CPC   COOPERATIVE PATENT CLASSIFICATION

C   **CHEMISTRY; METALLURGY**
(NOTES omitted)

COMBINATORIAL TECHNOLOGY

C40   **COMBINATORIAL TECHNOLOGY**

C40B   **COMBINATORIAL CHEMISTRY; LIBRARIES, e.g. CHEMICAL LIBRARIES** (in silico combinatorial libraries of nucleic acids, proteins or peptides G16B 35/00; in silico combinatorial chemistry G16C 20/60)

>   **NOTES**
>
> 1.   In this subclass, the first place priority rule is applied, i.e. at each hierarchical level, classification is made in the first appropriate place.
> 2.   When classifying in this subclass{, subject matter of interest is also classified in other appropriate places:}
>   • 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 100 and 101 of the Guide);
>   • {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.

A01N	Biocides
A61K	Preparations for medical, dental or toilet purposes
A61P	Specific therapeutic activity of chemical compounds or medicinal preparations
B01D	Separation
B01J	Chemical or physical processes, e.g. catalysis; Apparatus therefor
B01L	Chemical or physical laboratory apparatus
B29	Shaped plastics
C01, C07, C08	Inorganic, organic or organic macromolecular compounds; Methods of preparation or separation thereof
C12	Biochemistry. microbiology, enzymology including microorganisms or enzymes, preparing them, using them to synthesise compounds or compositions; Measuring or testing processes involving microorganisms or enzymes; Mutation or genetic engineering
C22	Metal alloys
G01N	Chemical or physical analysis
G01R, G01T	Physical measurements methods; Apparatus therefor
G03F	Photomechanical methods
G06F	Electrical digital data processing
G06K	Data processing
G06T	Image data processing
G09F	Displaying; Advertising.

> }
> 3.   {C12N 15/1034 - C12N 15/1093 always take precedence over C40B.}

10/00   **Directed molecular evolution of macromolecules, e.g. RNA, DNA or proteins**

20/00   **Methods specially adapted for identifying library members**

20/02   . Identifying library members by their fixed physical location on a support or substrate

20/04   . Identifying library members by means of a tag, label, or other readable or detectable entity associated with the library members, e.g. decoding processes

20/06   . using iterative deconvolution techniques

20/08   . Direct analysis of the library members per se by physical methods, e.g. spectroscopy

30/00   **Methods of screening libraries**

30/04   . by measuring the ability to specifically bind a target molecule, e.g. antibody-antigen binding, receptor-ligand binding

30/06   . by measuring effects on living organisms, tissues or cells

30/08   . by measuring catalytic activity

30/10   . by measuring physical properties, e.g. mass

40/00   **Libraries per se, e.g. arrays, mixtures**

40/02   . Libraries contained in or displayed by microorganisms, e.g. bacteria or animal cells; Libraries contained in or displayed by vectors, e.g. plasmids; Libraries containing only microorganisms or vectors

40/04	. Libraries containing only organic compounds

> **NOTE**
>
> Libraries containing salts of organic compounds are classified in the groups for the libraries containing the parent compound

40/06	. . Libraries containing nucleotides or polynucleotides, or derivatives thereof
40/08	. . . Libraries containing RNA or DNA which encodes proteins, e.g. gene libraries
40/10	. . Libraries containing peptides or polypeptides, or derivatives thereof
40/12	. . Libraries containing saccharides or polysaccharides, or derivatives thereof
40/14	. . Libraries containing macromolecular compounds and not covered by groups C40B 40/06 - C40B 40/12
40/16	. . Libraries containing metal-containing organic compounds
40/18	. Libraries containing only inorganic compounds or inorganic materials

50/00	**Methods of creating libraries, e.g. combinatorial synthesis**
50/04	. using dynamic combinatorial chemistry techniques
50/06	. Biochemical methods, e.g. using enzymes or whole viable microorganisms
50/08	. Liquid phase synthesis, i.e. wherein all library building blocks are in liquid phase or in solution during library creation; Particular methods of cleavage from the liquid support
50/10	. . involving encoding steps
50/12	. . using a particular method of attachment to the liquid support
50/14	. Solid phase synthesis, i.e. wherein one or more library building blocks are bound to a solid support during library creation; Particular methods of cleavage from the solid support
50/16	. . involving encoding steps
50/18	. . using a particular method of attachment to the solid support

60/00	**Apparatus specially adapted for use in combinatorial chemistry or with libraries**
60/02	. Integrated apparatus specially adapted for creating libraries, screening libraries and for identifying library members
60/04	. Integrated apparatus specially adapted for both screening libraries and identifying library members
60/06	. Integrated apparatus specially adapted for both creating libraries and identifying library members
60/08	. Integrated apparatus specially adapted for both creating and screening libraries
60/10	. for identifying library members
60/12	. for screening libraries
60/14	. for creating libraries

70/00	**Tags or labels specially adapted for combinatorial chemistry or libraries, e.g. fluorescent tags or bar codes**

80/00	**Linkers or spacers specially adapted for combinatorial chemistry or libraries, e.g. traceless linkers or safety-catch linkers**

99/00	**Subject matter not provided for in other groups of this subclass**