IPC REVISION PROJECTS/
PROJETS DE RÉVISION DE LA CIB

CHEMICAL FIELD/
DOMAINE DE LA CHIMIE

IPC/C 412/98
ORIGINAL: English/French
DATE: November 1, 2002

WORLD INTELLECTUAL PROPERTY ORGANIZATION
ORGANISATION MONDIALE DE LA PROPRIÉTÉ INTELLECTUELLE

GENEVA/GENÈVE

COMMITTEE OF EXPERTS OF THE IPC UNION
COMITÉ D'EXPERTS DE L'UNION DE L'IPC

IPC REVISION PROJECT FILE/DOSSIER DE PROJET DE RÉVISION DE LA CIB

PROPOSAL BY: **ES** **PROPOSITION DE :**	**REVISION OF IPC AREA:** **A 61 K** **RÉVISION DU DOMAINE DE LA CIB :**
KIND OF REVISION: **Creation of subgroups** **TYPE DE RÉVISION :** **Création de sous-groupes**	

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33	Decision of the Working Group	/ Décision du groupe de travail	WG	01.01
34	Proposal	/ Proposition	EP	02.01
35	Comments	/ Observations	JP	06.01
36	Comments	/ Observations	EP	06.01
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45	Comments	/ Observations	ES	06.01
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48	Comments	/ Observations	DE	10.01
49	Comments	/ Observations	JP	10.01
50	Comments	/ Observations	SE	10.01
51	Comments	/ Observations	RO	10.01
52	French version of approved amendments	/ Version française des modifications approuvées	EP	10.01
53	Rapporteur report	/ Rapport du rapporteur	EP	10.01
54	Decision of the Working Group	/ Décision du groupe de travail	WG	01.02
55	Rapporteur proposal	/ Proposition du rapporteur	EP	01.02
56	Comments	/ Observations	JP	03.02
57	Comments	/ Observations	RU	04.02
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62	Comments	/ Observations	EP	04.02
63	Comments	/ Observations	SE	04.02
64	Comments	/ Observations	US	04.02
65	French version of approved amendments	/ Version française des modifications approuvées	EP	05.02
66	Rapporteur report	/ Rapport du rapporteur	EP	05.02
67	Decision of the Working Group	/ Décision du groupe de travail	WG	07.02
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69	Comments	/ Observations	RO	09.02
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72	French version of approved amendments / Version française des modifications approuvées	EP	11.02
73	Rapporteur report / Rapport du rapporteur	EP	11.02

ANNEX 67

EXCERPT FROM DOCUMENT IPC/WG/7/7/
EXTRAIT DU DOCUMENT IPC/WG/7/7

Project C 412 (chemical) – A number of amendments to the new main group A 61 K 8/00 were approved (see Annex 24E to this report).

Comments were invited on:

– whether the new group 8/892 covered a sufficient number of documents to be retained in the classification scheme;

– which examples would be desirable to introduce in the new group 8/899 in order to illustrate its contents.

The Working Group also approved certain amendments to the classification scheme of the new subclass A 61 Q created at its sixth session and introduced subdivisions of its main groups (see Annex 26E to this report).

Comments were invited on:

– whether any precedence references were needed between the new groups 1/02 and 1/12;

– how the borderline between the new groups 5/06 and 5/10 in respect of subject matter relating to “temporary colouring or dyeing the hair” could be clarified and whether additional examples should be introduced for this purpose.

Comments were also invited on whether the existing group A 61 P 17/16 should be deleted, in view of its insignificant file size.

Projet C 412 (chimie) – Plusieurs modifications ont été approuvées en ce qui concerne le nouveau groupe principal A 61 K 8/00 (voir l’annexe 24E du présent rapport).

Des observations ont été demandées

– sur la question de savoir si le nouveau groupe 8/892 couvre un nombre suffisant de documents pour pouvoir être maintenu dans le schéma de classement;

– sur les exemples qu’il serait souhaitable de faire figurer dans le nouveau groupe 8/899 pour en illustrer le contenu.

Le groupe de travail a aussi approuvé certaines modifications en ce qui concerne le schéma de classement de la nouvelle sous-classe A 61 Q créée à sa sixième session et a introduit des subdivisions dans ses groupes principaux (voir l’annexe 26E du présent rapport).

Des observations ont été demandées

– sur la question de savoir si des renvois de priorité sont nécessaires entre les nouveaux groupes 1/02 et 1/12;

– sur la question de savoir comment la démarcation entre les nouveaux groupes 5/06 et 5/10 en ce qui concerne les éléments relatifs à “la coloration ou la teinture temporaire des cheveux” pourrait être précisée et si des exemples supplémentaires devraient être ajoutés à cet effet.

Des observations ont aussi été demandées sur la question de savoir si le groupe existant A 61 P 17/16 doit être supprimé, compte tenu de la petite taille de son dossier de recherche.

ANNEX 24E A 61 K [Project-Rapporteur : 412/EP] <SC07008E>

N	*8/14*	• • *Liposomes*	R
N	*8/35*	• • • • *Ketones, e.g. quinones, benzophenone*	R
N	*8/69*	• • • *containing fluorine*	R
N	*8/70*	• • • • *containing perfluoro groups, e.g. perfluoroethers*	R
N	*8/85*	• • • • *Polyesters*	
N	*8/86*	• • • • *Polyethers*	
N	*8/87*	• • • • *Polyurethanes*	
N	*8/88*	• • • • *Polyamides*	
N	*8/891*	• • • • • *saturated, e.g. dimethicone, phenyl trimethicone*	
N	*8/892*	• • • • • *containing silicon bound to unsaturated aliphatic groups, e.g. vinyl dimethicone*	
N	*8/893*	• • • • • *containing atoms other than carbon and hydrogen in the side groups to the backbone*	
N	*8/894*	• • • • • • *side groups containing halogen, e.g. fluorosilicones*	
N	*8/895*	• • • • • • *side groups containing nitrogen, e.g. amodimethicone*	
N	*8/896*	• • • • • • *side groups containg oxygen, e.g. dimethiconol*	
N	*8/897*	• • • • • • • *modified by an alkoxy group, e.g. behenoxy dimethicone*	
N	*8/898*	• • • • • • • *modified by a polyoxyalkylene group, e.g. cetyl dimethicone copolyol*	
N	*8/899*	• • • • • • *side groups containing sulfur (8/898 takes precedence)*	
N	*8/90*	• • • *Block copolymers (8/89 takes precedence)*	R
N	*8/91*	• • • *Graft copolymers (8/89 takes precedence)*	R
N	*8/92*	• • *Oils, fats or waxes; Derivatives thereof, e.g. hydrogenation products*	R

ANNEXE 24F **A 61 K** **[Project-Rapporteur : 412/EP] (T:EP) - SC/06/5** **<SC07011F> <SC06009E>**

R

N	*Note(s) après 8/00*		
		(1)	*Dans chacun des groupes 8/02 à 8/18, sauf indication contraire, le classement s'effectue à la dernière place appropriée.*
		(2)	*L'utilisation de cosmétiques ou de préparations similaires pour la toilette est en outre classée dans la sous-classe A 61 Q.*
		(3)	*Il est important de tenir compte des notes de la classe C 07, par exemple des notes qui suivent le titre de la sous-classe C 07 D, qui indiquent les règles pour le classement des composés organiques dans cette classe, ces règles s'apliquant aussi au classement des composés organiques dans le groupe 8/00, sauf indication contraire.*
		(4)	*Les sels ou les complexes des composés organiques sont classés selon les composés actifs de base. Si un complexe est formé entre plusieurs composés actifs, le classement s'effectue à la dernière place appropriée.*
N	*8/03*	• •	*Compositions liquides avec au moins deux couches distinctes*
N	*8/04*	• •	*Dispersions; Émulsions*
N	*8/06*	• • •	*Émulsions*
N	*8/11*	• •	*Compositions encapsulées*
N	*8/14*	• •	*Liposomes*
N	*8/19*	• •	*contenant des composés inorganiques*
N	*8/20*	• • •	*Halogènes; Leur composés*
N	*8/21*	• • • •	*Fluorures; Leurs dérivés*
N	*8/22*	• • •	*Peroxydes; Oxygène; Ozone*
N	*8/23*	• • •	*Soufre; Sélénium; Tellure; Leurs composés*
N	*8/24*	• • •	*Phosphore; Ses composés*
N	*8/25*	• • •	*Silicium; Ses composés*
N	*8/26*	• • •	*Aluminium; Ses composés*
N	*8/27*	• • •	*Zinc; Ses composés*
N	*8/28*	• • •	*Zirconium; Ses composés*
N	*8/29*	• • •	*Titane; Ses composés*
N	*8/30*	• •	*contenant des composés organiques*
N	*8/31*	• • •	*Hydrocarbures*
N	*8/33*	• • •	*contenant de l'oxygène*
N	*8/34*	• • • •	*Alcools*
N	*8/35*	• • • •	*Cétones, p.ex. quinones, benzophénone*
N	*8/36*	• • • •	*Acides carboxyliques; Leurs sels ou anhydrides*

N	*8/362*	• • • • • *Acides polycarboxyliques*
N	*8/365*	• • • • • *Acides hydroxycarboxyliques; Acides cétocarboxyliques*
N	*8/368*	• • • • • *dans lesquels le groupe carboxyle est directement lié aux atomes de carbone du cycle aromatique*
N	*8/37*	• • • • *Esters d'acides carboxyliques*
N	*8/38*	• • • • *Percomposés, p.ex. peracides*
N	*8/39*	• • • • *Dérivés alkoxylés*
N	*8/40*	• • • *contenant de l'azote (quinones contenant de l'azote 8/35)*
N	*8/41*	• • • • *Amines*
N	*8/42*	• • • • *Amides*
N	*8/43*	• • • • *Guanidines*
N	*8/44*	• • • • *Acides aminocarboxyliques ou leurs dérivés, p.ex. acides aminocarboxyliques contenant du soufre; Leurs sels, esters ou dérivés N-acylés*
N	*8/45*	• • • • *Dérivés alkoxylés*
N	*8/46*	• • • *contenant du soufre (8/44 a priorité)*
N	*8/49*	• • • *contenant des composés hétérocycliques*
N	*8/55*	• • • *contenant du phosphore*
N	*8/58*	• • • *contenant des atomes autres que des atomes de carbone, hydrogène, halogène, oxygène, azote, soufre ou phosphore*
N	*8/60*	• • • *Sucres; Leurs dérivés*
N	*8/63*	• • • *Stéroïdes; Leurs dérivés*
N	*Note(s) après 8/63*	*Le présent groupe couvre les stéroïdes tels qu'ils sont définis dans la Note (1) après le titre de la sous-classe C 07 J.*
N	*8/64*	• • • *Protéines; Peptides; Leurs dérivés ou produits de dégradation*
N	*8/65*	• • • • *Collagène; Gélatine; Kératine; Leurs dérivés ou produits de dégradation*
N	*8/66*	• • • • *Enzymes*
N	*8/67*	• • • *Vitamines*
N	*8/68*	• • • *Sphingolipides, p.ex. céramides, cérébrosides, gangliosides*
N	*8/69*	• • • *contenant du fluor*
N	*8/70*	• • • • *contenant des groupes perfluorés, p.ex. perfluoroéthers*
N	*8/72*	• • *contenant des composés organiques macromoléculaires*
N	*8/73*	• • • *Polysaccharides*
N	*8/81*	• • • *obtenus par des réactions faisant intervenir uniquement des liaisons insaturées carbone-carbone*
N	*8/84*	• • • *obtenus par des réactions autres que celles faisant intervenir uniquement des liaisons insaturées carbone-carbone*

N	*8/89*		• • • • *Polysiloxanes*
N	*8/90*		• • • *Polymères séquencés (8/89 a priorité)*
N	*8/91*		• • • *Polymères greffés (8/89 a priorité)*
N	*8/92*		• • *Huiles, graisses ou cires; Leurs dérivés, p.ex. produits d'hydrogénation*
N	*8/96*		• • *contenant des produits de constitution indéterminée ou leurs dérivés*
N	*8/97*		• • • *d'origine végétale, p.ex. extraits de plantes*
N	*8/98*		• • • *d'origine animale*
N	*8/99*		• • • *de micro-organismes*

ANNEX 25 **A 61 P** **[Project-Rapporteur : 412/EP]** **<SC07010E>**

N	*17/18*		• *Antioxidants, e.g. antiradicals (preparations for protection against sunlight A 61 Q 17/00)*

