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WORLD INTELLECTUAL PROPERTY ORGANIZATION
ORGANISATION MONDIALE DE LA PROPRIÉTÉ INTELLECTUELLE
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COMMITTEE OF EXPERTS OF THE IPC UNION
COMITÉ D'EXPERTS DE L'UNION DE L'IPC

IPC REFORM PROJECT FILE/DOSSIER DE PROJET DE RÉFORME DE LA CIB

SUBJECT:	REVIEW OF THE HYBRID SYSTEMS IN THE IPC
SUJET :	RÉEXAMEN DES SYSTÈMES HYBRIDES DANS LA CIB

ANNEX/ ANNEXE	CONTENT/CONTENU		SEE/VOIR R 5/99	ORIGIN/ ORIGINE	DATE
1	Background material	Information à l'appui		IB	30.03.99
2	Comments	Commentaires		SE	13.04.99
3	Comments	Commentaires		US	15.04.99
4	Comments	Commentaires		DE	04.05.99
5	Comments	Commentaires		GB	04.05.99
6	Rapporteur report	Rapport du rapporteur		IB	10.05.99

IV. HYBRID SYSTEMS (GUIDE TO THE IPC)

74. In specific areas of the Classification, the concept of hybrid systems has been introduced in order to improve the effectiveness of the Classification (see also paragraph 87).

75. A hybrid system, forming part of t he Classification, is a system which provides for a patent document classified according to the Classification to bear (i) the classification symbols appropriate to the technical subjects disclosed in the document and (ii), associated with those symbols, indexing codes which identify elements of information about the technical subjects in addition to the information covered by one or more of the classification symbols. Such elements of information may, for example, complement the information covered by the classification symbols by indicating the essential constituents of a composition or mixture, or constituent groups of a compound, or by identifying elements or components of a process or structure; alternatively they may identify uses or applications of classified technical subjects.

76. Indexing codes consist of a subclass symbol followed by two numbers separated by a colon, for example, B 29 K 9:06. **An indexing code is, thus, similar to a classification symbol (see paragraph 18, above) but has a colon (:) instead of the oblique stroke (/).** In the Classification, the following situations occur:

(a) In some areas, separate entries are used for classification purposes and for indexing purposes. In a subclass (for example, B 62 D) which contains entries of both kinds, the indexing entries follow all of the classification entries. Some subclasses (for example, B 29 K) contain only indexing entries; these subclasses are listed in the "Contents of Section" with the indication "For indexing purposes only".

(b) In other areas, the same entries are used both for classification purposes and indexing purposes. In these areas there is no duplication of the entries, and only the classification symbols are shown. When those entries are used for indexing purposes, the oblique stroke is replaced by a colon. The entries that can be used for both purposes are indicated by a note at the beginning of each such area and, in the printed version of the Classification, by a vertical line to the left of the group numbers (see, for example, A 01 N 25/00).

77. Indexing codes can only be used in association with classification symbols. Each place in the Classification where indexing codes may be used is indicated by a note. Similarly, a note, title or heading before each indexing scheme indicates with which classification symbols those indexing codes are associated.

LINKED INDEXING CODES; UNLINKED INDEXING CODES

78. Indexing codes are presented in the following two different ways on patent documents:

(a) **Linked Indexing Codes**
With respect to certain places in the Classification, it is necessary to show with which classification symbols the indexing codes are associated, as a practical means for rendering searches more effective.
For those places, the indexing codes and the classification symbols with which they are associated are linked by being printed within round brackets. Within these brackets, the classification symbol involved is listed first, followed by the indexing codes. Separate brackets are used for each set of linked indexing codes, for example, (C 08 F 210/16, 214:06) (C 08 F 255/04, 214:06).

(b) **Unlinked Indexing Codes**
With respect to other places in the Classification, it is not necessary to show with which classification symbols the indexing codes are associated, since linkage would not be of much benefit for retrieval purposes. Therefore, those indexing codes appear alone, i.e., unlinked, for example, B 29 K 9:06.

Whether indexing codes have to be presented linked or unlinked is indicated by notes at the relevant places in the Classification. Note (4) following the title of C 04 B is an example of a note prescribing a linked presentation, and Note (1) following the title of B 29 K is an example of a note prescribing an unlinked presentation.

79. Whenever possible, the layout of the indexing schemes is hierarchical, facilitating their presentation, and the elaboration of the schemes is such that truncation of the indexing codes is feasible when carrying out database searching.

Example (part of the indexing scheme in subclass B 01 J):

101 : 00 Catalysts containing as, or in, a component thereof oxides or hydroxides of magnesium, boron, aluminium, silicon, titanium, zirconium or hafnium
101 : 10 . of magnesium
101 : 20 . of boron
101 : 30 . of aluminium (aluminosilicates 101:6 2)
101 : 32 . . Alumina
101 : 34 . . . Hydrated alumina
101 : 36 . . . Gamma-alumina

APPLICATION OF THE INDEXING CODES

80. Indexing codes are applied in a non-discretionary manner, which means that all indexing codes identifying elements of information about a technical subject already classified as such have to be allotted, avoiding thereby any judgment by the person indexing on whether or not to allot a particular indexing code, when the said elements of information are present. This principle may be departed from in very exceptional circumstances, for example, indexing of "Markush"-type formulae, when non-discretionary indexing would result in an unjustifiable number of indexing codes having to be applied.

81. Whereas in a classification scheme a hiera rchically higher group may cover subject matter classifiable in more than one of its subdivisions (see paragraph 70, above), in an indexing scheme the hierarchically higher group is only to be used in a residual manner, i.e., to record a specific feature not provided for in any of its subdivisions. When indexing two or more elements of information about a technical subject, which elements are covered by two or more indexing codes at the same level of indentation, all of those indexing codes should be allotted and not the hierarchically higher code.

Examples:

1. A catalyst comprising rhenium oxide, classified in group B 01 J 23/36, containing, as components, hydrated alumina and gamma- alumina is indexed in 101:34 and 101:36 (see paragraph 79, above).
2. A welding process for attaching flanges is described as being applicable to the manufacture of railway rails, structural beams and rail vehicle wheels.
   In this case, B 23 K 101:26 and 101:28 should be applied for rails and beams, respectively, together with B 23 K 101:00, covering rail vehicle wheels that are not specifically provided for in any of the subdivisions of B 23 K 101:00. See the following excerpt of the indexing scheme referred to.

101 : 00 Articles made by soldering, welding or cutting
101 : 02 . Honeycomb structures
101 : 04 . Tubular or hollow articles
101 : 06 . . Tubes
101 : 08 . . . finned or ribbed
101 : 10 . . Pipe-lines
101 : 12 . . Vessels
101 : 14 . . Heat exchangers
101 : 16 . Bands or sheets of indefinite length
101 : 18 . Sheet panels
101 : 20 . Tools
101 : 22 . Nets, wire fabrics or the like
101 : 24 . Frameworks
101 : 26 . Railway- or like rails
101 : 28 . Beams

V. MATTER TO BE CLASSIFIED OR INDEXED; PRESENTATION OF CLASSIFICATION SYMBOLS AND INDEXING CODES; X-NOTATIONS (GUIDE TO THE IPC)

82. The primary purpose of the Classification is, as noted in paragraph 2, above, to facilitate search. For this purpose each separate technical subject disclosed in a patent document should be classified if it is of interest for search purposes.

INVENTION INFORMATION; ADDITIONAL INFORMATION

83. Patent documents

(a) comprise "invention information", i.e., technical information as defined by the claims, with due regard given to the description and the drawings (if any). The classification symbols allotted should not be restricted to the place or places in the Classification which cover only one aspect of a technical subject identified. Due regard should also be given to further places in the Classification where other non-trivial aspects of that technical subject may need to be classified;

(b) may comprise "additional information", i.e., non-trivial technical information given in the description, which is not claimed and does not form part of the invention as such but might constitute useful information for the searcher.

REPRESENTATION OF INVENTION INFORMATION AND ADDITIONAL INFORMATION

84. The invention information is represented either by classification symbols alone or by both classification symbols and indexing codes. The additional information is represented by classification symbols, by indexing codes or by both.

85. Classification symbols from any place in the Classification, together with any indexing codes associated with those symbols, may be used for indicating additional information.

OBLIGATORY CLASSIFICATION

86. According to Article 4(3) of the Strasbourg Agreement Concerning the International Patent Classification, in classifying a patent document, the competent authorities of the countries of the Special Union shall indicate "the complete symbols of the Classification applied to the invention to which the patent document relates". This means that it is an obligation on the part of the said authorities to allot the classification symbols which represent the invention information (see paragraph 83(a), above).

NON-OBLIGATORY CLASSIFICATION; NON-OBLIGATORY INDEXING

87. In order to improve the benefits to be derived from the Classification, it is desirable* that the invention information, as defined in paragraph 83(a), above, be indexed, if possible, and that also the additional information, as defined in paragraph 83(b), above, be classified or indexed, since, upon publication of the patent document concerned, such information about the technical disclosure may be relevant, for example, for future patent applications. The indication of such information is particularly important for patent documents published at the first publication level.

