

# 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.](#)

<a href="#">A01N</a>	Biocides
<a href="#">A61K</a>	Preparations for medical, dental or toilet purposes
<a href="#">A61P</a>	Specific therapeutic activity of chemical compounds or medicinal preparations
<a href="#">B01D</a>	Separation
<a href="#">B01J</a>	Chemical or physical processes, e.g. catalysis; Apparatus therefor
<a href="#">B01L</a>	Chemical or physical laboratory apparatus
<a href="#">B29</a>	Shaped plastics
<a href="#">C01</a> , <a href="#">C07</a> , <a href="#">C08</a>	Inorganic, organic or organic macromolecular compounds; Methods of preparation or separation thereof
<a href="#">C12</a>	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
<a href="#">C22</a>	Metal alloys
<a href="#">G01N</a>	Chemical or physical analysis
<a href="#">G01R</a> , <a href="#">G01T</a>	Physical measurements methods; Apparatus therefor
<a href="#">G03F</a>	Photomechanical methods
<a href="#">G06F</a>	Electrical digital data processing
<a href="#">G06K</a>	Data processing
<a href="#">G06T</a>	Image data processing
<a href="#">G09F</a>	Displaying; Advertising.
3. {[C12N 15/1034](#) - [C12N 15/1093](#) always take precedence over [C40B](#). }

10/00	<b>Directed molecular evolution of macromolecules, e.g. RNA, DNA or proteins</b>	30/04	• by measuring the ability to specifically bind a target molecule, e.g. antibody-antigen binding, receptor-ligand binding
20/00	<b>Methods specially adapted for identifying library members</b>	30/06	• by measuring effects on living organisms, tissues or cells
20/02	• Identifying library members by their fixed physical location on a support or substrate	30/08	• by measuring catalytic activity
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	30/10	• by measuring physical properties, e.g. mass
20/06	• using iterative deconvolution techniques	<b>40/00</b>	<b>Libraries <u>per se</u>, e.g. arrays, mixtures</b>
20/08	• Direct analysis of the library members <u>per se</u> by physical methods, e.g. spectroscopy	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
30/00	<b>Methods of screening libraries</b>		

- 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