ANNEX 26E **A 61 Q** **[Project-Rapporteur : 412/EP]** **<SC07009E>**

N	*Note(s) after the title*			R
		(1)	*This subclass covers the use of cosmetics or similar toilet preparations already classified as such in main group A 61 K 8/00, in subclasses C 11 D or C 12 N, or in classes C 01, C 07 or C 08.*	
		(2)	*When classifying in this subclass, classification is also made in subclass A 61 P if the preparation is stated to have therapeutic activity.*	
		(3)	*In this subclass, the use of cosmetics or similar toilet preparations is classified in all appropriate places.*	
		(4)	*The classification symbols of this subclass are not listed first when assigned to patent documents.*	
N	***1/00***		***Make-up preparations; Body powders; Preparations for removing make-up***	R
N	*1/02*		• *Preparations containing skin colorants, e.g. pigments*	
N	*1/04*		• • *for lips*	
N	*1/06*		• • • *Lipsticks*	
N	*1/08*		• • *for cheeks, e.g. rouge*	
N	*1/10*		• • *for eyes, e.g. eyeliner, mascara*	
N	*1/12*		• *Face or body powders, e.g. for grooming, adorning or absorbing*	
N	*1/14*		• *Preparations for removing make-up*	
N	*3/02*		• *Nail coatings*	
N	*3/04*		• *Nail coating removers*	
N	*5/02*		• *Preparations for cleaning the hair*	

N	*5/04*	• *Preparations for permanent waving or straightening the hair*	
N	*5/06*	• *Preparations for styling the hair, e.g. by temporary shaping or colouring*	
N	*5/08*	• *Preparations for bleaching the hair*	
N	*5/10*	• *Preparations for dyeing the hair*	
N	*5/12*	• *Preparations containing hair conditioners*	
N	*Note(s) after 7/00*		
		Informative note *References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:* *Preparations with therapeutic activity A 61 P 17/14.*	
N	*7/02*	• *Preparations for inhibiting or slowing hair growth*	
N	*9/02*	• *Shaving preparations*	
N	*9/04*	• *Depilatories*	
N	*11/02*	• *Preparations for deodorising, bleaching or disinfecting dentures*	
N	***13/00***	***Formulations or additives for perfume preparations*** *(essential oils or perfumes per se C 11 B 9/00)*	R
N	***17/00***	***Barrier preparations; Preparations brought into direct contact with the skin for affording protection against external influences, e.g. sunlight, X-rays or other harmful rays, corrosive materials, bacteria or insect stings*** *(chemical means for combating harmful chemical agents A 62 D 3/00)*	R
N	*Note(s) after 17/00*		
		Informative note *References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:* *Drugs for treating burns A 61 P 17/02.*	
N	*17/02*	• *containing insect repellants*	
N	*Note(s) after 17/02*		
		Informative note *References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:* *Pest repellants A 01 N.*	
N	*17/04*	• *Topical preparations for affording protection against sunlight or other radiation; Topical sun tanning preparations*	
N	*19/02*	• *for chemically bleaching or whitening the skin*	
N	*19/04*	• *for chemically tanning the skin (topical sun tanning preparations 17/04)*	

N	*19/06*	•	*for countering cellulitis*
N	*19/08*	•	*Anti-ageing preparations*

ANNEXE 26F **A 61 Q** **[Project-Rapporteur : 412/EP]** **<SC07012F>**
(T:EP) - SC/06/5 **<SC06008E>**

N *Note(s) après le titre* R

(1) *La présente sous-classe couvre l'utilisation de cosmétiques ou de préparations similaires pour la toilette déjà classés en tant que tels dans le groupe principal A 61 K 8/00, dans les sous-classes C 11 D ou C 12 N, ou dans les classes C 01, C 07 ou C 08.*

(2) *Lors du classement dans la présente sous-classe, un classement dans la sous-classe A 61 P est également attribué si la préparation est déclarée présenter une activité thérapeutique.*

N ***17/00*** R

Préparations protectrices; Préparations employées en contact direct avec la peau pour protéger des influences extérieures, p.ex. des rayons du soleil, des rayons X ou d'autres rayons nuisibles, des matériaux corrosifs, des bactéries ou des piqûres d'insectes *(moyens chimiques pour combattre des agents chimiques nuisibles A 62 D 3/00)*

N *Note(s) après 17/00*

Note d'information

Les renvois ci-après indiquent les endroits de la CIB qui peuvent également présenter un intérêt pour une recherche portant sur la matière couverte par le groupe qui précède:

Médicaments pour traiter les brûlures A 61 P 17/02.

UK Patent Office **Date: 24 September 2002**

Comments on Project C412 , Subclass A61K

Comments were invited, in Annex 67, on the following points. Questions are in **bold**, comments in normal script.

$ Does the new group A61K 8/892 cover a sufficient number of documents?
We can=t think of many, if at all. We would observe, however, that the unsaturated aliphatic groups involved may be few in number (vinyl, allyl, butadiene etc.) and have standard terminology, and therefore should be easily text-searched. This group may well be of little use.

$ Which examples would be desirable to introduce in the new group A61K 8/899 in order to illustrate its contents?
This group is clear enough as it is, and in view of the last place rule would automatically take documents that cannot clearly be put into a superior group. We don=t think examples are needed.

$ Are precedence references needed between the new groups A61Q 1/02 and 1/12?
A61Q is a multiple classification subclass, so precedence references are not usually needed. Having said this, a separation could be made here regarding the fact that the preparations of 1/12 are in powder form. If so, perhaps we could add the following to 1/02:

C 1/02 - - - pigments (preparations in powder form 1/12)

$ How to clarify the borderline between A61Q 5/06 and 5/10.
The matter of Atemporary@ *versus* Apermanent@ was discussed at WG/7, and we were unable to shed much light (or colour) onto the subject! As an easy-ish way out, we might suggest amending 5/10 to read:

C 5/10 . Preparations for dyeing the hair, other than by temporary colouring

$ Should existing group A61P 17/16 be deleted in view of its file size?
Probably not. It may be too early to judge whether introducing this group was a mistake, since it was only introduced at IPC7. There are many other imperfections in the IPC and this is not the worst of them.

Martin Price

STATE OFFICE FOR INVENTIONS
AND TRADEMARKS

Date

:27 September 2002
Page: 1

RO COMMENTS

PROJECT :C 412
Class/Subclass : A61K

Comments were invited on :

-whether the new group 8/892 covered a sufficient number of documents to be retained in the classification scheme

We consider that this new group could be a particular place for all this compounds even if the file size is not so large . We would like to draw the attention to the fact that in the Annex 24E of the report the subgroup 8/89 ....Polysiloxanes is missing from the scheme.

-which examples would be desirable to introduce in the new group 8/899 in order to illustrate its contents

Even if this group is clear enough , for the reason of symmetry with the other previous subgroups, an example could be given, e.g. disodium PG-propyldimethicone thiosulphat

-are precedence references needed between the new groups A61Q 1/02 and 1/12 ?

We do not see the need of any precedence references because the two subgroups cover preparations having different intentions for their use and also because A61Q is a multiple classification subclass where such precedence references are not usually needed.

-how to clarify the borderline between A61Q 5/06 and 5/10 ?

We consider that the difficulty in establishing the borderline between the subject matter of this

subgroups consist in matter of Atemporary@ or Apermanent@. In fact no hair dye is permanent. Such dyes are easy washable or more resistant in time depending on how deep is penetrating the dye in the structure of the hair based on the components of the dye. The temporary coloring preparations are the most easy-washable and usually are used for styling. Taking into account this, we appreciate that the existing subgroups are sufficient clear as they are.

-should existing group A61P 17/16 be deleted in view of its file size ?

We are of the opinion not to delete this subgroup.

Mirela Georgescu

EUROPEAN PATENT OFFICE
Principal Directorate Documentation

Comments
14 September 2002

Project: C412 Subclass: A61K

Re: IPC/WG/7/7

Comments were asked on:

- whether the new group 8/892 covered a sufficient number of documents to be retained in the classification scheme

The ECLA group only contains 22 documents, so group 8/892 can be deleted.

- which examples would be desirable to introduce in the new group 8/899 in order to illustrate its contents

We found two examples: dimethicone/disodium PG-propyldimethicone thiosulfate copolyol and dimethicone/sodium PG-propyldimethicone thiosulfate copolyol.

- whether any precedence references were needed between the new groups A61Q1/02 and 1/12

Group A61Q1/02 would contain products such as liquid foundation and 1/12 would contain powder products.
We think that group 1/12 could be deleted because nowadays preparations such as compact powder used as make-up would have to be classified in both groups. Furthermore, it related to a shape of product more than its use.

- how the borderline between the new groups 5/06 and 5/10 in respect of subject matter relating to temporary colouring or dyeing the hair could be clarified and whether additional examples should be introduced for this purpose

We think that the example referring to "colouring" the hair in group 5/06 should be deleted.
In the text books, dyeing the hair refers to permanent, temporary or semi-temporary precesses. Temporary and semi-temporary processes use colorant per se, that will go with washing the hair, whereas permanent dyeing uses colorant which are only effective with coupling agents.

Therefore, we think that "styling" the hair should only involve shaping., and usually involves the use of polymers.

- whether the existing group A 61 P 17/16 should be deleted, in view of its insignificant file size

Old group A61P 17/16 contains three types of compositions:
- sun screen compositions, either topical or oral, which will now be in cosmetic preparations.
- moisturizing compositions: if used for dry skin for e.g., will be cosmetic; if used for eczema, will stay in A61P, namely A61P17/00
- anti-oxydant compositions: radical scavengers, so will go in A61P17/18

Therefore, we think that A61P17/16 should be deleted.

- Additional points:
We would like to change the title of the following groups: A61k8/39 and A61K8/45. Instead of "Alkoxylated derivatives" we would like to add: --- "i.e. derivatives containing from 2 to 10 oxyalkylene groups".

The idea is to classify in these groups compounds like steareth-2 but not ethers like dioctyl ether, which would be classified in A61K8/33 (..containing oxygen). The reference to the number of oxyalkylene groups is necessary because any derivative containing more than 11 oxyalkylene groups would be considered as a polymer and therefore classified under A61K8/86, for example the PEG-120 glyceryl stearate.

Anne Glanddier

DEUTSCHES PATENT- UND MARKENAMT German Patent and Trade Mark Office	Class/Subcl.: **A61K** Date : 01/10/2002
DE - Comments — C 412	

1. ***Does the new group A61K8/892 cover a sufficient number of documents?***

   In our opinion the group covers a sufficient number of documents. Therefore, we strongly suggest that the group be kept.

2. ***Which examples would be desirable to introduce in the new group A61K 8/899 in order to illustrate its contents?***

   Since to us the new group appears to be clear without ambiguity, we do not think examples are necessary.

3. ***Are precedence references needed between the new groups A61Q1/02 and 1/12?***

   We are in favour of the proposal by the UK adding the wording ‘preparations in powder form 1/12’ to the subgroup title of A61Q1/02.

4. ***How is the borderline clarified best between the new groups A61Q 5/06 and 5/10?***

   Preparations for styling the hair, e.g. by temporary shaping or colouring refer to colour-changing products, such as colour setting lotions, creams and mousse. To disambiguate the preparations covered by 5/06 we propose that the examples mentioned above should be introduced.

   Preparations used for permanent dyeing the hair often are mixtures of direct dyestuffs and oxidation hair dyes. Direct dyestuffs are ‘ready-made’, exist as coloured compounds, and are less permanent than oxidation hair colours. As hair colorants today are tailor-made and therefore cannot be bought ‘off-the-peg’ from the chemical industry, mixtures of different categories of dyestuffs are used.

   To avoid confusion we suggest to keep the subgroup title for A61Q 5/10 as proposed in Annex 67.

5. Should the existing group A61P17/16 be deleted in view of its file size?

We do not agree to delete the existing group A61P17/16.

Martina Fritzsche

OFFICE EUROPEEN DES BREVETS
Direction Principale Documentation

Traduction
23 octobre 2002

Projet: C412 **Version Française**

Re: IPC/WG/7/7

Remarques:
- Le terme anglais "backbone" adopté dans le groupe 8/893 n'est pas utilisé dans la CIB. On lui préfère l'expression "main chain".
- Pour le groupe A61Q5/12, le terme "conditionnement" est maintenant utilisé par les déposants; le terme traitement est peut-être trop large.