PRESENTATION OF CLASSIFICATION SYMBOLS AND INDEXING CODES

88. The order of classification symbols and indexing codes is as follows:

1. Classification symbols repesenting invention information, of which the **symbol which most adequately represents the invention should be listed first.**
2. After a double oblique stroke -
   (i) classification symbols representing additional information
   (ii) linked indexing codes
   (iii) unlinked indexing codes.

If the listing of symbols or codes following the double oblique stroke commences on a new line, the double oblique stroke should be printed on that line immediately before those symbols and codes.

89. All symbols and codes are separated from each other by commas, but no comma is needed before or after the bracket used for a set of linked indexing codes. When two or more symbols or codes, relating to the same subclass, are listed consecutively, the subclass symbol is indicated only for the first symbol or code; for the following symbol(s) or code(s) only the numbers identifying the groups are indicated, separated by commas, except that for the first symbol within a bracket the subclass symbol must be repeated.

90. Examples illustrating the presentation of classification symbols and indexing codes:

1. C 08 F 210/16, 255/04 // A 61 K 47/00, C 09 J 151/06 (C 08 F 210/16, 214:06) (C 08 F 255/04, 214:06)
   These symbols and codes indicate
   – two classification symbols representing invention information, C 08 F 210/16 and C 08 F 255/04;
   – two classification symbols representing additional information, A 61 K 47/00 and C 09 J 151/06;
   – two sets of linked indexing codes, (C 08 F 210/16, 214:06) and (C 08 F 255/04, 214:06), which indicate, respectively, that the ethene-propene copolymer, besides the already indicated monomers, contains vinyl chloride, and that vinyl chloride has been polymerized on to an ethene-propene copolymer.

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* Each competent authority of the countries of the Special Union determines its general policy in regard to the use of indexing codes and their application to its patent documents since their application is not obligatory. The user should be aware that not all competent authorities currently allot indexing codes.

2. B 29 C 65/08 // B 29 K 83:00, B 29 L 23:18. These symbols and codes indicate

- one classification symbol representing invention information, B 29 C 65/08, concerning the working of plastics by joining preformed parts using ultrasonic means;
- two unlinked indexing codes, B 29 K 83:00 and B 29 L 23:18, which indicate, respectively, that the material extruded is a silicon-containing polymer and that the article formed is a pleated hose.

3. B 42 D 15/10 // B 42 D 111:00, 203:00, 213:00. These symbols and codes indicate

- one classification symbol representing invention information, B 42 D 15/10, concerning identity, credit, cheque or like information-bearing cards;
- three unlinked indexing codes, B 42 D 111:00, 203:00, 213:00, which indicate, respectively, that the card is made of paper or cardboard and that the one data feature is the picture of the user and the other is in the form of a relief or indentation.

STATISTICAL DATA PREPARED ON THE BASIS OF THE REPLIES RECEIVED IN THE SURVEY ON THE USE OF THE IPC (1998)

PART A – ASSIGNING OF IPC SYMBOLS TO PATENT DOCUMENTS PUBLISHED BY YOUR OFFICE

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4. Does your Office assign any of the following non-obligatory IPC symbols after the double oblique stroke?

– non-obligatory classification symbols:

YES: AR, AT, CH, CZ, DE, DK, EA, EG, EP, ES, FR, GB, GR, IE, IN, JP, KG, MD, NL, NO, NZ, PT, RU, SE, SI, SK (26 offices)

NO: AM, CA, CN, CU, EE, GE, LK, LT, MC, MK, MY, TJ, TR, US, YU, ZA (16 offices)

No reply: KZ, UZ (two offices)

– indexing codes:

YES: AR, AT, CH, CN, CZ, DE, DK, EA, EP, ES, FR, GB, GR, IE, JP, KZ, MD, NO, NZ, PT, RU, SE, SK (23 offices)

NO: AM, CA, CU, EE, EG, GE, IN, KG, LK, LT, MC, MK, MY, NL, SI, TJ, TR, US, YU, ZA (20 offices)

No reply: UZ (one office)

PART C – USE OF THE IPC FOR COMPUTERIZED SEARCHING

1. Are the IPC symbols used in queries to computerized databases (percentage of searches when available)?

YES: AR (100), AT (25), CA (50), CH, CN (100), CZ (80), CU (75), DE (50), DK (50), EE (100), EG, EP (15), ES (100), FR, GB (50), GE (70), GR (100), IN, JP (100), KG (100), KZ (100), MC (80), MD (90), MK (45), MY (60), NL (78), NZ (100), PT (100), RU (5), SE (80), SI (80), SK (50), TR (10), US (1), UZ (100), YU (3.2) (36 offices)

NO: AM, EA, LK, LT, NO, TJ (six offices)

No reply: IE, ZA (two offices)

– in combination with IPC indexing codes?

YES: AR, CZ, DE, DK, EP, ES, FR, GB, IN, JP, KZ, MD, NL, RU, SE, SK (16 offices)

– in combination with other indexing terms?

YES: AR, AT, DE, EP, GE, IN, NL, SK (eight offices)

– in combination with keywords (percentage of searches, when available)?

YES: AR (80), AT (100), CA (60), CH (70), CN (100), CU (75), CZ (70), DE (50), DK (50), EE (70), EG, EP (100), ES (100), FR, GB (50), GR (95), IN, JP (100), KZ (20), MC (80), MD (45), MK (45), MY (40), NL (71), NZ (90), PT (90), SE (60), SK (50), TR (50) (29 offices)

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SURVEY OF HYBRID SYSTEMS IN THE SEVENTH EDITION OF THE IPC

Part I — Separate Indexing Schemes (indicated by the preceding guide heading)

Guide before: A01D10100:	Indexing scheme associated with groups **34/00**, **42/00**, **43/00**, **57/00**, **67/00**, **69/00** and **75/00**, relating to the use of mowers. The indexing codes should be unlinked. [6]
Guide before: A01D15100:	Indexing scheme associated with groups **42/00** to **45/00**, relating to the type of cutting apparatus used. The indexing codes should be unlinked. [7]
Guide before: A61B10100:	Indexing scheme associated with groups **18/08**, **18/12** and **18/18**, relating to removing hair. The indexing code should be unlinked. [7]
Guide before: A61F10100:	Indexing scheme associated with group **13/00**, relating to properties of absorbent pads. The indexing codes should be unlinked. [7]
Guide before: A61F11100:	Indexing scheme associated with groups **13/45** to **13/496**, with the exception of groups **13/471** and **13/472**, relating to the adaptation to the gender of the user. The indexing codes should be unlinked. [7]
Guide before: A61K10100:	Indexing scheme associated with group **51/00**, relating to the nature or the activity of the radioactive substance. The indexing codes should be unlinked. [6]
Guide before: A61L10100:	Indexing scheme associated with groups **2/00** to **12/00**, relating to the chemical composition of the materials used in disinfecting, sterilising or deodorising. The indexing codes should be unlinked. [7]
Guide before: A63B10100:	Indexing scheme associated with groups **21/00** to **23/00**. The indexing codes should be unlinked. [5]
Guide before: B01D10100:	Indexing scheme associated with group **24/00**. The indexing codes should be unlinked. [5]
Guide before: B01D11100:	Indexing scheme associated with group **53/34** and subgroups, relating to the reactants used for the chemical purification of waste gases. The indexing codes should be unlinked. [6]
Guide before: B01D13100:	Indexing scheme associated with groups **53/34** to **53/94**, relating to the catalysts used for the chemical purification of waste gases. The indexing codes should be unlinked. [6]
Guide before: B01D15100:	Indexing scheme associated with groups **53/00**, **53/34** to **53/73** and **53/92**, relating to the type of treatment. The indexing codes should be unlinked. [6]
Guide before: B01D17100:	Indexing scheme associated with groups **53/00** to **53/24**, **53/30** to **53/34** and **53/73** to **53/94**, relating to the components removed. The indexing codes should be unlinked. [6]
Guide before: B01J10100:	Indexing scheme associated with groups **21/00** to **31/00**, relating to components of catalyst compositions. The indexing codes should be linked. [6]
Guide before: B03D10100:	Indexing scheme associated with groups **1/001** to **1/018**, relating to the effects produced and the materials treated. The indexing codes should be unlinked. [5]
Guide before: B08B10100:	Indexing scheme associated with group **9/00**, relating to types of container cleaned. The indexing codes should be unlinked. [5]
Guide before: B09C10100:	Indexing scheme associated with groups **1/00** to **1/10**, relating to the reclamation of contaminated soil. The indexing code should be unlinked. [6]
Guide before: B21B10800:	Indexing scheme associated with groups **1/08** to **1/14**, relating to rolling work of special cross-section. The indexing codes should be unlinked. [7]
Guide before: B23K10100:	Indexing scheme associated with groups **1/00** to **31/00**, relating to articles made by soldering, welding or cutting or to materials to be soldered, welded or cut. The indexing codes should be unlinked. [5]
B29K	Indexing scheme associated with subclasses **B29B**, **B29C** or **B29D**, relating to moulding materials or to materials for reinforcements, fillers or preformed parts, e.g. inserts [4]
B29L	Indexing scheme associated with subclass **B29C**, relating to particular articles [4]

