i.e. things that are *"modified or particularly constructed for the given use or purpose"*. Since paragraph 59(b) of the Guide states that the same technical subject can be classified in both a function-oriented place and an application place I follow this way of reasoning, rather than saying that we in this case have two different things. I prefer this way of looking at the situation, because it seems artificial to define a second "virtual" inventive thing in a situation where we have one thing, for example one claim or one disclosure, with two aspects.

The expression "**uniquely adapted**" is not defined in the present IPC. When talking about things that are "uniquely adapted" I do so in the meaning of the first sentence of paragraph 69 of the Guide, i.e. things that are *"only applicable to, or only of use for, one specific kind of apparatus"*. This is a much stricter definition than the definition of special adaptation, and in fact the opposite of a definition of a thing "in general".

A "general" place covers the things defined by the title:

- **When they are of general applicability in the field**
- **When they are specially adapted for a particular purpose but still of interest for general application**
- **When they are specially adapted for a particular application and no place exists for that application**

A "general" place is therefore always to some extent residual to its related application places.

A "general" place does not cover things that are uniquely adapted to a particular application. Such things are classified in place for the applications.

The use of references between general and application places is very inconsistent.

What is the scope of a residual place?

A residual place, as defined by paragraphs 33 and 34 of the Guide, only covers things that are not provided for elsewhere.

As a rule, references from residual places have been avoided during revision work. During recent revision projects it has been explicitly stated that such references are informative and should not be part of the scheme, but placed in the informative layer.

Paragraph 35 of the Guide relates to things that **are** provided for elsewhere, and therefore the situation described does not really belong under the section "residual subject matter" - and certainly not if "inclusiveness" will be the norm. Paragraph 35 rather describes a type of combination places.

Since these rules outlined above have never been explicitly stated, there are exceptions to them in several places in the IPC. However, I believe them to be a correct generalisation of the situation.

2. The definition of limiting and informative references:

In February the Committee of Experts decided the following definitions:

Informative reference:

An informative reference is a reference that indicates the location of subject matter that could be of interest for searching, but which subject matter is not within the scope of the classification place where the reference occurs.

Limiting reference:

A limiting reference is a reference associated with a classification place that:

- (a) excludes specified subject matter from the scope of this classification place, when this subject matter would otherwise fulfill all the requirements of the classification title and definition, i.e. would otherwise be covered by that place; and*
- (b) indicates the place(s) where this subject matter is classified.*

3. What is the consequence as regards the categorisation of references?

There is general consensus that references from application places to general places are always informative.

The coverage of a residual place is decided by its residual nature. If something is classifiable elsewhere, it can not be classified in a residual place. This is regardless of whether a reference exists or not. A reference in a residual place does therefore **not** "exclude subject matter from the scope of the place, when this subject matter would otherwise be covered by that place", so it does **not** fulfil the definition of a "limiting reference" given by the Committee of Experts.

References from general places to application places can also never fulfil the definition of a "limiting reference" given by the Committee of Experts, because either multiple classification is allowed, or the general place is residual. There are three situations:

- The thing to be classified is both specially adapted and of general interest. In this case the reference does not remove matter from the place where it stands.

- The thing is specially adapted and there is a specific other place. In this case the matter belongs in the application place, regardless of whether there is a reference or not.
- The thing is uniquely adapted. In this case the matter is not covered by the general place, so the reference does not remove matter from the place where it stands.

References should be added during maintenance if the construction of a scheme is in contradiction to the rules of scope stated above. An example is when a group for "Details of apparatus A" is parallel to a group for "Apparatus A" - in this case a limiting reference relating to details should be added to the group covering "apparatus A".

4. What are the consequences as regards the Definition Format?

During the task force meeting a majority of delegates were in favour of having references from residual places and references from general places to application places in the section "Limiting references". I agree that this might be desirable, since they, in contrast to purely informative references, if only indirectly, do give information that has consequences for classification. However, in view of the fact that this section would then contain other references than those that the Committee of Experts has defined as limiting there are two possibilities:

- **Change the definition of "limiting reference"**. I think this should be avoided, particularly since the adopted definition identifies an extremely important category of references.
- **Change the title of the section**. I believe this is a much better solution, since it would also enable separation of references of different types.

I propose the following modification to the format:

- Rename the section "Limiting references" to "**References giving guidance for classification**".
- Put the true limiting references in this section under a heading "**Limiting references**" with the subheading "**This place does not cover**". This would ensure that the relatively few, but crucially important, genuine limiting references would still be easy to find.
- Put references to application places in this section under a heading "**References to application places**" with the subheading "**Examples of places where specially adapted subject matter is classified**". This subheading would indicate that the list is not exhaustive.
- In residual places put all references in this section, under a heading "**Places in relation to which this place is residual**". If the place is of the "not otherwise provided for" type, the heading should be "**Examples of places in relation to which this place is residual**", since such a list can not be made exhaustive. In residual places no section for informative references will be necessary.

5. What are the consequences as regards placement of references in the schemes?

In order to limit the amount of redundant information that clutters up the schemes it has been agreed to only put references in the scheme that have a direct effect on classification.

I propose the following as a rule for placement of references in the scheme:

- Only genuine limiting references, as defined by the Committee of Experts, should be placed in the schemes. They should also be placed under the section "References giving guidance for classification" in the informative layer.
- References from general places to application places should never be placed in the schemes, but only under the section "References giving guidance for classification" in the informative layer.
- References out of residual places should never be placed in the schemes, but only under the section "References giving guidance for classification" in the informative layer.
- References from application places to general places should never be placed in the schemes, but only under the section "Informative references"

This list of rules for placement of references will be easy to follow in a consistent way, and it will cover a large majority of the references in the IPC. If the placement of references is consistently done, the user will always know where to look for a particular type of references. If the rules are consistently applied there will also never be any need for asking the question "Is this reference important enough to be placed in the scheme or not?" during revision work, so there will be no need for time-consuming discussion and judgement.

Anders Bruun

[End of Annex III and of document]