Sous-Classe: A61K

N 8/85	Polyesters
N 8/86	Polyéthers
N 8/87	Polyuréthanes
N 8/88	Polyamides
N 8/891	saturés, p.ex. diméthicone, phényl triméthicone
N 8/892	contenant du silicium lié à des groupes aliphatiques insaturés, p.ex. vinyl diméthicone
N 8/893	contenant d'autres atomes que le carbone et l'hydrogène dans les chaînes latérales de la chaîne principale
N 8/894	les chaînes latérales contenant des atomes d'halogène, p.ex. fluorosilicones
N 8/895	les chaînes latérales contenant de l'azote, p.ex. amodiméthicone
N 8/896	les chaînes latérales contenant de l'oxygène, p.ex. diméthiconol
N 8/897	modifiées par des groupes alkoxyles, p.ex. behenoxy diméthicone
N 8/898	modifiées par des groupes polyoxyalkylènes, p.ex. cétyl diméthicone copolyol
N 8/899	les chaînes latérales contenant du soufre (8/898 a priorité)

Sous-Classe: A61P

N 17/18 . Antioxydants, p.ex. antiradicaux (utilisation de préparations pour la protection contre le soleil A61Q17/00)

Sous-Classe: A61Q

Note(s) après le titre

(3) Dans la présente sous-classe, l'utilisation de cosmétiques ou de préparations similaires pour la toilette est classée dans tous les endroits appropriés.
(4) Les symboles de classement relatifs à la présente sous-classe ne sont pas placés en premier sur les documents de brevets.

N **1/00** **Préparations pour le maquillage; Poudres corporelles; Préparations pour le démaquillage** R

N 1/02 . Préparations contenant des colorants cutanés, p.ex. pigments

N 1/04 . . pour les lèvres

N 1/06 . . . Rouges à lèvres

N 1/08 . . pour les joues, p.ex. fard

N 1/10 . . pour les yeux, p.ex. eye-liner, mascara

N 1/12 . Poudres pour le visage ou le corps p.ex. pour l'entretien, l'embellissement ou l'absorption

N 1/14 . Préparations pour le démaquillage

N 3/02 . Vernis à ongles

N 3/02 . Produits pour enlever le vernis à ongles

N 5/02 . Préparations pour le lavage des cheveux

N 5/04 . Préparations pour onduler de façon permanente ou décrêper les cheveux

N 5/06 . Préparations pour mettre les cheveux en forme, p.ex. pour mettre en forme ou colorer temporairement

N 5/08 . Préparations pour la décoloration des cheveux ou des poils

N 5/10 . Préparations pour la teinture des cheveux ou des poils

N 5/12 . Préparations contenant des agents de conditionnement des cheveux

N	Note(s) après 7/00	Note d'information Les renvois ci-après indiquent les endroits de la CIB qui peuvent également présenter un intérêt pour une recherche portant sur la matière couverte par le groupe qui précède: Préparations ayant une activité thérapeutique A61P17/14.
N	7/02	. Préparations pour empêcher ou feriner la pousse des cheveux ou des poils
N	9/02	. Préparations pour le rasage
N	9/04	. Dépilatoires
N	11/02	. Préparations pour désodoriser, décolorer ou désinfecter les prothèses dentaires
N	**13/00**	**Formulations ou additifs pour les préparations de parfums** (huiles essentielles ou parfums en soi C 11 B 9/00) R
N	17/02	. contenant des produits insecticides
N	Note(s) après 17/02	Note d'information Les renvois ci-après indiquent les endroits de la CIB qui peuvent également présenter un intérêt pour une recherche portant sur la matière couverte par le groupe qui précède: Pesticides A01N
N	17/04	. Préparations topiques pour faire écran au soleil ou aux radiations; Préparations topiques pour bronzer
N	19/02	. pour décolorer ou blanchir la peau chimiquement
N	19/04	. pour colorer chimiquement la peau (préparations topiques pour bronzer 17/04)
N	19/06	. Préparations pour lutter contre la cellulite
N	19/08	. Préparations contre le vieillissement

Anne Glanddier.

EUROPEAN PATENT OFFICE
Principal Directorate Documentation

Rapporteur Report
25 October 2002

Project: C412 Subclass: A61K/A61Q

Re: IPC/WG/7/7

Comments were received from UK, RO, EP, DE.

Comments were asked on:

- whether the new group 8/892 covered a sufficient number of documents to be retained in the classification scheme

As two offices want to keep the group, and two are for deleting it, R. suggests to keep it, unless more offices express an opinion at the next WG meeting.

- which examples would be desirable to introduce in the new group 8/899 in order to illustrate its contents

Again, the opinions are divided, so R. suggests to introduce one example: dimethicone/disodium PG-propyldimethicone thiosulfate copolyol

- whether any precedence references were needed between the new groups A61Q1/02 and 1/12

R. suggests to follow UK proposal, i.e. adding the following reference:

C 1/02 $ Preparations containing skin colorants, e.g. pigments **(preparations in powder form 1/12)**

- how the borderline between the new groups 5/06 and 5/10 in respect of subject matter relating to temporary colouring or dyeing the hair could be clarified and whether additional examples should be introduced for this purpose

R. suggests to change the wording according to UK suggestion:

C 5/10 $ Preparations for dyeing the hair, **other than by temporary colouring**

- whether the existing group A 61 P 17/16 should be deleted, in view of its insignificant file size

A61P17/16 should not be deleted.

- Additional points:

R. would like to know the opinion of the offices on whether the title of groups: A61k8/39 and A61K8/45 should be changed; instead of "Alkoxylated derivatives" EP would like to add: --- "i.e. derivatives containing from 2 to 10 oxyalkylene groups".

Anne Glanddier.

IPC/C 413/98
ORIGINAL: English/French
DATE: October 18, 2002

WORLD INTELLECTUAL PROPERTY ORGANIZATION
ORGANISATION MONDIALE DE LA PROPRIÉTÉ INTELLECTUELLE

GENEVA/GENÈVE

COMMITTEE OF EXPERTS OF THE IPC UNION
COMITÉ D'EXPERTS DE L'UNION DE L'IPC

IPC REVISION PROJECT FILE/DOSSIER DE PROJET DE RÉVISION DE LA CIB

PROPOSAL BY: **GB** **PROPOSITION DE :**	**REVISION OF IPC AREA:** **B 01 D** **RÉVISION DU DOMAINE DE LA CIB :**
KIND OF REVISION: **Creation of subgroups** **TYPE DE RÉVISION :** **Création de sous-groupes**	

ANNEX/ ANNEXE	CONTENT/CONTENU		ORIGIN/ ORIGINE	DATE
1	Revision request with detailed proposal	/ Demande de révision avec proposition détaillée	GB	12.98
2	Comments	/ Observations	EP	05.99
3	Proposal	/ Proposition	EP	05.99
4	Comments	/ Observations	SE	05.99
5	Comments	/ Observations	CA	05.99
6	Comments	/ Observations	RO	05.99
7	Comments	/ Observations	JP	07.99
8	Comments	/ Observations	DE	07.99
9	Rapporteur report	/ Rapport du rapporteur	GB	09.99
10	Rapporteur proposal	/ Proposition du rapporteur	GB	11.99
11	Decision of the Working Group	/ Décision du groupe de travail	WG	12.99
12	Proposal	/ Proposition	EP	03.00
13	Comments	/ Observations	EP	03.00
14	Comments	/ Observations	GB	03.00

RAPPORTEUR : GB **TECHNICAL FIELD/DOMAINE TECHNIQUE : C**

ANNEX/ ANNEXE	CONTENT/CONTENU		ORIGIN/ ORIGINE	DATE
15	Comments	/ Observations	DE	03.00
16	Comments	/ Observations	RO	03.00
17	Comments	/ Observations	CA	05.00
18	Comments	/ Observations	CA	05.00
19	Rapporteur report	/ Rapport du rapporteur	GB	05.00
20	Rapporteur proposal	/ Proposition du rapporteur	GB	05.00
21	Decision of the Working Group	/ Décision du groupe de travail	WG	09.00
22	Comments	/ Observations	EP	09.00
23	Proposal	/ Proposition	EP	09.00
24	Comments	/ Observations	JP	09.00
25	Comments	/ Observations	CA	09.00
26	Comments	/ Observations	RO	09.00
27	Comments	/ Observations	DE	11.00
28	Comments	/ Observations	GB	11.00
29	French version of approved amendments	/ Version française des modifications approuvées	FR	11.00
30	Comments	/ Observations	SE	11.00
31	Rapporteur report	/ Rapport du rapporteur	GB	11.00
32	Rapporteur proposal	/ Proposition du rapporteur	GB	11.00
33	Decision of the Working Group	/ Décision du groupe de travail	WG	01/01
34	Comments	/ Observations	EP	04.01
35	Comments	/ Observations	US	04.01
36	French version of approved amendments	/ Version française des modifications approuvées	FR	04.01
37	Comments	/ Observations	JP	06.01
38	Comments	/ Observations	EP	06.01
39	Comments	/ Observations	CA	06.01
40	Comments	/ Observations	RU	06.01
41	Comments	/ Observations	FR	06.01
42	Comments	/ Observations	RO	06.01

ANNEX/ ANNEXE	CONTENT/CONTENU		ORIGIN/ ORIGINE	DATE
43	Comments	/ Observations	GB	06.01
44	Comments	/ Observations	DE	06.01
45	Comments	/ Observations	FR	06.01
46	Rapporteur report	/ Rapport du rapporteur	GB	06.01
47	Comments	/ Observations	CA	08.01
48	Comments	/ Observations	EP	10.01
49	Decision of the Working Group	/ Décision du groupe de travail	WG	10.01
50	Comments	/ Observations	JP	10.01
51	Comments	/ Observations	FR	10.01
52	Comments	/ Observations	RO	10.01
53	French version of approved amendments	/ Version française des modifications approuvées	FR	10.01
54	Rapporteur proposal	/ Proposition du rapporteur	GB	10.01
55	Comments	/ Observations	DE	10.01
56	Rapporteur report	/ Rapport du rapporteur	GB	11.01
57	Comments	/ Observations	RU	11.01
58	Decision of the Working Group	/ Décision du groupe de travail	WG	01.02
59	Comments	/ Observations	JP	04.02
60	Comments	/ Observations	RU	04.02
61	Comments	/ Observations	RO	04.02
62	Comments	/ Observations	EP	04.02
63	Comments	/ Observations	DE	04.02
64	French version of approved amendments	/ Version française des modifications approuvées	FR	04.02
65	Proposal	/ Proposition	EP	05.02
66	Rapporteur report	/ Rapport du rapporteur	GB	05.02
67	Decision of the Working Group	/ Décision du groupe de travail	WG	07.02
68	Comments	/ Observations	RU	09.02
69	Comments	/ Observations	RU	09.02
70	Comments	/ Observations	RO	09.02

ANNEX/ ANNEXE	CONTENT/CONTENU		ORIGIN/ ORIGINE	DATE
71	Comments	/ Observations	EP	09.02
72	Comments	/ Observations	JP	10.02
73	Rapporteur report	/ Rapport du rapporteur	GB	10.02
74	Rapporteur proposal	/ Proposition du rapporteur	GB	10.02

ANNEX 67

EXCERPT FROM DOCUMENT IPC/WG/7/7/
EXTRAIT DU DOCUMENT IPC/WG/7/7

Project C 413 (chemical) – Comments were invited on the rapporteur report (see Annex 66 to the project file), in particular on the questions raised by the Rapporteur.

Comments were also invited on the new catchwords proposed by the EPO under this Project (see document IPC/WG/7/6, Annex II).

Projet C 413 (chimie) – Des observations ont été demandées sur le rapport du rapporteur (voir l'annexe 66 du dossier de projet), en particulier sur les questions soulevées par ce dernier.

Des observations ont aussi été demandées sur les nouveaux mots clés proposés par l'OEB dans le cadre de ce projet (voir l'annexe II du document IPC/WG/7/6).

FEDERAL INSTITUTE OF INDUSTRIAL PROPERTY

RU comments	
Project : C 413	**Date: 25.09.2002**
Class/Subclass : B01D	

Re: IPC WG/7/7

The rapporteur invites comments on:

- Should a reference to B01J 20/00 be inserted in either of (a) the references after the title "Ion exchange" before B01J 39/00, or (b) after the new subgroups B01J 39/26 and 41/20?

Taking into consideration the latest modifications of the schemes B01J 39/00 and 41/00 there appear two more subgroups apart from B01J 39/26 and 41/20 that references to B01J 20/00 might be introduced in. These are B01J 39/08 and 41/08. But actually we would prefer the only one after the title "Ion exchange".