Guide before: B42D10100:	Indexing scheme associated with group **15/10**, relating to details of identity, credit, cheque or like information-bearing cards. The indexing codes should be unlinked. [6]
Guide before: B60C10100:	Indexing scheme associated with groups **11/03** to **11/13**, relating to features of the tread pattern. The indexing codes should be unlinked. [6]
Guide before: B60T10100:	Indexing scheme associated with groups **13/122** to **13/20**, relating to pressure supply arrangements. The indexing codes should be unlinked. [6]
Guide before: B62D10100:	Indexing scheme associated with group **6/00** (but excluding groups **6/02** to **6/10**) relating to driving conditions sensed and responded to. The indexing codes should be unlinked. [5]
Guide before: B62D15100:	Indexing scheme associated with group **6/00**, relating to the nature of the steering system. The indexing codes should be unlinked. [6]
Guide before: B65D10100:	Indexing scheme associated with groups **39/00** to **55/00**, relating to tamper-indicating means. The indexing code should be unlinked. [5]
Guide before: B65D11100:	Indexing scheme associated with group **81/00**, relating to the material or means used. The indexing codes should be unlinked. [6]
Guide before: C02F10100:	Indexing scheme associated with groups **1/00** to **11/00** relating to the nature of the contaminant in the water, waste water, sewage or sludge. The indexing codes should be linked. [7]
Guide before: C02F10300:	Indexing scheme associated with groups **1/00** to **11/00**, relating to the nature of the water, waste water, sewage or sludge to be treated. The indexing codes should be unlinked. [7]
Guide before: C04B10100:	Indexing scheme associated with group **35/00**, relating to high critical-temperature superconductive ceramics. The indexing code should be unlinked. [6]
Guide before: C04B10300:	Indexing scheme associated with groups **22/00** and **24/00**, relating to the function or property of the active ingredients. The indexing codes should be unlinked. [6]
Guide before: C04B11100:	Indexing scheme associated with groups **26/00** to **32/00**, relating to the function, property or use of the mortars, concrete or artificial stone. The indexing codes should be unlinked. [6]
Guide before: C07K10100:	Indexing scheme associated with groups **1/00** to **19/00**, relating to the peptide composition, structure or properties. The indexing codes should be unlinked. [6]
C07M	Indexing scheme associated with subclasses **C07B** to **C07K**, relating to specific properties of organic compounds [6]
Guide before: C08G10100:	Indexing scheme associated with group **18/00**, relating to cellular products. The indexing code should be linked. [5]
Guide before: C09K10100:	Indexing scheme associated with group **17/00**, relating to the use or the intended effect of the soil-conditioning or soil-stabilising materials. The indexing codes should be unlinked. [6]
C10N	Indexing scheme associated with subclass **C10M** [4]
C12R	Indexing scheme associated with subclasses **C12C** to **C12Q** or **C12S**, relating to micro-organisms [3]
Guide before: C22C10100:	Indexing scheme associated with groups **47/00** and **49/00**, relating to the nature of the fibrous materials contained in metal-fibrous composites. The indexing codes should be unlinked. [7]
C22K	Indexing scheme associated with subclasses **C21D**, **C22C** or **C22F**, relating to changing the physical characteristics of alloys [6]
Guide before: D06M10100:	Indexing scheme, associated with groups **11/00**, **13/00**, **15/00**, **16/00** and **23/00**, relating to the fibres to be treated. The indexing codes should be unlinked. [5]
Guide before: E01D10100:	Indexing scheme associated with groups **1/00** to **22/00**, relating to the material constitution of bridges. The indexing codes should be unlinked. [6]
Guide before: E04B10100:	Indexing scheme associated with groups **1/00** to **9/00**, relating to fire protection. The indexing code should be unlinked. [5]
Guide before: E04B10300:	Indexing scheme associated with subgroup **9/04**, relating to the material of the slabs, sheets or the like. The indexing codes should be unlinked. [5]
Guide before: F16D10100:	Indexing scheme associated with group **48/00**, relating to control inputs to clutches or clutch systems. The indexing codes should be unlinked. [6]
Guide before: F16F10100:	Indexing scheme associated with group **15/00**, relating to the arrangement of two or more gyratory masses. The indexing codes should be unlinked. [6]

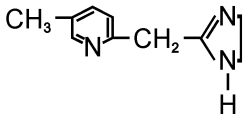
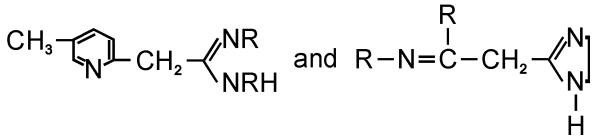
Guide before: F16H10100:	Indexing scheme associated with groups **59/00** to **63/00**, relating to types of gearing controlled and to changing the number of driven wheels. The indexing codes should be unlinked. [7]
Guide before: F16L10100:	Indexing scheme associated with groups **55/26** to **55/48**, relating to uses and applications of pigs or moles. The indexing codes should be unlinked. [6]
F21W	Indexing scheme associated with subclasses **F21L**, **F21S** and **F21V**, relating to uses or applications of lighting devices or systems [7]
F21Y	Indexing scheme associated with subclasses **F21L**, **F21S** and **F21V**, relating to the form of the light sources [7]
Guide before: F23C10100:	Indexing scheme associated with group **10/00**, relating to combustion in entrained fluidised beds. The indexing code should be unlinked. [7]
Guide before: G01B10100:	Indexing scheme associated with groups **5/00** to **21/00**, relating to the transducer types and the things being measured. The indexing codes should be unlinked [6]
Guide before: G06F10100:	Indexing scheme associated with subgroup **1/02**, relating to the type of function generated. The indexing codes should be unlinked. [5]
Guide before: G06F15100:	Indexing scheme associated with groups **17/00** and **19/00**, relating to functional or application aspects of data processing equipment. The indexing codes should be unlinked. [6]
Guide before: G10L10100:	Indexing scheme associated with groups **11/00** to **21/00**, relating to speech signal processing or feature extraction. The indexing codes should be unlinked. [7]
Guide before: H01L10100:	Indexing scheme associated with group **27/00**, relating to integrated circuits. The indexing code should be unlinked. [5]
Guide before: H01R10100:	Indexing scheme associated with group 24/00, relating to the number of poles in a two-part coupling device. The indexing codes should be unlinked. [7]
Guide before: H04N10100:	Indexing scheme associated with groups **1/00** to **17/00**, relating to still video cameras. The indexing code should be unlinked. [6]

Part II — Separate Indexing Schemes and Double-Purpose Schemes (indicated by respective notes)

Note near: A01D N1	(2) In this subclass, in groups **34/00**, **42/00**, **43/00**, **57/00**, **67/00**, **69/00** and **75/00**, it is desirable to add the indexing codes of groups **101:00** or **103:00**. The indexing codes should be unlinked. [7]
Note near: A01D N2	(3) In this subclass, in groups **42/00** to **45/00**, it is desirable to add the indexing codes of group **151:00**. The indexing codes should be unlinked. [7]
Note near: A01N02500/ N9	(10) In groups **25/00** to **65/00**, it is desirable to add the indexing codes relating to individual components of a composition. The indexing codes, which are chosen from the said groups, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be linked. [4]
Note near: A61B01800/ N0	In groups **18/08**, **18/12** and **18/18**, it is desirable to add the indexing code of group **101:00**, relating to removing hair. The indexing code should be unlinked. [7]
Note near: A61F01300/ N0	In this group, it is desirable to add the indexing codes of groups **101:00** to **105:00**. The indexing codes should be unlinked. [7]
Note near: A61F01345/ N0	In groups **13/45** to **13/496**, with the exception of groups **13/471** and **13/472**, it is desirable to add the indexing codes of groups **111:00** and **113:00**. The indexing codes should be unlinked. [7]
Note near: A61K00972/ N0	(1) In groups **31/00** to **47/00**, it is desirable to add the indexing codes relating to individual components of a composition. The indexing codes, which are chosen from the said groups, with the exception of groups **38/54** and **47/44**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be linked. [5]
Note near: A61K05100/ N0	In this group, it is desirable to add the indexing codes of groups **101:00** to **123:00**. The indexing codes should be unlinked. [6]
Note near: A61L00200/ N0	In groups **2/00** to **12/00**, it is desirable to add the indexing codes of group **101:00**. The indexing codes should be unlinked. [7]
Note near: A63B01904/ N0	In groups **21/00**, **22/00** and **23/00**, it is desirable to add the indexing codes of group **101:00** or **103:00**. The indexing codes should be unlinked. [5]
Note near: B01D02400/ N0	In this group, it is desirable to add the indexing codes of group **101:00**. The indexing codes should be unlinked. [5]
Note near: B01D05300/ N1	(2) In this group, it is desirable to add the indexing codes of groups **111:00** to **187:00**, in the manner indicated: [6]
Note near: B01J02100/ N0	In groups **21/00** to **31/00**, it is desirable to add the indexing codes of groups **101:00** to **105:00**. The indexing codes should be linked. [6]
Note near: B01J03200/ N0	(1) In groups **32/00** to **38/00**, it is desirable to add the indexing codes relating to the materials of the catalyst. The indexing codes, which are chosen from groups **21/00** to **31/00**, with the exception of groups **21/20**, **23/90** to **23/96**, **25/04**, **27/28** to **27/32**, **29/90** and **31/40**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be linked. [6]
Note near: B03D00100/ N1	(2) In groups **1/001** to **1/018**, it is desirable to add the appropriate indexing code(s) from each of groups **101:00** and **103:00**. The indexing codes should be unlinked. [5]
Note near: B08B00900/ N0	In this group, it is desirable to add the indexing codes of group **101:00**. The indexing codes should be unlinked. [5]
Note near: B09C00100/ N0	In groups **1/00** to **1/10**, it is desirable to add the indexing code of group **101:00**. The indexing code should be unlinked. [6]
Note near: B21B00108/ N0	In groups **1/08** to **1/14**, it is desirable to add the indexing codes of groups **108:00**. The indexing codes should be unlinked. [7]
Note near: B23K N3	(3) In groups **1/00** to **31/00**, it is desirable to add the indexing codes of groups **101:00** or **103:00**. The indexing codes should be unlinked. [5]