- Is the new subgroup B01D 15/28 necessary in view of RU's comments?

We still believe subgroup B01D 15/28 to be superfluous for the reasons we have stated before (see Annex 60 to the project file).

FEDERAL INSTITUTE OF INDUSTRIAL PROPERTY

RU comments	
Project : C 413	**Date: 25.09.2002**
Class/Subclass : B01D	**New catchwords**

Re: IPC WG/7/6

Comments were invited on the new catchwords proposed by the EPO.

Chromatography

We propose one more entry in addition to those proposed by the EPO:

"ion-exchangers for - B01J 39/26, 41/20"

Sorbents

Once it was decided to introduce an entry for "Sorbents", an entry containing indication to B01J 20/00 might be helpful as well.

However, the proposed multi-part group B01J 20/00 title requires that *liquid* sorbents not be classified in B01J 20/00 unless they are used for chromatographic processes.

Therefore we would like two more entries to be added to those proposed by the EPO:

"solid - B01J20/00"
"liquid - B01D 11/00"

STATE OFFICE FOR INVENTIONS
AND TRADEMARKS

Date : 27 September 2002
Page: 1

RO COMMENTS

PROJECT :C 413
Class/Subclass : B01D

Comments were invited on the catchwords proposed by the EPO :

Chromatography

We support the addition of an entry under this catchword proposed by the EPO regarding to
Aion exchanger for- B01J 39/26, 41/20"

The rapporteur invites also comments on:

-should a reference to B01J 20/00 be inserted in either of (a) the references after the title Aion exchange@ before B01J 39/00, or (b) after the new sub-groups B01J39/26 and 41/20

We prefer to introduce the references after the subgroups B01J 39/26 and 41/20 because the subject -matter of the subgroups are directly related, all of them being no processes or techniques but materials.

-is the new subgroup B01D 15/28 necessary in view of RU=s comments ?

We agree with the opinion of RU regarding the subgroup B01D 15/28, considering that chromatography is a particular case of adsorption, which is a process involving different

mechanisms of separation.

Mirela Georgescu

EUROPEAN PATENT OFFICE
Principal Directorate Documentation

Comments
16 September 2002

Project: C413 **Subclass: B01D / B01J**

Re.: - WPI/WG/7/7 prov., par.43, p. 11
- Annex 66 to the project file (GB Rapporteur Report)
- Annex 65 to the project file (EP proposal for new catchwords) = IPC/WG/7/6, annex II

I. Rapporteur's questions

1) *Reference to B01J20/00 needed ? :*

B01J20 relates to non-ion exchange sorbents, e.g. for chromatography. Thus it is obvious that this subject matter is not to be found under the "ion-exchange heading". It should also be obvious to a user of the IPC that an entry for such subject matter exist elsewere. So a reference to B01J20/00 could only be informative and thus only the definition layer should be considered for a possible reference.

2) *Group B01D15/28*:

This discussion also took place during the sixth session of the WG. So we will repeat here our arguments.

Although we agree that *adsorption chromatography* is a general term for types of chromatography involving a solid sorbent as stationary phase, this term does not include the various other chromatography separation mechanisms represented by the further sub-groups B01D15/30-15/38 (see literature)**.** Something that could be explained in the definition layer. Therefore, in our opinion, B01D15/28 should be maintained in order to classify documents describing chromatography separation mechanisms based only on adsorption, even if there might not be so many documents for this group.

R opinion that this group is a residual group for "other" chromatographic mechanisms is thus not correct, for the residual groups are 15/38 and 15/26**.**

II. Rapporteur Proposal

1) Precedence reference in B01D15/04 pointing to 15/36 : we agree
2) Change in guide heading before B01J39/00: we agree
3) Delete note (3) before B01J39/00: we agree

III. Wording of new group B01D15/38

According to our experts, in modern chromatography literature, the expression *ligand exchange chromatography* is used but not the expression *ligand chromatography*. Furthermore, *ligand exchange chromatography* and *complexation chromatography* are technically equivalent. The latter expression however is used less than the first one.

Therefore, EP propose to amend the wording of the new group B01D15/38 as follows:

N 15/38 ***. . . involving specific interaction not covered by one or more of groups 15/28 to 15/36***, ***e.g. affinity, ligand exchange or chiral chromatography*** R

IV. Proposal for new catchwords

In the proposal of annex 65 to the project file (or in annex II of document IPC/WG/7/6, the two annexes being equivalent), the term *ADSORBANTS* in the French Version, should be in singular.

Paul Daeleman

Japan Patent Office

September 30, 2002

Project: C-413 Subclass: B01D

JP Comments on Rapporteur Report on May 27, 2002, and EP New Catchwords on May 27, 2002

1. Rapporteur Report of Annex 66

(i) **Should a reference to B01J 20/00 be inserted in either of (a) the references after the title "Ion exchange" before B01J 39/00, or (b) after the new sub-groups B01J 39/26 and 41/20?**

Whether it is in solid form or liquid form, ion exchange sorbents should be classified in B01J39/ and B01J41/, and it is not necessary to create a reference indicating a classification of solid form into B01J20/.

(ii) Is the new subgroup B01D 15/28 necessary in view of RU's comments?

Basically, there has been no trouble with the relationship between "absorption" of subgroup B01D15/08 and "absorbents" of subgroup D01D15/00. We, therefore, think there will be no problem with the relationship between "absorption" of B01D15/28 and "absorbents" of D01D15/00, either.
Furthermore, we do no see any difficulty with that between "absorption" of B01D15/28 and "absorption" of D01D15/08 being a superior classification of B01D15/28.
Subgroup B01D15/28 is not an inadequate classification, nor is it necessary to delete.

•C B01D 15/04 .- - - adsorbents *(15/36 takes precedence)*

We agree to insert the reference "15/36 takes precedence" herein.

• C Title before B01J 39/00 <u>Ion-exchange</u> (treatment of milk A32C 9/14*; separation by ion-exchangers B01D, eg by liquid ion-exchangers B01D 11/00, separation of liquids by ion-exchange adsorbents B01D 15/04*; separation of isotopes B01D 59/00; - -

The wording "e.g. by liquid ion-exchangers B01D 11/00" does not seem to be appropriate herein since subgroup "B01D11/00" is a place for "solvent extraction" which is not equal to "ion-exchangers."

• D Note (3) before B01J 39/00. <Delete Note>
We agree with the deletion of this note.

2. New Catchword Proposed by EP of Annex 65 (IPC/WG/7/6)

We support the additional new entries of 1) Chromatography and 2) Sorbents in the Catchword Index.

UK Patent Office **Date: 16 October 2002**

Rapporteur Report on Project C413, Subclasses B01D/B01J

Comments were invited on the Rapporteur report of Annex 66, in particular on the questions raised by the Rapporteur; comments were also invited on the catchwords proposed by EP.

Comments came from RU, RO, EP and JP (Annexes 68-72), including comments on the catchwords.

Questions raised by the Rapporteur

The questions were:

(i) Should a reference to B01J 20/00 be inserted in either of (a) the references after the title AIon exchange@ before B01J 39/00, or (b) after the new sub-groups B01J 39/26 and 41/20?

(ii) Is the new subgroup B01D 15/28 necessary in view of RU=s comments?

On question (i), JP and EP commented that there was no need for such a reference, EP pointing out that such a reference would be informative not limiting, and therefore the reference should go into the definition layer of project D024. RO and RU want a reference, but one of them in (a) above and the other in (b) above.

There is no consensus here, but R agrees with EP that this reference would be an informative one. B01J 20/00 is not for ion-exchange materials, and B01J 39/00 and the two subgroups mentioned are. B01J 20/00 is not therefore taking matter that would otherwise be classified in 39/00. The accepted criteria for defining a *limiting* reference are not met, and therefore the reference is informative. R will not introduce the reference, but will take up this point in the context of definition project D024.

On question (ii), the level of agreement among Offices is no better, JP and EP wanting to keep B01D 15/28 and RU and RO feeling the group is superfluous. EP want this subgroup maintained, even though there may not be many documents in it, in order to classify documents describing chromatography separation mechanisms based only on adsorption. R=s feeling is to play safe and not to delete this group. If, however, this group does turn out to be superfluous in the years to come, it may be removed in revision at the advanced level.

R proposal in Annex 66

Only EP and JP make comments on the specific entries proposed by R in Annex 66. They agree with the proposals made except the reference to B01D 11/00 made under B01J 39/00. JP=s point is

correct since B01D 11/00 takes solvent extraction and does not at all refer to ion-exchange. Therefore the reference is (a) not strictly correct and (b) informative anyway. R will remove this reference and take up this point in the context of project D024.

R has however spotted that the next reference, which is to B01D 15/04, is correct but incomplete since 15/04 will now be subordinated to 15/36, so a (limiting) reference to 15/36 will also be needed. A proposed reference is in the consolidated proposal mentioned below. There appear to be no other informative references that need to be moved to the definition layer.

EP proposal on the wording of new group B01D 15/38

EP propose to change the wording of the example in the title of B01D 15/38, by replacing *Aligand chromatography@* with *Aligand exchange chromatography@* and deleting *Acomplexation chromatography@*. A brief search on EPODOC has been done by R. The expression (complex+ w chromatography) has zero hits on EPODOC, and (complexation and chromatography and (b01d/ic)) has only one hit. R can easily agree to the deletion of the term *Acomplexation chromatography@* from the title of 15/38.

The situation on *ligand (exchange) chromatography* is less clear, the expressions with and without *Aexchange@* having about 6 hits each depending how they are searched for. We are not talking big numbers here, so the matter is not of huge importance. EP seem to say that, according to their experts, the term *Aligand exchange chromatography@* is the more modern term so R can give EP the benefit of the doubt and accept their suggestion.

Catchwords

EP wish to correct one of their Annex 65 entries. RO and RU make a sensible suggestion for ion-exchangers for chromatography, and RU make an equally sensible suggestion for sorbents. These suggestions are incorporated in the consolidated proposal, with R providing French versions of the suggestions from RO and RU.

R=s consolidated proposal (for both IPC entries and catchwords) follows in another Annex, and will hopefully lead to completion of the project.

Martin Price

UK Patent Office **Date: 16 October 2002**

Rapporteur Proposal on Project C413, Subclass B01D/B01J

This is the consolidated proposal mentioned in the Rapporteur Report of even date.

B01D

C	15/04	- - - adsorbents (15/36 takes precedence)
C	15/38	- - - involving specific interaction not covered by one or more of groups 15/28 to 15/36, e.g. affinity, ligand exchange or chiral chromatography

B01J

C	Guidance heading before 39/00	Ion-exchange (treatment of milk A32C 9/14; separation by ion-exchangers B01D, e.g. separation of liquids by ion-exchange adsorbents B01D 15/04, chromatography involving ion-exchange B01D 15/36; separation of isotopes B01D 59/00; - - -.
D	Note (3) before 39/00	<Delete Note>

Catchwords

English version

(1) CHROMATOGRAPHY

- processes and apparatus	B01D 15/08
preparative gas -	B01D 53/02
sorbents for	B01J 20/281
- for investigating or analysing materials	G01N 30/00
ion-exchangers for	B01J 39/26, 41/20

(2) SORBENT(S)

solid -	B01J 20/00
liquid -	B01D 11/00
- for chromatography	B01J 20/281

French version

(1) CHROMATOGRAPHIE

analyse des matériaux par -	G01N 30/00
procédés et appareillages pour la séparation des liquides par -	B01D 15/08
- préparatoire en phase gazeuse	B01D 53/02
matériaux absorbants ou adsorbants pour -	B01J 20/281
échangeurs d'ions pour -	B01J 39/26, 41/20

(2) ADSORBANT (S)

- solides	B01J 20/00
- liquides	B01D 11/00
- pour la chromatographie	B01J 20/281

Martin Price

IPC/C 422/00
ORIGINAL: English/French
DATE: November 6, 2002

WORLD INTELLECTUAL PROPERTY ORGANIZATION
ORGANISATION MONDIALE DE LA PROPRIÉTÉ INTELLECTUELLE

GENEVA/GENÈVE

COMMITTEE OF EXPERTS OF THE IPC UNION
COMITÉ D'EXPERTS DE L'UNION DE L'IPC

IPC REVISION PROJECT FILE/DOSSIER DE PROJET DE RÉVISION DE LA CIB

PROPOSAL BY: **GB, US** **PROPOSITION DE :**	**REVISION OF IPC AREA:** **C 40 B** **RÉVISION DU DOMAINE DE LA CIB :**
KIND OF REVISION: **Creation of class, subclass** **TYPE DE RÉVISION :** **Création de classe, sous-classe**	