Note near: B29B N0	In this subclass, it is desirable to add the indexing codes of subclass **B 29 K**. The indexing codes should be unlinked. [4]
Note near: B29C N7	(4) In this subclass, it is desirable to add the indexing codes of subclasses **B 29 K** and L. The indexing codes should be unlinked. [4]
Note near: B29D N1	(2) In this subclass, it is desirable to add the indexing codes of subclass **B 29 K**. The indexing codes should be unlinked. [4]
Note near: B42D01510/ N0	In group **15/10**, it is desirable to add the indexing codes of groups **101:00** to **227:00**. The indexing codes should be unlinked. [5]
Note near: B60C01103/ N0	In groups **11/03** to **11/13**, it is desirable to add the indexing codes of groups **101:00** to **125:00**. The indexing codes should be unlinked. [6]
Note near: B60T01312/ N0	In groups **13/122** to **13/20**, it is desirable to add the indexing codes from groups **101:00** to **105:00**. The indexing codes should be unlinked. [6]
Note near: B62D00600/ N1	(2) In this group (but excluding groups **6/02** to **6/10**), it is desirable to add the indexing codes of groups **101:00** to **137:00**. The indexing codes should be unlinked. [5]
Note near: B62D00600/ N2	(3) In this group, it is desirable to add the indexing codes of groups **151:00** to **155:00**. The indexing codes should be unlinked. [6]
Note near: B63B N0	(1) In groups **1/00** to **11/00**, **15/00** to **19/00**, **39/00** to **43/00**, **49/00**, **59/00**, it is desirable to add the indexing code relating to individual components of surf-boards. The indexing code, which is from group **35/79**, has the same number as the classification symbol, but a colon is used instead of the oblique stroke, and should be linked. [5]
Note near: B63H N0	(1) In groups **1/00**, **5/00**, **9/00**, it is desirable to add the indexing code relating to individual components of surf-boards. The indexing code, which is from group **B 63 B 35/79**, has the same number as the classification symbol, but a colon is used instead of the oblique stroke, and should be linked. [5]
Note near: B65D03900/ N0	In groups **39/00** to **55/00**, it is desirable to add the indexing code of group **101:00**. The indexing code should be unlinked. [5]
Note near: B65D08100/ N0	In this group, it is desirable to add the indexing codes of groups **111:00** or **113:00**. The indexing codes should be unlinked. [6]
Note near: C02F N1	(2) In this subclass, it is desirable to add the indexing codes of group **101:00**. The indexing codes should be linked. [7]
Note near: C02F N2	(3) In this subclass, it is desirable to add the indexing codes of group **103:00**. The indexing codes should be unlinked. [7]
Note near: C02F00900/ N3	(4) In this group, it is desirable to add the indexing codes relating to individual steps of the multistep treatment. The indexing codes, which are chosen from groups **1/00** to **1/56** or **1/66** to **7/00** have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke, and should be linked. [7]
Note near: C03C02524/ N1	(2) In groups **25/24** to **25/44**, it is desirable to add the indexing codes relating to the individual constituents of the composition. The indexing codes, which are chosen from groups **25/24** to **25/44**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke and should be linked. [7]
Note near: C04B N6	(4) In groups **26/00** to **30/00**, it is desirable to add the indexing codes relating to individual constituents. The indexing codes, which are chosen from groups **7/00** to **24/00**, with the exception of groups **7/13**, **7/36** to **7/60**, **9/11** to **9/20**, **11/02** to **11/036**, **11/28** and **11/30**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke, and should be linked. [4]
Note near: C04B02200/ N1	(2) In groups **22/00** and **24/00**, it is desirable to add the indexing codes of group **103:00**. The indexing codes should be unlinked. [6]
Note near: C04B02600/ N0	In groups **26/00** to **32/00**, it is desirable to add the indexing codes of group **111:00**. The indexing codes should be unlinked. [6]
Note near: C04B03500/ N5	(6) In this group, it is desirable to add the indexing code of group **101:00**. The indexing code should be unlinked. [6]

Note near: C04B03566/ N0	(1)	In group **35/66**, it is desirable to add the indexing codes relating to individual constituents of the monolithic refractories or refractory mortars. The indexing codes, which are chosen from groups **7/00** to **28/00**, with the exception of groups **7/13**, **7/36** to **7/60**, **9/11** to **9/20**, **11/02** to **11/036**, **11/28** and **11/30**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be linked. [6]
Note near: C05 N1	(2)	In this class, it is desirable to add the indexin g codes relating to ingredients of a mixture of different fertilisers or of fertilisers with non-fertilisers. The indexing codes, which are chosen from the groups in this class, with the exception of groups **C 05 B 1/10** and **11/02**, **C 05 C 1/02** and **7/02**, **C 05 F 1/02**, **3/06**, **9/02**, **11/06** and **17/02**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be linked.
Note near: C07B N4	(4)	In this subclass, it is desirable to add the indexing co des of subclass **C 07 M**. The indexing codes should be unlinked. [6]
Note near: C07C N20	(7)	In this subclass, it is desirable to add the indexing codes of subclass **C 07 M**. The indexing codes should be unlinked. [6]

Note near: C07D N23	(7)	In this subclass, it is desirable to add the indexing codes relating to individual components, chosen according to the guidelines mentioned under (a) to (d) below. The indexing codes, which are chosen as indicated below, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke, and should be linked. The following guidelines should be followed: (a) For compounds classified in groups 203/00 to 347/00 one or more appropriate places which precede the classification place may be given as additional information, e.g. in order to show essential substituents. The appropriate codes are chosen from groups 203/00 to 347/00, with the exception of groups 203/02, 209/06, 209/84, 211/02, 213/08 to 213/14, 213/803 to 213/807, 243/26 to 243/36, 251/56 to 251/62, 295/023, 301/00 to 301/36, 307/08, 307/50 and 311/40. **[2]** (b) In compounds containing two or more hetero rings **covered by different main groups**, neither condensed among themselves nor with a common carbocyclic ring system, each hetero ring is shown as additional information. The appropriate codes which are chosen from groups 203/00 to 347/00, with the exception of groups 203/02, 209/06, 209/84, 211/02, 213/08 to 213/14, 213/803 to 213/807, 243/26 to 243/36, 251/56 to 251/62, 295/023, 301/00 to 301/36, 307/08, 307/50 and 311/40, are determined by scission of all other hetero rings and considering them as substituents. The locations of the scissions are chosen so as to obtain the substituents which appear in the later place in the Classification, e.g. the relevant rings of  are considered to be  and the invention information and additional information relating to the said compound would read: 401/06 // (401/06, 213:58, 233:24). **[2]** (c) **For compounds containing one condensed ring system having two or more relevant hetero rings, and for which no specific group is provided**, all relevant rings having hetero atoms as ring members are shown as additional information. These rings are indicated by the main group symbols of groups 203/00 to 347/00, with the exception of groups 207/00, 211/00 to 219/00, 233/00, 295/00, 301/00 and 309/00. **[2]** (d) **For compounds containing two or more condensed ring systems each having two or more hetero rings, each condensed system is shown as additional information.** The appropriate codes are chosen from groups 451/00 to 517/00, with the exception of groups 463/02 to 463/08, 477/02 to 477/08, 499/04 to 499/20, 501/02 to 501/12, 503/02 to 503/08 and 505/02 to 505/08, and determined by considering separately each condensed system in turn. **[2]**
Note near: C07D N31	(8)	In this subclass, it is desirable to add the indexing codes of subclass **C 07 M**. The indexing codes should be unlinked. [6]
Note near: C07F N3	(4)	In this subclass, it is desirable to add the indexing codes of subclass **C 07 M**. The indexing codes should be unlinked. [6]
Note near: C07G N2	(3)	In this subclass, it is desirable to add the indexing codes of subclass **C 07 M**. The indexing codes should be unlinked. [6]
Note near: C07H N16	(5)	In this subclass, it is desirable to add the indexing codes of subclass **C 07 M**. The indexing codes should be unlinked. [6]
Note near: C07J N7	(3)	In this subclass, it is desirable to add the indexing codes of sub class **C 07 M**. The indexing codes should be unlinked. [6]
Note near: C07K N15	(6)	In this subclass, it is desirable to add the indexing codes of groups **101:00** to **123:00**. The indexing codes should be unlinked. [6]