ANNEX/ ANNEXE	CONTENT/CONTENU		ORIGIN/ ORIGINE	DATE
1	Revision request with detailed proposal	/ Demande de révision avec proposition détaillée	GB	12.99
2	Proposal	/ Proposition	US	03.00
3	Comments	/ Observations	RU	05.00
4	Comments	/ Observations	GB	05.00
5	Comments	/ Observations	DE	05.00
6	Comments	/ Observations	JP	05.00
7	Comments	/ Observations	EP	05.00
8	Comments	/ Observations	SE	05.00
9	Comments	/ Observations	US	06.00
10	Decision of the Working Group	/ Décision du groupe de travail	WG	09.00
11	Rapporteur report	/ Rapport du rapporteur	GB	09.00
12	Rapporteur proposal	/ Proposition du rapporteur	GB	09.00
13	Comments	/ Observations	EP	09.00
14	Comments	/ Observations	JP	09.00

RAPPORTEUR : GB **TECHNICAL FIELD/DOMAINE TECHNIQUE : C**

ANNEX/ ANNEXE	CONTENT/CONTENU		ORIGIN/ ORIGINE	DATE
15	Comments	/ Observations	RU	09.00
16	Comments	/ Observations	DE	11.00
17	Comments	/ Observations	SE	11.00
18	Comments	/ Observations	US	11.00
19	Rapporteur report	/ Rapport du rapporteur	GB	11.00
20	Decision of the Working Group	/ Décision du groupe de travail	WG	01/01
21	Comments	/ Observations	CA	03.01
22	Comments	/ Observations	SE	03.01
23	Comments	/ Observations	RU	03.01
24	Comments	/ Observations	EP	03.01
25	Comments	/ Observations	JP	03.01
26	Comments	/ Observations	DE	03.01
27	Rapporteur report	/ Rapport du rapporteur	GB	04.01
28	Decision of the Working Group	/ Décision du groupe de travail	WG	06.01
29	Comments	/ Observations	EP	06.01
30	Comments	/ Observations	RU	06.01
31	Comments	/ Observations	EP	06.01
32	Comments	/ Observations	RO	06.01
33	Comments	/ Observations	EP	08.01
34	Rapporteur proposal	/ Proposition du rapporteur	GB	11.01
35	Decision of the Working Group	/ Décision du groupe de travail	WG	11.01
36	Comments	/ Observations	DE	11.01
37	Comments	/ Observations	EP	11.01
38	Comments	/ Observations	SE	11.01
39	Comments	/ Observations	FR	11.01
40	Comments	/ Observations	RO	11.01
41	French version of approved amendments	/ Version française des modifications approuvées	FR	11.01
42	Rapporteur report	/ Rapport du rapporteur	GB	11.01

ANNEX/ ANNEXE	CONTENT/CONTENU		ORIGIN/ ORIGINE	DATE
43	Comments	/ Observations	JP	11.01
44	Comments	/ Observations	RU	11.01
45	Decision of the Working Group	/ Décision du groupe de travail	WG	01.02
46	Citation of examples	/ Enumération d'exemples	EP	01.02
47	Comments	/ Observations	US	01.02
48	Proposal	/ Proposition	US	01.02
49	Proposal	/ Proposition	GB	02.02
50	Comments	/ Observations	DE	04.02
51	Comments	/ Observations	RU	04.02
52	Comments	/ Observations	JP	04.02
53	Comments	/ Observations	RO	04.02
54	Comments	/ Observations	EP	04.02
55	Comments	/ Observations	US	04.02
56	Comments	/ Observations	SE	04.02
57	Rapporteur report	/ Rapport du rapporteur	EP	06.02
58	Decision of the Working Group	/ Décision du groupe de travail	WG	07.02
59	Proposal	/ Proposition	EP	08.02
60	Comments	/ Observations	GB	09.02
61	Comments	/ Observations	RU	09.02
62	Comments	/ Observations	RO	09.02
63	Comments	/ Observations	US	09.02
64	Comments	/ Observations	EP	10.02
65	Comments	/ Observations	JP	10.02
66	Comments	/ Observations	DE	10.02
67	French version of approved amendments	/ Version française des modifications approuvées	FR	10.02
68	Rapporteur report	/ Rapport du rapporteur	EP	11.02
69	Rapporteur proposal	/ Proposition du rapporteur	EP	11.02

ANNEX 58

EXCERPT FROM DOCUMENT IPC/WG/7/7/
EXTRAIT DU DOCUMENT IPC/WG/7/7

Project C 422 (chemical) – Following the proposal submitted by the United States of America (see Annex 48 to the project file), the Working Group agreed to rearrange subdivisions of the new subclass C 40 B, which had been created at the fifth session of the Working Group, according to the standardized sequence of main groups in IPC subclasses, approved by the ad hoc IPC Reform Working Group (see document IPC/REF/4/4, Annex IV).

The new structure of subclass C 40 B is presented in Annex 32 to this report.

The Working Group also agreed on certain subdivisions of main groups 1/00 and 3/00 of subclass C 40 B (see the said Annex 32).

Comments were invited on whether the creation of the new group 3/04 under main group 3/00 was needed, in view of its possible overlap with the new groups 3/06 to 3/10.

The EPO was invited to submit a consolidated proposal on desirable subdivisions of main groups 5/00, 7/00 and 11/00, on the basis of the proposals submitted by the United Kingdom, Japan and the United States of America (see Annexes 49, 52 and 55 to the project file, respectively), and taking into account the possibility of creating a new main group covering “linkers, carriers and chemical identifiers” for combinatorial chemistry.

Comments were invited on the consolidated proposal to be submitted.

Projet C 422 (chimie) – À la suite de la proposition présentée par les États-Unis d’Amérique (voir l’annexe 48 du dossier de projet), le groupe de travail a convenu de réaménager les subdivisions de la nouvelle sous-classe C 40 B, créée à la cinquième session du groupe de travail, en fonction de la séquence normalisée des groupes principaux dans les sous-classes de la CIB, approuvée par le Groupe de travail ad hoc sur la réforme de la CIB (voir l’annexe IV du document IPC/REF/4/4).

La nouvelle structure de la sous-classe C 40 B est présentée dans l’annexe 32 du présent rapport.

Le groupe de travail a aussi convenu de certaines subdivisions des groupes principaux 1/00 et 3/00 de la sous-classe C 40 B (voir ladite annexe 32).

Des observations ont été demandées sur la question de savoir si la création du nouveau groupe 3/04 dans le groupe principal 3/00 est nécessaire, compte tenu du risque de chevauchement avec les nouveaux groupes 3/06 à 3/10.

L’OEB a été invité à soumettre une proposition récapitulative quant aux subdivisions souhaitables des groupes principaux 5/00, 7/00 et 11/00, à partir des propositions présentées par le Royaume-Uni, le Japon et les États-Unis d’Amérique (voir respectivement les annexes 49, 52 et 55 du dossier de projet) et compte tenu de la possibilité de créer un nouveau groupe principal couvrant “linkers, carriers and chemical identifiers” pour la chimie combinatoire.

Des observations ont été demandées sur la proposition récapitulative qui doit être présentée.

ANNEX 32 C 40 B [Project-Rapporteur : 422/GB] <SC07014E>

R

N *Note(s) after the title*

When classifying in this subclass, subject matter of interest is also classified in other appropriate places:

(a) library members are also classified in the appropriate places elsewhere in the IPC (e.g. in section C) according to established procedure relating to "Markush"-type formulae (see paragraph 71 of the Guide);

(b) methods or apparatus covered by this subclass are also classified for their biological, chemical, physical or other features in the appropriate places in the IPC, if such features are of interest, e.g.

A 01 N	*Biocides*
A 61 K	*Preparations for medical, dental or toilet purposes*
A 61 P	*Therapeutic activity of compounds*
B 01 D	*Separation*
B 01 J	*Chemical or physical processes, e.g. catalysts; Apparatus therefor*
B 01 L	*Chemical or physical laboratory apparatus*
B 29	*Shaped plastics*
C 01,	
C 07,	
C 08	*Inorganic, organic or organic macromolecular compounds; Methods of preparation or separation thereof*
C 12	*Biochemistry, microbiology, enzymology including microorganisms or enzymes, preparing them, using them to synthesize compounds or compositions; Measuring or testing processes involving microorganisms or enzymes; Mutation or genetic engineering*
C 22	*Metal alloys*
G 01 N	*Chemical or physical analysis*
G 01 R,	

			G 01 T	*Physical measurements methods; Apparatus therefor*
			G 03 F	*Photomechanical methods*
			G 06 F	*Electrical digital data processing*
			G 06 K	*Data processing*
			G 06 T	*Image data processing*
			G 09 F	*Displaying; Advertising*
N	1/00	<Becomes C 40 B 5/00>		R
N	*1/02*	• *Identifying library members by their fixed physical location on a support or substrate*		
N	*1/04*	• *Identifying library members by means of an associated tag, label, or other readable or detectable entity, e.g. decoding processes*		
N	*1/06*	• *using iterative deconvolution techniques*		
N	*1/08*	• *using physical methods, e.g. spectroscopy*		
N	3/00	<Becomes C 40 B 7/00>		R
N	*3/02*	• *<u>In silico</u> screening*		
N	*3/04*	• *by measuring the effects on living organisms, tissues or cells*		
N	*3/06*	• *by measuring catalytic activity*		
N	*3/08*	• *by measuring the specific ability to bind a target molecule, e.g. antibody-antigen binding, receptor-ligand binding*		
N	*3/10*	• *by measuring physical properties, e.g. mass*		
N	5/00	<Becomes C 40 B 3/00>		R
N	7/00	<Becomes C 40 B 1/00>		R
N	9/04	<Becomes C 40 B 9/08>		R
N	9/08	<Becomes C 40 B 9/04>		R
N	9/10	<Becomes C 40 B 9/14>		R
N	9/14	<Becomes C 40 B 9/10>		R

EUROPEAN PATENT OFFICE
Principal Directorate Documentation

Proposal
21 August 2002

Project: C422 **Subclass: C40B**

Re: IPC/WG/7/7

This is the EP proposal for C40B. For purpose of clarity, the whole scheme has been repeated, with already adopted groups in bold.

Proposal:

	C 40	**COMBINATORIAL TECHNOLOGY**
	C40B	**COMBINATORIAL CHEMISTRY; LIBRARIES, e.g. CHEMICAL LIBRARIES**
	1/00	**Methods specially adapted for identifying library members**
	1/02	**. Identifying library members by their fixed physical location on a support or substrate**
C	**1/04**	**. Identifying library members by means of ~~an associated~~** a **tag, label, or other readable or detectable entity** associated with the library members, **e.g. decoding processes**
	1/06	**. ~~using~~ Using iterative deconvolution techniques**
C	**1/08**	**. Using ~~using physical methods~~** direct analysis of the library members *per se*, **e.g. spectroscopy**
	3/00	Methods of screening libraries
	3/02	**. *in silico* screening**
	3/04	**. by measuring the effects on living organisms, tissues or cells**
	3/06	**. by measuring catalytic activity**
	3/08	**. by measuring the ability to specifically bind a target molecule, e.g. antibody-antigen binding, receptor-ligand binding**
	3/10	**. by measuring physical properties, e.g. mass**
	5/00	**Libraries**, e.g. arrays, mixtures
N	5/02	. Libraries contained in or presented or displayed by a micro-organism, e.g. bacteria, animal cell, or vector, e.g. plasmid or libraries consisting only of micro-organisms or vectors
N	5/04	. Libraries consisting only of organic compounds

N 5/06 . . Libraries containing nucleotides or polynucleotides

N 5/08 . . . Libraries consisting of RNA or DNA which encodes proteins, e.g. genes

N 5/10 . . Libraries containing peptides or polypeptides

N 5/12 . . Libraries containing polymers consisting of more than 5 monomer units, and not covered by sub-groups 5/06-5/10, e.g. polysaccharides

N 5/14 . . Libraries containing metal-containing organic compounds (compounds *per se* C07F)

N 5/16 . Libraries consisting only of inorganic compounds

7/00 Methods of creating libraries, e.g. combinatorial synthesis

N 7/02 . *In silico* or mathematical conception of libraries

N 7/04 . Directed molecular evolution of macromolecules, e.g. RNA, DNA, proteins

N 7/06 . Preparation of dynamic combinatorial libraries

N 7/08 . Biochemical methods, e.g. using enzymes or whole viable microorganisms

N 7/10 . Liquid phase synthesis

N 7/12 . Solid phase synthesis

N 7/14 . . capturing the reaction products by means of a polymer, i.e. resin capture

N 7/16 . . using supported reagents

N 7/18 . Using encoding techniques, e.g. incorporation of tags or labels
Note: Tags *per se* should be classified in the corresponding C07 class and in C40B11/02

N 7/20 . Using a particular attachment method to the liquid/solid support
Note: linkers *per se* should be classified in the corresponding compound areas, e.g. C07 and in C40B11/04 or sub-groups thereof

9/00 Apparatus specially adapted for use in combinatorial chemistry or with libraries

9/02 . Integrated apparatus specially adapted for creating libraries, screening libraries and for identifying library members

9/04 . Integrated apparatus specially adapted for both screening libraries and identifying library members

9/06 . Integrated apparatus specially adapted for both creating libraries and identifying library members

9/08 . Integrated apparatus specially adapted for both creating and screening libraries

9/10 . **For identifying library members**

9/12 . **For screening libraries**

9/14 . **For creating libraries**

N 11/00 Tags, labels specially adapted for combinatorial chemistry or libraries; Linkers, spacers specially adapted for combinatorial chemistry or libraries

N 11/02 . Tags, labels specially adapted for combinatorial chemistry or libraries**,** e.g. fluorescent tags, bar codes
Note: Tags *per se* should be classified in the corresponding compound areas, e.g. C07. If of interest, the encoding strategy should be classified in C40B7/18, the decoding process in C40B1/04 and the measuring or testing technique in the corresponding G01 area.

N 11/04 . Linkers, spacers specially adapted for combinatorial chemistry or libraries, e.g., traceless linkers, safety-catch linkers
Note: linkers *per se* should be classified in the corresponding compound areas, e.g. C07. If of interest, the attachment method to the solid support or the method for the cleavage therefrom should be classified in C40B7/20.

13/00 Subject matter not provided for in groups 1/00 to 11/00 and relating to combinatorial chemistry or libraries

A few remarks:

1) There seems to be a mixture of small characters and capital letters in the wording of adopted subgroups 1/02 to 1/08. That should be modified.

2) Preparation of dynamic combinatorial libraries / Directed molecular evolution of macromolecules
Both techniques use combinations of synthesis and screening steps.

Dynamic combinatorial chemistry (DCC) "implements the reversible connection of sets of basic components to give access to virtual combinatorial libraries, whose constituents comprise all possible combinations that may potentially be generated. The constituent(s) actually expressed among all those accessible is (are) expected to be that (those) presenting the strongest interaction with the target, that is, the highest receptor/substrate molecular recognition. The overall process is thus instructed (target-driven), combinatorial, and dynamic"[1]. It usually refers to chemical synthesis in solution, in the search for new ligands to e.g. a receptor or an enzyme.

Directed molecular evolution consists in the repetition of cycles of selection, amplification and mutation of populations of macromolecules, mainly RNA and DNA[2]. It mimics Darwinian evolution on a molecular scale. It refers to biochemical methods, e.g. (reverse) transcription.

Instead of subgroups 7/06 and 7/08, a main group could be devoted to these two similar methods. Because of the complex nature of these techniques (which combine both synthesis and screening processes), the main group should, according to the principles of top to bottom priority and inclusiveness, appear at the top of the scheme, i.e. as 1/00

3) About 5/12:

[1]Lehn J.-M. Chem. Eur. J. (1999) 5 (9) 2455-2463

[2]Joyce G. F. Scientific American (1992) 267 (6) 48-55

The wording "and not covered by sub-groups 5/06-5/10" is redundant with the principles of top to bottom priority and inclusiveness. It could be deleted provided it is made clear to the users that these principles apply.

4) About subgroups 7/08 to 7/12 with respect to the different phase systems in combinatorial chemical synthesis:

Three major types of combinatorial synthesis can be distinguished:

Liquid phase synthesis:
All the reactants and reagents are in liquid phase.
They may all be soluble in the reaction medium (called "solution phase synthesis" or "synthesis in solution") or several non-miscible liquid phases may be present ("synthesis in multiple liquid phase systems") like in the case of syntheses performed on a soluble support such as PEG (polyethylene glycol) or when fluorous synthesis is used.

Solid phase synthesis:
The reactions are performed on a solid support, i.e. the reactants are bound to a solid support (e.g. polymer, resin).

Mixed phase synthesis:
Both liquid and solid phases are present in the process (note that mixed phase reaction systems involving gas phases are also covered). This is for instance the case when supported reagents are used[3] (while starting materials and reaction products are soluble in the reaction mixture) or in the case of "resin capture"[4,5,6] where products are "captured" by a solid support after a reaction performed in solution.

In our scheme, we have merged the two types of synthesis using solid-bound compounds, (i.e. mixed-phase and solid-phase synthesis) in one group.

One could also think of creating an extra one-dot subgroup for gas-phase processes, but this would probably exhaust main group 7/00.

5) About new main-group 11/00:
As discussed in the last WG meeting, the idea of creating a new sub-group directed to tags and linkers was supported by some offices. This would leave former main-group 11/00 (now 13/00) ready to accommodate any subject-matter not covered by groups 1/00 to 11/00.
Alternatively, our former proposal (one-dot sub-groups 11/02 and 11/04) could still be used.

Anne Glanddier

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[3]Besodes, M.; Antonakis, K. *Tetrahedron Letters* (1985) *26*, 1305-1306

[4]Keating, A. *et al J. Am. Chem. Soc.* (1996) *118*, 2574

[5]WO 99 41216 (see claim 20)

[6]US 6306959

UNITED KINGDOM PATENT OFFICE

IPC Revision Project C422, Subclass C40B

25 September 2002

Comments in response to IPC/WG/7/7

Re: the proposal submitted by the European Patent Office in Annex 59

The working group posed the question of whether there was overlap between the newly created subgroup 3/04 and existing subgroups 3/06, 3/08 and 3/10. In our opinion there will be overlap. Many biochemical processes having effects on living organisms, tissues or cells produce those effects by specific binding of targets or by catalytic activity. We suspect that a significant number of cases will measure a quantity where differentiating effects on cells from catalysis, binding or physical property is extremely difficult. However, if the top down classification scheme is applied effectively means that this is not necessarily a problem.

The United Kingdom generally supports the subdivision of C40B 5/00 and 7/00 as proposed by the EPO. We suggest minor additions to 5/06 and 5/10 thus:

C 5/06 . . Libraries containing nucleotides, polynucleotides *or their derivatives*
C 5/10 . . Libraries containing peptides, polypeptides *or their derivatives*

With respect to the new subdivision 7/04, the UK is unsure whether this group should be limited to macromolecular compounds. We suggest removing this limitation so that 7/04 now reads thus:

C 7/04 . Directed molecular evolution, e.g. for RNA, DNA, proteins

Proposed subgroups 7/18 & 7/20 would appear to have potential overlap with the proposed new subgroups 11/02 & 11/04. We suggest that subgroups 7/18 and 11/02 be converted into a single subgroup under main group 11/00, and that 7/20 and 11/04 also be combined for the following reasons.

Whilst there is a primae facie case for one group covering AX@ and another covering Ausing X@, we believe that in practice any tag or linker would also be in the context of using that tag or linker. Similarly, any disclosure of using a particular tag or linker would by necessity also disclose that tag or linker.

In our opinion a compound which is described solely by the nature of the compound without reference to combinatorial chemistry should be classified in the appropriate place outside C40B. Any reference made to combinatorial chemistry would inherently imply use of that tag/linker.

We feel that in practice, maintaining separate Atags/linkers@ and Ausing tags/linkers@ subdivisions would lead examiners to classify in both subdivisions for almost all cases where tags/linkers are present, and also to the need to search both subdivisions. We feel dual classification of these terms and dual searching to be unnecessary.

We would also question whether the main group 7/00 is the most appropriate place for Ausing tags/linkers@. We feel that there may be disclosure of using tags/linkers where the method of creating the library is not disclosed, i.e. where the library per se is disclosed with the use of a tag/linker as a characterising feature. Would such disclosure be relegated to main group 5/00 (Libraries) or to main group 11/00 (Tags/linkers) or its subdivisions? If it were to be classified under 5/00, would this necessitate the creation of further subdivisions along the lines of proposed 7/18 & 7/20. If classified under 11/+, this would lead to Ausing tags/linkers@ being classified in different places depending on whether the method of attaching or method of attachment were disclosed.

The necessary changes would thus be:

D 7/18 <delete subgroup>
D 7/20 <delete subgroup>

C 11/00 Tags, labels *or encoding techniques* specially adapted for *or used in* combinatorial chemistry or libraries; Linkers, spacers *or attachment techniques* specially adapted for, or used in, combinatorial chemistry or libraries
C 11/02 . Tags or labels specially adapted for *or used in* combinatorial chemistry or libraries, <rest remains unchanged>
C 11/04 . Linkers or spacers specially adapted for *or used in* combinatorial chemistry or libraries, <rest remains unchanged>

Jason Scott

FEDERAL INSTITUTE OF INDUSTRIAL PROPERTY

RU comments	
Project : C 422	**Date: 25.09.2002**
Class/Subclass : C40B	

Re: IPC/WG/7/7

We agree with the scheme proposed by the EPO (An 49) as a whole and have remarks to the following groups.

3/04

We think that this group should be deleted because of overlap with other groups.

5/04 and 5/16

We have some doubts in regard to the existence of libraries containing both inorganic and organic compounds, so it seems that the word "only" is unnecessary in the wordings of these groups.

5/14

In our opinion the wording of this group is incorrect. It is unclear whether this group should cover libraries of compounds covered by C07F (according to the reference) only or libraries of other compounds containing metal salts or complexes should be covered by this group as well. For example peptides and nucleotides may contain metals (see C07H 23/00, C07K 103:00). Why is the reference "compounds per se..." introduced in this group only and not included in 5/06 or 5/07 as well?

7/04 and 7/08

We feel that as direct molecular evolution is a process where enzymes are always used, group 7/04 might be two-dot group of 7/08.

7/06

Taking into account the definition of "dynamic combinatorial chemistry" (An. 59), we see overlap between group 7/06 and groups 3/02, 7/02, 7/10, 7/12. We think that this group is unnecessary. Subject matter of this group could be classified in other groups of this scheme.

E.Loubiako

STATE OFFICE FOR INVENTIONS AND TRADEMARKS

Date: 27 September 2002

RO COMMENTS

PROJECT : C 422
Class/Subclass : C40B

Comments were invited on:

-the proposal submitted by the EPO in Annex 59:

We generally support the subdivisions of the scheme proposed by the EPO in Annex 59. Regarding the notes after subgroups 7/18 , 7/20 ,11/02 and 11/04 we suggest to reunite them in a general note (c) after the title.

Mirela Georgescu

USPTO COMMENTS	
REVISION PROJECT: C422 **Class/subclass: C40B**	**Date: September 27, 2002**

Comments were invited on:

-Whether the creation of the new group 3/04 under main group 3/00 was needed, in view of its possible overlap with the new groups 3/06 to 3/10

There may or may not be overlap, but in order to tell, a clear idea of the scope of subgroup 3/04 (*by measuring the effects on living organisms, tissues or cells*) is needed. US believes an explanation of the subject matter intended for this group as well as patent document examples are necessary in order for us to comment on or support this group.

-The consolidated proposal submitted by the EPO on August 21, 2002 (Annex 59)

US agrees with much of EP's proposed scheme. However, we do have several issues that need clarification as well as suggestions for alternative wording of group titles.

For group 1/08, we support the title proposed by EP, but suggest the following addition to further clarify the subject matter to be placed in this group:

> **1/08. Using ~~using physical methods~~ direct analysis of the library members per se *by physical methods*, e.g. spectroscopy**

The title of group 5/02 definitely needs parentheses in appropriate places to be clearly understood. It should be:

> **5/02. Libraries contained in or presented or displayed by a micro-organism *(e.g. bacteria, animal cell)* or vector *(e.g. plasmid)* or libraries consisting only of micro-organisms or vectors**

However, since the use of parentheses in titles for separating "examples" doesn't appear to be IPC practice, US prefers removing the examples *(the italicised wording in the title above)* from the title, unless an exception is made. Otherwise, the title is confusing.

In the titles of groups 5/04 and 5/16, US believes it is not necessary to include the word "only" in addition to "consisting of" since "consisting of" is interpreted as meaning "only".