Note near C07K N16	(7)	In this subclass , it is desirable to add the indexing codes of subclass **C 07 M**. The indexing codes should be unlinked. [6]
Note near C08F N25	(7)	In groups **210/00** to **297/00**, it is desirable to add the indexing codes relating to additional monomeric components, in cases where no specific subgroups defined by the said monomeric components are present. The indexing codes, which are chosen from groups **210/00** to **238/00**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be linked. [2]
Note near: C08G01800/ N0	In this group, it is desirable to add the indexing code of group **101:00**. The indexing code should be linked. [5]	
Note near: C08J N2	(3)	In this subclass, it is desirable to add the indexing codes of subclass **C 08 L**. The indexing codes should be unlinked. [5]
Note near: C08K N9	(3)	In this subclass, it is desirable to add the indexing codes relating to the essential ingredients of a mixture. The indexing codes, which are chosen from the groups of this subclass, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be linked. [2]
Note near: C08L N7	(3)	In this subclass, it is desirable to add the indexing codes relating to additional macromolecular constituents of the composition. The indexing codes, which are chosen from the groups of this subclass, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke, and should be linked. [2]
Note near C09D N15	(4)	In groups **101/00** to **201/00**, it is desirable to add the indexing codes relating to additional macromolecular constituents of the coating composition. The indexing codes, which are chosen from the said groups, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be linked.
Note near: C09J N14	(4)	In groups **101/00** to **201/00**, it is desirable to add the indexing codes relating to additional macromolecular constituents of the adhesive. The indexing codes, which are chosen from the said groups, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke, and should be linked.
Note near: C09K01700/ N4	(5)	In this group, i t is desirable to add the indexing codes of groups **101:00** to **109:00**. The indexing codes should be unlinked. [6]
Note near C10M N19	(5)	In this subclass, it is desirable to add the indexing codes relating to: – each of the essential ingredients of a mixt ure. However, in the case of an aqueous lubricating composition covered by group 173/00, the presence of water is not indicated; – each of the essential reactants of a reaction product covered by groups 109/02, 121/04 or 159/12. The indexing codes, which are chosen from groups 101/00 to 109/00, 113/00 to 121/00, 125/00 to 139/00, 143/00 to 155/00, 159/00 or 163/00 to 167/00, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be linked. **[4]**
Note near C10M N23:	(6)	In this subclass, it is desirable to add the indexing codes of subclass **C 10 N**. The indexing codes should be unlinked. [4]
Note near: C11D N0	(1)	In this subclass, it is desirable to add the indexing codes relating to ingredients of compositions classified in the mixture groups of groups **1/00** to **10/00**. The indexing codes, which are chosen from groups **1/00** to **9/00**, with the exception of groups **1/37**, **1/645** to **1/655**, **1/825** to **1/86**, **1/94**, **3/065** to **3/075**, **7/56**, **7/60** and **9/60**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be linked.
Note near: C12C N0	In this subclass, it is desirable to add the indexing codes of subclass **C 12 R**. The indexing codes should be linked. [6]	
Note near: C12F N0	In this subclass, it is desirable to add the indexing codes of subclass **C 12 R**. The indexing codes should be linked. [6]	
Note near: C12G N0	In this subclass, it is desirable to add the indexing codes of subclass **C 12 R**. The indexing codes should be linked. [6]	

Note near: C12H N0	In this subclass, it is desirable to add the indexing codes of subclass **C 12 R**. The indexing codes should be linked. [6]
Note near: C12J N0	In this subclass, it is desirable to add the indexing codes of subclass **C 12 R**. The indexing codes should be linked. [6]
Note near: C12L N0	In this subclass, it is desirable to add the indexing codes of subclass **C 12 R**. The indexing codes should be linked. [6]
Note near: C12M N1	(2) In this subclass, it is desirable to add the indexing codes of subclass **C 12 R**. The indexing codes should be linked. [6]
Note near: C12N N2	(3) In this subclass, it is desirable to add the indexing codes of subclass **C 12 R**. The indexing codes should be linked. [6]
Note near: C12P N7	(6) In this subclass, it is desirable to add the indexing codes of subclass **C 12 R**. The indexing codes should be linked. [6]
Note near: C12Q N5	(5) In this subclass, it is desirable to add the indexing codes of subcla ss **C 12 R**. The indexing codes should be linked. [6]
Note near C12S N15	(4) In this subclass, it is desirable to add the indexing codes of subclass **C 12 R**. The indexing codes should be linked. [6]
Note near: C21D N0	In this subclass, it is desirable to add the indexing codes of subclass **C 22 K**, relating to changing the physical characteristics of alloys. The indexing codes should be unlinked. [6]
Note near: C21D00600/ N0	(1) In this group, it is desirable to add the indexing codes relating to aspe cts of the heat treatment methods. The indexing codes are chosen from groups **1/02** to **1/84**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [7]
Note near: C21D00600/ N1	(2) In this group, it is desirable to add the indexing codes relating to the alloying constituents. The indexing codes are chosen from groups **C 22 C 38/02** to **38/60**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [7]
Note near: C22B00300/ N0	(1) In this group, it is desirable to add the indexing codes relating to the metals obtained. The indexing codes, which are chosen from the main groups (only) of groups **11/00** to **25/00**, from group **19/34** or from any of the groups **26/00** to **61/00**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [5]
Note near: C22C N5	(2) In this subclass, it is desirable to add the indexing codes of subclass **C 22 K**. The indexing codes should be unlinked. [6]
Note near: C22C04700/ N0	In groups **47/00** and **49/00**, it is desirable to add the indexing codes of groups **101:00**, **111:00** and **121:00**. The indexing codes should be unlinked. [7]
Note near: C22F N0	In this subclass, it is desirable to add the indexing codes of subclass **C 22 K**. The indexing codes should be unlinked. [6]
Note near: D06M01100/ N3	(3) In this group, it is desirable to add the indexing codes of grou p **101:00**. The indexing codes should be unlinked. [5]
Note near: D06M01300/ N2	(2) In this group, it is desirable to add the indexing codes of group **101:00**. The indexing codes should be unlinked. [5]
Note near: D06M01500/ N4	(2) In this group, it is des irable to add the indexing codes of group **101:00**. The indexing codes should be unlinked. [5]
Note near: D06M01600/ N0	In this group, it is desirable to add the indexing codes of group **101:00**. The indexing codes should be unlinked. [5]
Note near: D06M02300/ N0	In this group, it is desirable to add the indexing codes of group **101:00**. The indexing codes should be unlinked. [5]
Note near: D21H01700/ N1	(2) In this group, it is desirable to add the indexing codes relating to individual constituents of fibres used in the pulp or paper. The indexing codes, which are chosen from groups **11/00** to **15/00**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [6]

Note near: D21H01771/ N0	(1)	In this group, it is desirable to add the indexing codes relating to individual components of the mixtures. The indexing codes, which are chosen from groups **17/00** or **21/00**, with the exception of groups **17/18**, **17/19** and **17/70**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [5]
Note near: D21H01900/ N0	(1)	In this group, it is desirable to add the indexing codes relating to individual constituents of the fibres used in the pulp or the paper, the non-fibrous material added to the pulp or the impregnating or coating material. The indexing codes, which are chosen from groups **11/00** to **17/00** or **21/14** to **21/56**, with the exception of groups **17/18**, **17/19** and **17/70**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [5]
Note near: D21H01984/ N0	(1)	In groups **21/00** to **21/12**, it is desirable to add the indexing codes relating to individual constituents of the fibres used in the pulp or the paper, the non-fibrous material added to the pulp or the impregnating or coating material. The indexing codes, which are chosen from groups **11/00** to **17/00**, with the exception of groups **17/18**, **17/19** and **17/70**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [5]
Note near: D21H02112/ N0	(1)	In groups **21/14** to **21/56**, it is desirable to add the indexing codes relating to individual constituents of the fibres used in the pulp or the paper, the non-fibrous material added to the pulp or the impregnating or coating material. The indexing codes, which are chosen from groups **11/00** to **19/00**, with the exception of groups **17/18**, **17/19** and **17/70**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [5]
Note near: D21H02156/ N0	(1)	In groups **23/00** to **23/20**, it is desirable to add the indexing codes relating to individual constituents of the fibres used in the pulp or the paper, the non-fibrous material added to the pulp or the impregnating or coating material. The indexing codes, which are chosen from groups **11/00** to **17/00** or **21/00**, with the exception of groups **17/18**, **17/19** and **17/70**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [5]
Note near: D21H02320/ N0	(1)	In groups **23/22** to **23/78**, it is desirable to add the indexing codes relating to individual constituents of the fibres used in the pulp or the paper, the non-fibrous material added to the pulp or the impregnating or coating material. The indexing codes, which are chosen from groups **11/00** to **21/00**, with the exception of groups **17/18**, **17/19** and **17/70**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [5]
Note near: D21H02500/ N0	(1)	In this group, it is desirable to add t he indexing codes relating to individual constituents of the fibres used in the pulp or the paper, the non-fibrous material added to the pulp or the impregnating or coating material. The indexing codes, which are chosen from groups **11/00** to **21/00**, with the exception of groups **17/18**, **17/19** and **17/70**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [5]
Note near: D21H02700/ N1	(2)	In this group, it is desirable to add t he indexing codes relating to individual constituents. The indexing codes, which are chosen from groups **11/00** to **25/00**, with the exception of groups **17/18**, **17/19** and **17/70**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [5]
Note near: E01D N0	In this subclass, it is desirable to add the indexing codes of group **101:00**. The indexing codes should be unlinked. [6]	
Note near: E04B N3	(3)	In this subclass, it is desirable to add the indexing code of group **101:00**. The indexing code should be unlinked. [5]
Note near: E04B00904/ N0	In this group, it is desirable to add the indexing codes of group **103:00**. The indexing codes should be unlinked. [5]	