We agree with EP that the wording in the title of 5/12, "and not covered by sub-groups 5/06-5/10," is unnecessary if the principles of top to bottom priority and inclusiveness are followed. When these principles are applied, it is understood that, if an invention is properly classifiable in subgroup 5/12, it must not have been appropriate for any of subgroups 5/06-5/10.

In group 5/14 (*Libraries containing metal-containing organic compounds*), EP has included a note in the title which states, "compounds per se C07F." US believes this note could be misleading and doesn't really define what is meant by metal-containing organic compounds. C07F includes silicon compounds, phosphorus compounds, etc., which are considered non-metals. According to the first note in Section C, a metal is any element **other** than H, B, C, Si, N, P, O, S, Se, Te, noble gases, and halogens. Also, notes related to C07F appear to indicate that metal salts of organic compounds are classified with the parent organic

compound and thus, presumably, not with the metal per se classification. It is not clear to US where EP would classify a library consisting of metal salts of organic compounds.

In group 5/16, US recommends adding "or inorganic materials" after "inorganic compounds" so that it will be clear that "metal alloys" may also be classified in this group.

Since groups 7/04 and 7/06 are processes which include both screening and creating steps, US is opposed to positioning them under 7/00 rather than 3/00. However, we can support a main group at the top of the scheme (new 1/00), as suggested by EP, which includes these concepts. Though EP has supplied a definition for dynamic combinatorial library preparation and DME, we still find the scope of the two concepts to be unclear and hope that a clearer explanation can be supplied.

US believes the new title of 7/08, "Biochemical methods" is indefinite. What does a biochemical method include other than enzymes and viable microorganisms? Could it include a method using a piece of DNA from a microorganism? The title "using enzymes or viable microorganisms" was recommended by US because it established clear metes and bounds of exactly what subject matter was intended for this group. US believes the scope of "biochemical methods" is open to misinterpretation and requires a clear explanation. Perhaps the inclusion of an "i.e." in the title could be used if "Biochemical methods" is the title insisted upon.

After reading EP's explanations of the different combinatorial syntheses, US understands what EP intends liquid phase, solid phase, and mixed phase to be, but we are not certain that these concepts are universally interpreted in this manner by others. US examiners do not interpret these concepts in the same way.

For example, EP appears to be interpreting a mixed phase system more broadly than US examiners interpret it. It appears EP is including the purification or isolation step as part of the synthesis. In other words, EP appears to treat a process of (1) solution phase library preparation followed by (2) solid support isolation of library members or removal of contaminants as mixed phase synthesis. While it is true that the overall process (synthesis and isolation) is mixed phase, the synthesis per se is single phase.

Under group 7/12 (solid phase), EP has included "resin capture". Most of the "resin capture" we have seen involves a liquid phase synthesis step followed by isolation of library members via solid phase, a step sequence that US does not consider as solid phase synthesis. The **synthesis** is liquid phase only. Our understanding of solid phase synthesis is that it entails **making** the "product" or "library" on a solid support.

US is also concerned that the existence of both 7/10 and 7/12 in the scheme will exhaust 7/00 when top to bottom priority and inclusiveness principles are used. Any technique with the synthesis occurring in liquid phase will be classified in 7/10. If no liquid phase synthesis exists, but solid phase synthesis does, it will be classified in 7/12. According to EP, gas phase synthesis would go in 7/00. US is not certain what EP intends by gas-phase synthesis since we have differing opinions on how to interpret solid and mixed phase "synthesis". If the actual synthesis of the library members occurs in liquid or solid phase and the members are separated out by a gas phase, we don't believe such a step sequence would be gas phase synthesis. A gas phase synthesis group would require that the actual synthesis occur in the gas phase. Our examiners are not aware of documents showing this gas phase synthesis technique. Perhaps EP has an example patent document showing this concept.

However, US will support 7/10 and 7/12 during the testing of the scheme. If it is found that 7/00 has no documents, a modification of the scheme may need to be made.

The following changes to the titles of 7/10 and 7/12 are recommended for clarity:

7/10 · Liquid phase synthesis, i.e. reagents and reactants are in a liquid phase during library creation

7/12 · Solid phase synthesis, i.e. reactants are bound to a solid support during library creation

US suggests further evaluation of the correctness of having 7/14 and 7/16 indented under 7/12 based on our discussion above concerning what US believes "solid phase synthesis" entails. Are the concepts covered by 7/14 and 7/16 truly "solid phase" synthesis?

EP suggested the possible creation of a one-dot group for gas-phase synthesis. It seems that the head group 7/00 would most likely be exhausted if such a group is added.

US does not support the creation of groups 7/18 and 7/20. These two groups, especially 7/20, may be appropriate in an indexing scheme, but not in a **classification** scheme. If one follows top to bottom priority and inclusiveness, it would appear that no documents would make it to these subgroups. Encoding techniques and use of particular attachment methods would apparently be part of solid or liquid synthesis systems, and thus would be properly classifiable in those areas. Also, the use of "particular attachment method" in 7/20 seems indefinite. What requirements must an attachment method meet to be considered a "**particular**" attachment method? The scope of the expression is not clear.

If the concept of encoding is thought to be important enough for a subgroup, perhaps a subgroup could be inserted after 7/08 titled *"Synthesis involving encoding steps."*

Concerning the new group 11/00 proposed by EP, we wish to make two points.

First, US has argued against this group based on our position that the same invention should not have multiple obligatory classification places. A tag or linker is usually a "chemical compound" and is classified in the compound area. If the linker is attached to library members, it most probably would be classified in the library main group or indented subgroups; if linkers are involved in a method of making a library, this subject matter would be found in the "creating" main group or indented subgroups. However, after consulting with our combinatorial examiners, we have decided that due to the unique nature of combinatorial technology, perhaps groups directed to these concepts could be of use. Nevertheless, US remains opposed to the creation of multiple obligatory classification places for the exact same invention as a general practice in the Reformed IPC.

Second, the new 11/00 main group will have no patent documents if both 11/02 and 11/04 are created. US recommends deleting 11/02 and 11/04 in order that 11/00 will be populated with documents. Alternatively, the proposed main group 11/00 could be deleted and the concepts of 11/02 and 11/04 made into separate main groups.

EUROPEAN PATENT OFFICE
Principal Directorate Documentation

Comments
26 September 2002

Project: C422 **Subclass: C40B**

Re: IPC/WG/7/7

Comments were invited on whether the creation of the new group 3/04 under main group 3/00 was needed, in view of its possible overlap with the new groups 3/06 to 3/10.

We agree with US comment, and think that there could be an overlap.
To avoid this, maybe a reference to indicate that specific binding to a target molecule should be classified in 3/08 could be introduced, for example:

3/04	$	by measuring the effects on living organisms, tissues or cells **(measuring binding affinity C40B3/08)**.

Anne Glanddier.

Japan Patent Office October 2, 2002

Project: C-422 Subclass:C40B

JP Comments on the EP proposal (annex 59)

1. C40B5/12

"Libraries containing polymers consisting of **more than 5 monomer units**, and not covered by sub-groups 5/06-5/10, e.g. polysaccharides"

"More than 5 monomer units", which seems too low as a general boundary between polymers and oligomers, comes from the rule described in C07H and C08B. We think that the rules of general polymer's subclasses, C08G and C08F, which comprise of synthetic polymers should be applied here.

In light of the fact that the number of repeating units for polymer is over 11 in the fields of C08F and C08G (see references of C08G65/00 and C08G73/00), JP thinks that polysaccharides should be classified separately from synthetic polymers of C08F or C08G.

JP does not think this subgroup is necessary since "library members are also classified in the appropriate place elsewhere in the IPC (section C)." JP also thinks one-dot group 5/04 "Libraries consisting only of organic compounds" would work enough. However, we do not disagree with the creation of subgroups covering nucleic acids, peptides and polysaccharides when the number of the related applications are large, provided such subgroups are separate from synthetic polymers covered by C08F and C08G.

Consequently, JP proposes three alternative options on the scheme of 5/04-5/14.

Alternative 1

5/04 . Libraries consisting only of organic compounds
including polymers not defined below, e.g. C08F, C08G
5/06 .. Libraries containing nucleotides or polynucleotides
5/08 … Libraries consisting of RNA or DNA which encodes proteins, e.g. genes
5/10 .. Libraries containing peptides or polypeptides
5/12 .. Libraries containing polysaccharides
5/14 .. libraries containing metal-containing organic compounds

Alternative 2

5/04 . Libraries consisting only of organic compounds
5/05 .. Libraries containing origomers or polymers (e.g. C08F, C08G)
5/06 … Libraries containing nucleotides or polynucleotides
5/08 …. Libraries consisting of RNA or DNA which encodes proteins, e.g. genes
5/10 ... Libraries containing peptides or polypeptides
5/12 … Libraries containing polysaccharides
5/14 .. libraries containing metal-containing organic compounds

Alternative 3

5/04 . Libraries consisting only of organic compounds
5/06 .. Libraries containing nucleotides or polynucleotides
5/08 ... Libraries consisting of RNA or DNA which encodes proteins, e.g. genes 5/10 .. Libraries containing peptides or polypeptides
5/12 .. Libraries containing polysaccharides
5/13 .. Libraries containing other polymers (e.g. C08F, C08G)
5/14 .. libraries containing metal-containing organic compounds

2. C40B11/02 and 11/04

There are a lot of applications subscribing the supports combined with linkers. It should be indicated in a note that documents characterized by the linkers should be classified in the group of linkers and documents characterized by the supports should be classified in the group of supports.

DEUTSCHES PATENT- UND MARKENAMT German Patent and Trade Mark Office	Class/Subcl.: **C40B**
	Date : 15.10.2002
DE - Comments — C 422	

Re: Project C 422 Subclass C40B

Comment on EP proposal (Annex 59):

- 1/08: ”Identifying library members using physical methods, e.g. spectroscopy” seems to be the better wording for 1/08, because this way the characteristic of methods which have to be classified in 1/08 is described more precisely than saying ””Using direct analysis…”.

- 3/04: Apoptosis of cells can be controlled as well by binding a ligand to a receptor on the cell surface. Therefore in our eyes there will be overlap predominately between 3/04 and 3/08. We propose to delete subgroup 3/04 or to name the measured effects to make the difference between 3/04 and 3/06, 3/08 and 3/10 clear.

- 5/02: We think as well that the title of 5/02 is confusing, because of the examples. In addition it is not correct to describe vectors as micro-organisms. We see one solution for this problem in the US proposal in Annex 63, but nevertheless we think that the meaning of ”Library presented by a micro-organism” and ”Library displayed by a micro-organism” should be explained by an example.

-

- 5/14: This is a very important subgroup, but the attached note to 5/14 is misleading, because for example metal-containing porphyrins are classified in C07D 487/22.
  According to our ”definition-statement” to subclass C40 B we think that the right place for a note, that compounds per se have to be classified in the corresponding compound class, is the definition of C40B.

In this context it is much more important for us to make clear that in subgroups 5/02-5/16 as well the corresponding ”in silico libraries” have to be classified, because the ”in silico aspect” is mentioned in 3/02 and 7/02 but not under the libraries per se. Therefore we would prefer to rename main group 5/00 in ”Physical existent and in silico libraries”.

- 7/18 and 7/20: Using tags or linkers can not be considered as a special method for the synthesis of libraries. A separate subgroup for only one aspect of a complex synthesis is therefore indefensible. In addition we do not support a corresponding note in 11/00 according to the proposal of UK in Annex 60.

- 11/02 and 11/04: A subdivision of 11/00 is not necessary and not helpful at all. Therefore we propose to delete subgroup 11/02 and 11/04.

INSTITUT NATIONAL DE LA PROPRIÉTÉ INDUSTRIELLE **FR - oct. 2002**

Projet IPC / C 422
Sous-classe C40

VERSION FRANÇAISE

Ce document a été établi sur la base de notre proposition, après consultation des autres offices et du Bureau international. (ref : annexe 32 du document IPC/WG/7/7)

ANNEX 32 C 40 B [Project-Rapporteur : 422/GB] <SC07014E>

N *Note(s) après le titre* R

Lors du classement dans la présente sous-classe, un classement est également attribué dans les autres endroits appropriés :

(a) les éléments de bibliothèques sont également classés dans les autres entrées appropriées de la CIB (p.ex. dans la section C) selon la procédure établie pour les formules de type "Markush" (voir le paragraphe 71 du Guide d'utilisation);

(b) les procédés et les appareils couverts par la présente sous-classe sont également classés pour leurs caractéristiques biologiques, chimiques, physiques ou autres dans les endroits appropriés de la CIB si de telles caractéristiques présentent un intérêt, p.ex.

A 01 N	*Biocides*
A 61 K	*Préparations à usage médical, dentaire ou pour la toilette*
A 61 P	*Activité thérapeutique des composés*
B 01 D	*Séparation*
B 01 J	*Procédés physiques ou chimiques, p.ex. catalyse; Appareillage approprié*
B 01 L	*Appareils de laboratoire pour la chimie ou la physique*
B 29	*Travail des matières plastiques*
C 01,	
C 07,	
C 08	*Composés inorganiques, organiques ou organiques macromoléculaires; Leurs procédés de préparation ou de séparation*

C 12	*Biochimie, microbiologie, enzymologie y compris les micro-organismes ou les enzymes, leur préparation, leur utilisation pour synthétiser des composés ou des compositions; Procédés de mesure ou d'analyse faisant intervenir des micro-organismes ou des enzymes; Techniques de mutation ou de génétique*
C 22	*Alliages métalliques*
G 01 N	*Analyse physique ou chimique*
G 01 R,	
G 01 T	*Procédés de mesure physiques; Appareils à cet effet*
G 03 F	*Procédés photomécaniques*
G 06 F	*Traitement électrique de données numériques*
G 06 K	*Traitement de données*
G 06 T	*Traitement de données d'image*
G 09 F	*Présentation; Publicité*

N	*1/00*	<Devient C 40 B 5/00>	*R*
N	*1/02*	• *Identification des éléments d'une bibliothèque par leur emplacement physique fixe sur un support ou un substrat*	
N	*1/04*	• *Identification des éléments d'une bibliothèque au moyen d'une étiquette, d'un identificateur ou d'un autre marqueur lisible ou détectable, p.ex. procédés de décodage*	
N	*1/06*	• *utilisant des techniques de déconvolution itératives*	
N	*1/08*	• *utilisant des procédés physiques, p.ex. spectroscopie*	
N	*3/00*	<Devient C 40 B 7/00>	R
N	*3/02*	• *Criblage par ordinateur (in silico)*	
N	*3/04*	• *en mesurant les effets sur des cellules, des tissus ou des organismes vivants*	
N	*3/06*	• *en mesurant l'activité catalytique*	
N	*3/08*	• *en mesurant l'aptitude spécifique à se lier à une molécule cible, p.ex. liaison anticorps-antigène, liaison récepteur-ligand*	
N	*3/10*	• *en mesurant les caractéristiques physiques, p.ex. la masse*	
N	5/00	<Devient C 40 B 3/00>	R
N	7/00	<Devient C 40 B 1/00>	R
N	9/04	<Devient C 40 B 9/08>	R
N	9/08	<Devient C 40 B 9/04>	R
N	9/10	<Devient C 40 B 9/14>	R
N	9/14	<Devient C 40 B 9/10>	R

Remarque : Dans la Note après le titre de la sous-classe C 40 B en version anglaise, le renvoi vers B 01 J mentionne "catalysts". Nous pensons qu'il faut écrire "catalysis".

EUROPEAN PATENT OFFICE
Principal Directorate Documentation

Rapporteur Report
24 October 2002

Project: C422 Subclass: C40B

Re: IPC/WG/7/7

Comments have been received from GB, RU, RO, US, EP, JP and DE.

Comments were asked on a possible overlap between group 3/04 and groups 3/06 to 3/10, and the proposal of EP in Annex 59.

Most offices think that there may be an overlap and RU and DE propose to delete 3/04; UK and EP do not think that the overlap will be a problem, considering the precedence rule; US would like more explanation on the group.
R thinks that deleting the group would bring too many documents in the head-group. The overlap could be possibly avoided by exchanging the two subgroups 3/04 and 3/08. Also, we could add the following reference:

3/04 or 3/08	$	by measuring the effects on living organisms, tissues or cells **(specific binding to target molecules C40B3/08)**

Comments are invited on these alternatives.

Answer to UK comment (A.60):

We are not sure of what the wording "derivatives" implies, e.g. whether 5/06 covers salts, or nucleosides ...

We would like to have libraries containing salts of organic compounds classified together with libraries containing the parent compound. In our new proposal, and with the use of the precedence rule, only libraries of organo-metallic compounds will be classified in (new) group 7/14.

We agree with UK comments concerning tags and linkers, provided two different main-groups are created.
We would like to propose two alternatives at the end this report: one proposal keeps the groups in the scheme, the other has all the groups concerning tags and linkers (as well as the corresponding methods) together at the end of the scheme.

Answer to RU comment (A. 61):

Mixed inorganic/organic libraries exist already: see for instance WO 0017413 (metal-containing organic compounds e.g. in Table 7, and inorganic components in Table 8).
Such a document could then populate main group 5/00.

Answer to RO comment (A. 62):

We are not sure yet whether the notes should be reunited at the beginning of the scheme. That could be possibly decided at a later stage in the project.

Answer to US comment (A. 63):

An example of gas phase synthesis is EP 0829460.

Answer to JP comment (A. 65):

We agree with JP comment on group 5/12, so we will delete the reference to 5 monomers units. R. would propose to follow Alternative 3 of Annex 65.

Answer to DE comments (A. 66):

We agree that the title "Libraries" should include physically existing as well as in silico libraries; however, it seems a more elegant solution could be to include it in the definition project D005, or in some notes at the beginning of the scheme.

Proposal of Annex 59:

We have tried to take into account the remarks of the offices in the counter-proposal in the following annex.

There are still a few points which will potentially cause some confusion:

- classification of mixed libraries, for e.g. containing RNA and peptides: with the present scheme, that would be classified in 5/06; therefore, we have changed the wording with "containing" instead of "consisting of, so that such a library would go in 5/08 (with 5/10 as a possible additional classification).

- tags and linkers:

There are two alternatives: either we keep 7 entries in different places, which are 3/04, 9/102, 9/122, 9/124, 13/00 and 15/00, or we delete 3/04, 9/102, 9/122, 9/124 and have 13/00 and subgroup and 15/00 and subgroup.

The first alternative is shown in our proposal.

The second alternative could be:

D 3/04

D 9/102

D 9/104

D 9/122

D 9/124

N 13/00 Tags, labels or encoding techniques specially adapted for or used in combinatorial chemistry or libraries (tags or labels *per se*: C07; chemical reaction *per se* C07B)

N 13/02 $ Tags or labels e.g. fluorescent tags, bar codes

N	15/00	Linkers, spacers or attachment techniques to the liquid/solid support specially adapted for or used in combinatorial chemistry or libraries (linkers or spacers *per se*: C07; chemical reaction *per se*: C07B)
N	15/02	$ Linkers or spacers e.g., traceless linkers, safety-catch linkers

Anne Glanddier.

$$$$$$

EUROPEAN PATENT OFFICE
Principal Directorate Documentation

Modified Proposal
24 October 2002

Project: C422 Subclass: C40B

This is a modified proposal for C40B. For purpose of clarity, the whole scheme has been repeated.

Proposal:

	C 40	COMBINATORIAL TECHNOLOGY
	C40B	COMBINATORIAL CHEMISTRY; LIBRARIES, e.g. CHEMICAL LIBRARIES
N	**1/00**	**Chemical evolution processes**
N	**1/02**	$ **Directed molecular evolution of macromolecules, e.g. RNA, DNA, proteins**
N	**1/04**	$ **Using dynamic combinatorial chemistry techniques**
	3/00	Methods specially adapted for identifying library members
	3/02	$ Identifying library members by their fixed physical location on a support or substrate
C	3/04	$ Identifying library members by means of a tag, label, or other readable or detectable entity associated with the library members, e.g. decoding processes
	3/06	$ Using iterative deconvolution techniques
C	3/08	$ Using ~~physical methods~~ direct analysis of the library members *per se* **by physical methods**, e.g. spectroscopy
	5/00	Methods of screening libraries
	5/02	$ *in silico* screening
	5/04	$ by measuring the effects on living organisms, tissues or cells **(specific binding to target molecule C40B5/08)**
	5/06	$ by measuring catalytic activity

	5/08	$ by measuring the ability to specifically bind a target molecule, e.g. antibody-antigen binding, receptor-ligand binding
	5/10	$ by measuring physical properties, e.g. mass
	7/00	Libraries, e.g. arrays, mixtures
N	7/02	$ Libraries contained in or presented or displayed by a micro-organism, **(**e.g. bacteria, animal cell**)**, or vector, **(**e.g. plasmid**)** or libraries consisting ~~only~~ of micro-organisms or vectors Note: Libraries containing salts of organic compounds should be classified together with the libraries containing the parent compounds
N	7/04	$ Libraries consisting ~~only~~ of organic compounds
N	7/06	$ $ Libraries containing nucleotides or polynucleotides
N	7/08	$ $ $ Libraries **containing** ~~consisting of~~ RNA or DNA which encodes proteins, e.g. genes
N	7/10	$ $ Libraries containing peptides or polypeptides
N	7/12	$ $ Libraries containing ~~polymers consisting of more than 5 monomer units, and not covered by sub-groups 5/06-5/10, e.g.~~ polysaccharides
N	**7/13**	$ $ **Libraries containing other polymers, e.g. C08F, C08G**
N	7/14	$ $ Libraries containing metal-containing organic compounds ~~(compounds *per se* C07F)~~
N	7/16	$ Libraries consisting ~~only~~ of inorganic compounds **or inorganic materials**
	9/00	Methods of creating libraries, e.g. combinatorial synthesis
N	9/02	$ *In silico* or mathematical conception of libraries
~~N~~	~~9/04~~	$ ~~Directed molecular evolution of macromolecules, e.g. RNA, DNA, proteins~~
~~N~~	~~9/06~~	$ ~~Preparation of dynamic combinatorial libraries~~
N	9/08	$ Biochemical methods, e.g. using enzymes or whole viable microorganisms
N	9/10	$ Liquid phase synthesis, **i.e. all library building blocks are in liquid phase during library creation**

N 9/102 $ $ using a particular attachment method to the liquid support **(chemical reaction per se C07B)**

N 9/104 $ $ **involving encoding steps**

N 9/108 $ $ **Fluorous synthesis**

N 9/11 $ $ **Synthesis occurs on a liquid macromolecular compound, e.g. polyethylene glycol**

N 9/112 $ $ **capturing the formed library members by means of a solid polymer, i.e. resin capture**

N 9/12 $ Solid phase synthesis, **i.e. library building blocks are bound to a solid support during library creation**

N 9/122 $ $ using a particular attachment method to the solid support **(chemical reaction per se C07B)**

N 9/124 $ $ **involving encoding steps**

~~N 9/14~~ $ $ ~~capturing the reaction products by means of a polymer, i.e. resin capture~~

~~N 9/16~~ $ $ ~~using supported reagents~~

~~N 9/18~~ $ ~~Using encoding techniques, e.g. incorporation of tags or labels~~
~~Note: Tags *per se* should be classified in the corresponding C07 class and in C40B11/02~~

~~N 9/20~~ $ ~~Using a particular attachment method to the liquid/solid support~~
~~Note: linkers *per se* should be classified in the corresponding compound areas, e.g. C07 and in C40B11/04 or sub-groups thereof~~

11/00 Apparatus specially adapted for use in combinatorial chemistry or with libraries

11/02 $ Integrated apparatus specially adapted for creating libraries, screening libraries and for identifying library members

11/04 $ Integrated apparatus specially adapted for both screening libraries and identifying library members

11/06 $ Integrated apparatus specially adapted for both creating libraries and identifying library members

11/08 $ Integrated apparatus specially adapted for both creating and screening libraries

11/10 $ For identifying library members

11/12 $ For screening libraries

11/14 $ For creating libraries

N **13/00** Tags, labels specially adapted for combinatorial chemistry or libraries**,** e.g. fluorescent tags, bar codes
Note: Tags *per se* should be classified in the corresponding compound areas, e.g. C07. If of interest, the encoding strategy should be classified in C40B9/104 or C40B9/124, the decoding process in C40B3/04 and the measuring or testing technique in the corresponding G01 area.

N **15/00** Linkers, spacers specially adapted for combinatorial chemistry or libraries, e.g., traceless linkers, safety-catch linkers
Note: linkers *per se* should be classified in the corresponding compound areas, e.g. C07. If of interest, the attachment method to the liquid/solid support or the method for the cleavage therefrom should be classified in C40B9/102 or C40B9/122 respectively.

17/00 Subject matter not provided for in groups 1/00 to 11/00 and relating to combinatorial chemistry or libraries