Note near: F16D04800/ N0	In groups **48/00** to **48/12**, it is desirable to add the indexing codes of groups **101:00** to **113:00**. The indexing codes should be unlinked. [6]
Note near: F16F01500/ N0	In this group, it is desirable to add the indexing codes of groups **101:00** or **103:00**. The indexing codes should be unlinked. [6]
Note near: F16H04804/ N1	(2) In groups **48/06** to **48/30**, it is desirable to add the indexing codes relating to constructional features of differential gearings. The indexing codes, which are chosen from those groups, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [6]
Note near F16H05900/ N10	(6) In groups **59/00** to **63/00**, it is desirable to add the indexing codes relating to control inputs or outputs. The indexing codes, which are chosen from groups **59/00** or **63/00**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [5]
Note near F16H05900/ N11	(7) In groups **59/00** to **63/00**, it is desirable to add the indexing codes of groups **101:00** to **109:00**. The indexing codes should be unlinked. [7]
Note near F16L05526/ N13	(2) In groups **55/26** to **55/48**, it is desirable to add the indexing codes of groups **101:00** to **101:70**. The indexing codes should be unlinked. [6]
Note near: F21L N2	(3) In this subclass, it is desirable to add the indexing codes of subclasses **F 21 W** and **Y**. The indexing codes should be unlinked. [7]
Note near: F21S N2	(3) In this subclass, it is d esirable to add the indexing codes of subclasses **F 21 W** and **Y**. The indexing codes should be unlinked. [7]
Note near: F21V N0	In this subclass, it is desirable to add the indexing codes of subclasses **F 21 W** and **Y**. The indexing codes should be unlinked.
Note near: F23C01000/ N0	In this group, it is desirable to add the indexing code of group **101:00**. The indexing code should be unlinked. [7]
Note near: G01B00500/ N0	In groups **5/00** to **21/00**, it is desirable to add the indexing codes of groups **101:00** to **121:00**. The indexing codes should be unlinked. [6]
Note near: G06F00102/ N0	In group **1/02**, it is desirable to add the indexing codes of group **101:00**. The indexing codes should be unlinked. [5]
Note near: G06F01700/ N0	In groups **17/00** to **19/00**, it is desirable to add the indexing codes of groups **151:00** to **171:00**. The indexing codes should be unlinked. [6]
Note near: G10L N0	(1) In this subclass, it is desirable to add the indexing codes relating to speech classification or search methods. The indexing codes, which are chosen from groups **15/08** to **15/18**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [7]
Note near: G10L N1	(2) In this subclass, it is desirable to add the in dexing codes of group **101:00**. The indexing codes should be unlinked. [7]
Note near: G10L01700/ N0	In group **17/00**, it is desirable to add the indexing codes relating to the feature extraction or training or procedure. The indexing codes, which are chosen from groups **15/02**, **15/06** and **15/22**, have the same numbers as the classification symbols, but a colon is used instead of the oblique stroke , and should be unlinked. [7]
Note near: H01L02700/ N1	(2) In this group, it is desirable to add the indexing cod e of group **101:00**. The indexing code should be unlinked. [5]
Note near: H01R02400/ N0	In this group, it is desirable to add the indexing codes of groups **101:00** to **107:00**. The indexing codes should be unlinked. [7]
Note near: H04N00100/ N0	In groups **1/00** to **17/00**, it is desirable to add the indexing code of group **101:00**. The indexing code should be unlinked. [6]

[Annex 2 follows/
L´annexe 2 suit]

ANNEX 2/ANNEXE 2

Swedish Patent and Registration Office

Review of the hybrid systems in the IPC
Date: April 13th, 1999

COMMENTS
on IPC/CE/28/5, Annex 5, point 5

The Ad Hoc IPC Reform Working Group was given the task of reviewing the hybrid systems in the IPC.

We see the hybrid systems as a valuable part of the IPC, and something that will be necessary for the future. We can see four main ways of dealing with the documentation growth in the future:

- Continued fine subdivision of the IPC. This has the disadvantage that the system becomes very large and complex. For every new subdivision, the risk of missing documents increases, which puts an added burden on classifiers and searchers. The further subdivision is taken, the more important it gets with precedence rules and similar solutions, which make the systems difficult to use.
- Text searching. This is language-dependent, and as long as no effort is made of improving the abstracts or texts, the search will be done in texts that are produced by the applicant, who has no primary interest in giving information.
- Automatic classification/search. This is still very much a future technology, and its success will depend on technical developments which will probably largely be made outside the of the patent community.
- Hybrid systems. It is a method which is not afflicted by the shortcomings of the other ones. It is language-independent in the same way as the IPC itself. The information given is selected from pre-defined lists, and not produced by the applicants. Hybrid systems are economic in volume of the schemes and in revision work, since a relatively low number of index codes have the same effect as a high number of classification entries. Hybrid systems are also well suited for computer searching.

The development of IPC and the other search tools of patent offices will probably follow all these four lines, but we strongly support maintaining and developing the hybrid systems, and definitely support making hybrid systems part of the ”top level” of a future two-level IPC.

We would like to state that we do not see any fundamental problems with the present hybrid system approach. It needs fine-tuning, but the basic idea is sound.

How should future hybrid systems (or ”multi-dimensional” classification systems) of the IPC be constructed?

We have a couple of decades of experience of indexing. It is time to use that experience for improving the system:

- Guidelines should be drawn up for when and how hybrid systems should be introduced in the IPC. At present many indexing schemes are introduced ad hoc, sometimes as a fallback solution if classification is not considered appropriate. In our opinion, hybrid solutions should only be adopted for information which is not possible or desirable to cover in the ”one-dimensional” classification part. This could be information that cuts across the subdivisions of the classification or for information which is inherently multidimensional, such as multistep processes. We do not think that indexing should be used as a short-term solution for testing classification schemes, or as an alternative to further subdivision of a technical field along the same lines as earlier subdivisions.

- The structure and presentation of indexing schemes should be more strictly standardised. The present practise is inconsistent, for example regarding titles and the use of main groups.

- There should be two basic types of hybrid/multidimensional systems. One of them should be for discretionary use, for indicating invention information. This should belong to the classification part of the IPC. The other should be for non-discretionary use, for recording additional background information. This could, as now, be a separate part of the IPC.

- The necessity of linked indexing should be considered, and guidelines should be drawn up for when linked or unlinked indexing should be used. The presentation of linked index codes should be simplified.

- We propose going through all the existing indexing schemes, in order to see whether they should be kept, modified, deleted, or converted to classification schemes.

Anders Bruun

[Annex 3 follows/
L´annexe 3 suit]

ANNEX 3/ANNEXE 3

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

April 15, 1999

Mr. Mikhail Makarov
Head, IPC Section,
Classification and Patent
Information Division,
World Intellectual Property Organization
34, chemin des Colombettes
1211 Geneva 20
SWITZERLAND

Re: IPC Reform Working Group-Task 5 – Review the hy brid systems in the IPC

Dear Mr. Makarov:

Enclosed is the initial US response to Task 5 as set forth in Annex V of the Final Report of the Twenty-Eighth Session Committee of Experts (IPC/CE/28/5) for your consideration. Copies of this document have also been circulated via e-mail to the IPC Reform Working Group Members.

Sincerely,

Robert W. Saifer, Director
International Liaison Staff

Enclosure
cc Reform WG Members

REFORM WORKING GROUP

US Paper on Task 5
Review the hybrid systems in the IPC

"Hybrid" systems exist to cure basic inadequacies in the structure and rules of the current paper based IPC. Hybrid systems add complexity which conflicts with the goal of creating a readily understood and easily used base or core level IPC (see US paper on IPC Reform Task #1). There will be little or no need for "hybrid" systems, at least at the base or core level, in a reformed IPC designed to take full advantage of an electronic file and word search engines.

Current "hybrid" classification schemes in the IPC include two basic types as described in the Guide to the IPC, paragraph 76:
(a) the type which uses entries for indexing purposes which are separate from those used for classification purposes, the indexing code(s) representing an additional element of information about a technical subject in addition to information covered by the classification symbol(s); and
(b) the type which uses entries for indexing purposes which are the same as those used for classification purposes, the indexing code(s) providing an additional classification symbol(s) for an additional technical subject(s).

All indexing codes must be used in association with classification symbols (Guide, paragraph 77). However, some indexing codes are "linked" while others are "unlinked". This additional level of complexity is applied where necessary to render searches "more effective", and not used when linkage would not benefit "retrieval purposes" (Guide, paragraph 78).

The US has experience using indexing codes in the US Patent Classification system (USPC). Indexing codes were used in both a paper based system and an purely electronic environment (see the Annex to this paper).

Advantages of Indexing Codes:

- Indexing codes permit a search of alternate classification concepts, for example, a constituent of a mixture, an element of a process or structure, or a use of a technical subject (Guide, paragraph 75);
- Indexing codes ensure a complete search of a concept by assigning all patent documents even broadly disclosing an indexed concept to the code for that concept (Guide, paragraph 80);
- Indexing codes allow examiners to "term" search documents in "foreign" languages without the need to translate the indexed concept;
- Indexing codes allow searching for additional information that may not be included in the patent document's abstract when full text searching is not available.

Disadvantages of Indexing Codes:

- Indexing codes add complexity which conflicts with the goal of creating a readily understood and easily used base or core level IPC (see US paper on IPC Reform Task #1);
- Indexing codes are expensive to create, especially when indexing codes must be applied to all documents as a result of full classification of the backfile into the current classification;
- Indexing codes are expensive to maintain, since documents must be screened for all concepts for which indexing codes have been created;
- The non-obligatory application of indexing codes (Guide, paragraph 80) crowds the files and results in a search of a concept returning many documents of questionable utility which contain a concept fully and more completely covered by other patent documents;
- Indexing codes require manual coding which depends on individual interpretation of the entire disclosure of a patent document in a time limited environment, leading to incomplete and inconsistent coding;
- Some Offices (including the US) do not apply or are opposed to indexing codes, which are not obligatory and therefore not applied to all relevant patent documents.

Alternatives to Indexing Codes:
The *Standing Committee on Information Technologies* (SCIT) plans to make full text searching available world wide in the future. This capability replaces most of the need for indexing by providing an alternative technique to achieve the advantages of indexing. For example, full text searching permits a term to be searched across a designated portion of the IPC. The search can be limited or broadened with additional terms.

Terms can represent words or phrases. As capability and software sophistication increase, terms represent increasingly precise concepts. Translation software permits terms to be searched in several languages simultaneously. The location of the term in the returned patent documents can be electronically highlighted, as is currently done by the US and other electronic systems. Online patent family data provides information about preferred copies to lessen the need for translation of foreign language documents. Advances in translation software provide machine based translation of improving quality when a preferred language family document is not available. It is noted that these capabilities do not require any of the expenditure of classification time and classification expertise associated with indexing codes.

It is important that all appropriate classification symbols are assigned to a patent document for its non-trivial, novel disclosures. This is because searchers of electronic classification files limit the scope of their search to specified areas of the classification schedule, to avoid retrieving too many irrelevant documents. Thoughtful multiple classifications provide the process for ensuring that all pertinent documents will be found in a limited scope search. The Guide to the IPC, paragraph 82, states that “The primary purpose of the Classification is, as noted in paragraph 2, above, to facilitate search. For this purpose each separate technical subject disclosed in a patent document should be classified if it is of interest for search purposes.”

In practice such multiple classifications has been limited, perhaps to avoid crowding the search files (both paper and electronic) with unnecessary documents, or perhaps due to a perceived conflict with Guide paragraph 52. An electronic file provides a mechanism to determine the necessity for assigning multiple classifications to a patent document since the documents already having a classification symbol can be viewed (see US paper on IPC Reform Task #4).

"Catch term" lists provide additional capabilities. A "catch term" list is terms and simple concepts that are considered useful to limiting searches in a given technology. It provides a mechanism to quickly respond to changing technology by adding words to an official list which reflect new concepts. Catch terms can be associated with foreign language equivalents. The "catch term" concept and the "thesaurus" concept can be easily blended together when appropriate for a particular technology. Since catch terms are associated with classifications and not the documents themselves, the costs of applying them to individual patent documents is avoided.

The alternatives to indexing codes described above retain most of the advantages of indexing codes without the major disadvantages of indexing codes. The advantage remaining is described in the first bullet above as: "Indexing codes permit a search of alternate classification concepts, for example, a constituent of a mixture, an element of a process or structure, or a use of a technical subject (Guide, paragraph 75)". It is possible that the full text search capabilities described above will provide a mechanism to satisfy the need to search alternate classification concepts at the core level of the reformed IPC. This is particularly true if catch term lists are developed. However, in some instances, multiple parallel schemes could be used in the base or core level IPC if there is adequate support among individual offices. Multiple parallel schemes are classification schemes covering the same technological area which are based on different search strategies.

In summary, alternatives to indexing code based hybrid systems include:

- Full text term searching for specific concepts, elements or features.
- Electronic highlighting of search terms in patent documents.
- Term translation software to provide equivalent words for foreign patent documents.
- Multiple classifications, especially when combined with full text term searching (see US paper on IPC Reform Task #4).
- Catch term lists (terms and simple concepts that are considered useful to limiting searches in that technology).
- Multiple parallel classification schemes – if absolutely necessary and supported by sufficient individual offices.

The reformed IPC envisions a two level classification system in which the base or core level provides a basic array of classification symbols which accommodates all the patent document information of the individual offices. The core level is designed to be a readily understood and easily used tool, for both the public and individual offices. The individual offices are free to elaborate on the core level and thus develop their own second level classification array or indexing system. For example, the Japanese F-terms would be a second level. Since indexing codes are not essential in an electronic environment, the US suggests they be dropped from the base or core level of the reformed IPC.

ANNEX to US Paper on Task 5

The US has over 100 years experience with indexing codes. Virtually every examiner creates collections of documents which disclose concepts for which a difficult search was completed. These are their personal indexing system, and some eventually grow into useful schemes.

A simple indexing scheme was begun in the welding arts by examiner Roger Carr (subsequently retired IPC classifier) which inspired the current examiner to develop his own elaborate system of indexing codes. However, the level of effort required to maintain the larger system is enormous. It has been the experience of the US that indexing schemes are usually abandoned because the cost of maintenance becomes prohibitively high as they expand, or examiner interest wanes as the art matures, or the concepts are incorporated in standard classification schemes.

The largest USPC indexing scheme in recent history involved over 17,000 patents in the rapidly emerging computer area, and was known as Computer Aided Searching and Patent Image Retrieval (CASPIR). 1,133 indexing codes were applied to patent documents for digital processing applications and computer systems. Although the codes had definitions and were grouped by subject matter (e.g., storage, input/output, architecture, control, artificial intelligence, generic devices, generic operations, information storage systems, etc.), there was no superiority in the nature of a first place rule. Thus, the classification scheme was “flat”, with no “pointers” or “notes” to other indexing codes. In a few areas, where convenient, hierarchy was utilized by indenting some subclasses under others.

The indexing scheme was begun in 1971 and lasted until 1998. At first the numbers of patent documents added each year were less than 500, but in 1989 over 1000 patent documents were indexed at a cost of one hour per patent document. Since projections showed patent documents in this area would continue to increase rapidly (there were about 5,000 last year), the US could not afford the time required to index all future patent disclosures. A massive effort was begun to create classifications for the patent documents, resulting in the creation of six new USPC classes, 709-714 (USPC class equivalent to IPC subclass), which became official between 1997 and 1999, and contain over 26,000 different patent documents. Data processing systems and arithmetic processing computers were simultaneously reclassified into new USPC classes 700-708, resulting in the creation of a total of 15 new classes during that period, all related to the rapidly growing data processing and digital computer technologies.

The new classifications include superiority (first place rule) and multiple classifications are used to indicate disclosure of novel technological subject matter. The new classifications provide an affordable and efficient search strategy, used by the public as well as experts in the technological area. The point is that the US has tried indexing codes (many times) and has had to abandon it each time for a variety of reasons (e.g., labor intensive, inconsistent interpretation, difficulty locating the best term(s) in a long list, and inflexibility in modulating scope of terms) .

The current US classification strategy of superiority (first place rule) and multiple classifications was begun in 1965 when a group of gifted classifiers wrote a book entitled Development and Use of Patent Classification Systems (DUPACS). DUPACS instituted common rules and structure for the US classification system. These rules were applied to all new reclassification efforts (revisions) which took about 30 years to affect the entire classification system.

In summary, the US is opposed to indexing codes in the base or core level of the IPC not out of ignorance, but because of our experiences with indexing codes.

[Annex 4 follows/
L´annexe 4 suit]

ANNEX 4/ANNEXE 4

DEUTSCHES PATENT- UND MARKENAMT German Patent and Trademark Office	IPC/REF/WG **Task 5** Date : 4.05.1999
Review the hybrid systems in the IPC	

Re: **Comments on document IPC/CE/28/5, Annex V**

Hybrid systems are in some fields of the IPC imperative, parti cular in those fields where many classification places would be necessary to characterise the technical subject.

In this respect we like to refer to the place where credit cards are classified, B42D 15/10. In relation with this group an indexing scheme is provided for indicating the structure or materials of the card and the data features. Without the indexing scheme some tens of classification entries would be necessary to cover all the possibilities of credit cards.

When reviewing the hybrid systems one should also consider the introduction of indexing schemes which could be used not only with one narrow field of the IPC but with a larger area where it seems to be appropriate.

Further, when documents are indexed, intellectual effort is put in, i.e. one can get more information of the content of the document independently of the language ("Added value"). Moreover, indexing codes facilitate the search in databases since a huge number of documents can be cut down by entering the indexing code in addition to the classification symbol.

We could imagine that the application of indexing codes are related to the second or top level of the IPC mentioned under Task 1, item 4 of the Long Term Goals.

[Annex 5 follows/
L'annexe 5 suit]

ANNEX 5/ANNEXE 5

UK Patent Office

Comments on IPC Reform

Task 5 – Review the hybrid systems in the IPC

We think that many of the existing hybrid systems could be recast as multiple classification, especially where there is classification according to function and indexing according to application, or vice versa. Often, during revision of a project, a hybrid scheme has been instituted merely as a way out of a deadlock, rather than considering he best way of completing the project.

However, we consider that there are hybrid systems in the IPC which work well and efficiently and they should not be dismissed lightly. It may well be that the indexing parts of these IPC entries could from part of the envisaged second level IPC, but if so we consider it essential that the second tier should be centrally administered by WIPO, otherwise the second tier will be become an unregulated and haphazard conglomeration of local unofficial schemes.

We consider it likely that in the context of automatic classification/indexing, hybrid schemes are likely to become more, not less, important as we can see that intelligent scanning of the full text of patent documents could readily lead to automatic indexing. We believe that any **classification** system needs to be founded on the need for intellectual analysis of patent claims, but we doubt that that intellectual process is yet within the capability of modern AI systems.

Jim Calvert
04 May 1999

[Annex 6 follows/
L´annexe 6 suit]

ANNEX 6/ANNEXE 6

RAPPORTEUR REPORT ON TASK 5 OF THE PROGRAM OF THE AD HOC IPC REFORM WORKING GROUP

submitted by the International Bureau

INTRODUCTION

1. Task 5 of the program of the ad hoc IPC Reform Working Group (IPC/REF) relates to the review of the hybrid systems in the IPC. This Task is a component of a task group embracing aspects of the IPC general structure and principles. The objective of the task is to prepare recommendations concerning status of the hybrid systems in the reformed IPC of the twenty-first century. The International Bureau was appointed by the IPC Committee of Experts as Rapporteur for the Task elaboration.

2. For the consideration of the Task, the International Bureau submitted a background material including excerpts from the Guide to the IPC which describe structure and rules of hybrid systems currently applied in the IPC, the data showing the use of hybrid systems by industrial property offices for coding of patent documents and computerized searching, and a listing of indexing schemes represented in the seventh edition of the IPC, both as separate indexing schemes and double-purpose schemes that can be used for classifying and for indexing.

COMMENTS

3. Comments were submitted by industrial property offices of Germany (DE), United Kingdom (GB), Sweden (SE) and United States of America (US). Below follows a short summary of the comments.

4. According to DE, hybrid systems are imperative in specific IPC fields where too complex classification structure would be needed for describing the subject matter concerned. Contrary to the current structure of the IPC, indexing schemes could be introduced in broader classification areas. Application of indexing codes would be appropriate at the top level of the two-level structure of the reformed IPC.

5. GB notes that many existing hybrid systems could be converted into multifacet classification, especially in the fields where a classification scheme relates to function and an indexing scheme relates to application, or vice versa. The remaining indexing schemes could form part of the second IPC level which should be centrally administered by WIPO to provide uniform approach to the elaboration of the indexing schemes. Future prospects of the use of the hybrid systems may be connected with automatic indexing.

5. SE underlines that hybrid systems are a valuable part of the IPC because they are language-independent, designed in an economic manner and well suited for computer searching. Hybrid systems could represent part of the IPC top level. SE enumerates possible improvements in the hybrid systems elaboration, namely, guidelines are needed for the introduction of hybrid systems in the IPC, the structure and presentation of indexing schemes

should be further standardized, the need for the linkage of certain indexing codes should be reconsidered and their presentation should be simplified. With a view to that improvements and a possible conversion of some indexing schemes into classification schemes, all hybrid systems in the IPC should be reconsidered.

6. US remarks that hybrid systems add complexity in the IPC conflicting with the goal of creating a readily understood base level IPC. There would be little or no need for the hybrid systems, at least at the base level. In discussing advantages and disadvantages of hybrid systems, US notes the following disadvantages: indexing schemes are expensive for use in coding patent documents, the requirement of the manual coding leads to incomplete and inconsistent results, indexing codes are non-obligatory and are not, therefore, applied to all relevant patent documents. As an alternative technique, full text searching capabilities, which are constantly increasing, could be explored in combination with automated translation tools permitting terms to be searched in several languages simultaneously. Also promising would be to use open catchword lists and to introduce thereto, depending on offices needs, new or modified catchwords reflecting changing terminology. Such lists used together with the classification schemes would avoid cost of assigning indexing codes to patent documents. In some instances, however, multiple parallel classification schemes based on different search strategies could become an alternative to the hybrid systems.

RAPPORTEUR'S CONCLUSIONS AND RECOMMENDATIONS

7. The opinions of the commenting offices are divided on the value of the hybrid systems. There is consensus, however, that the hybrid systems should not be part of the base level of the reformed IPC, i.e., their use for coding of published patent documents should not be obligatory. Being attributed to the top IPC level, they will provide an additional search tool for offices wishing to use them. Harmonization in their elaboration should be increased and maintained in the future. This could be achieved by continuing the current practice of introducing and revising the IPC hybrid systems through the centralized revision process supervised by the IPC Committee of Experts.

8. There is also agreement that some of the separate indexing schemes representing the most important aspects of the respective subject matter could be converted into classification schemes and become part of the base IPC level. This would be departure from the predominantly one-dimensional current IPC and contribute to the elaboration of Task 4 of the IPC/REF program "Consider the elaboration of rules for multiple classification in the IPC". To this end, a complete review of all separate indexing schemes and double-purpose classification schemes in the IPC would be necessary. Such review may be carried out on the basis of the list of indexing schemes made available by the International Bureau.

9. Concurrently with the selection of indexing schemes appropriate for conversion into obligatory classification, standardization of the remaining indexing schemes with regard to their structure, wordings and rules of use could be achieved and serve as a model for their future development.

10. As suggested in some comments, guidelines for the introduction of hybrid systems in the IPC could be finally elaborated, which should describe, in particular, general approach to determining subject matter aspects appropriate for inclusion in classification schemes and in indexing schemes, respectively. In preparing such guidelines, the potential of full text

searching tools should be fully taken into account. For example, there might be no need for the introduction of hybrid systems in technical areas characterized by consistent or rapidly changing terminology where documents could be more effeciently indexed and information extracted by word searching systems. Some background material for the comparative study of text searching systems and hybrid systems could be collected in the course of a pilot project on the use of automated classification and indexing tools which the International Bureau intends to conduct.

11. Some simplification of the presentation of indexing schemes and of the recording of indexing codes could be envisaged. In particular, the linked mode of the presentation of indexing codes may be reconsidered. Having been designed for increasing the accuracy of the search, this mode brings about additional cost and mistakes in the recording of data. The need for maintaining the linked indexing codes should be estimated from the viewpoint of the profit and cost balance. If they are essential for the successful search, their presentation might be drastically simplified.

12. Finally, a proposal to start establishing of catchword lists open for introducing by offices of new or amended catchwords, brought forward by US, should be addressed. Such lists could serve as unofficial additional search tools, in analogy with the German Catchword Index "Stich- und Schlagwörterverzeichnis" made available by DE to the patent community. The IPC Revision Working Group which is responsible for the maintenance and updating of the official catchword indexes to the IPC could be authorized to consider that proposal.

13. The Rapporteur recommends that the IPC/REF consider the follow ing proposals:

(a) The hybrid systems could form part of the top level of the two-level reformed IPC.

(b) The existing indexing schemes be reviewed with a view to converting some of them into classification schemes and to standardizing the remaining schemes as regards their structure and presentation.

(c) A Task Force for conducting the said review be created, to prepare proposals for the second session of the IPC/REF.

(d) Following the review by the Task Force and on the basis of its results, prepara tion be started of the guidelines for the introduction of hybrid systems in the IPC.

(e) The need for maintaining the linked mode of the presentation of indexing codes be reconsidered and the recording of indexing codes be simplified.

(f) The IPC Revision Working Group be requested to study a proposal of establishing catchword lists open for introducing by offices of new or amended catchwords.

[End of Annex 6 and of document/
Fin de l'annexe 6 et du document]