

# CPC COOPERATIVE PATENT CLASSIFICATION

## C CHEMISTRY; METALLURGY

(NOTES omitted)

### CHEMISTRY

#### C07 ORGANIC CHEMISTRY

(NOTES omitted)

#### C07B GENERAL METHODS OF ORGANIC CHEMISTRY; APPARATUS THEREFOR (preparation of carboxylic acid esters by telomerisation [C07C 67/47](#); telomerisation [C08F](#))

##### NOTES

1. In this subclass, the functional group which is present already in some residue being introduced and is not substantially involved in a chemical reaction, is not considered as the functional group which is formed or introduced as a result of the chemical reaction.
2. In this subclass, the following term is used with the meaning indicated:
  - "separation" means separation only for the purposes of recovering organic compounds.
3. When classifying in this subclass, classification is also made in group [B01D 15/08](#) insofar as subject matter of general interest relating to chromatography is concerned
4. In this subclass, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place according to the type of reaction employed, noting the bond or the functional group which is formed or introduced as a result of the chemical reaction.
5. {[C07B 59/00](#) and subgroups thereof are used for the classification of individual labelled compounds as well as for general methods.}
6. {[C07B 61/02](#) is used for the classification of individual free radicals as well as for general methods.}

##### WARNING

The following IPC group is not in the CPC scheme. The subject matter for this IPC group is classified in the following CPC group:

[C07B 60/00](#)

covered by

[C07B 61/02](#)

**31/00 Reduction in general**

37/12 . . Diels-Alder reactions

**33/00 Oxidation in general**

##### Reactions with formation or introduction of functional groups containing hetero atoms

##### Reactions without formation or introduction of functional groups containing hetero atoms

**39/00 Halogenation**

**35/00 Reactions without formation or introduction of functional groups containing hetero atoms, involving a change in the type of bonding between two carbon atoms already directly linked**

**41/00 Formation or introduction of functional groups containing oxygen**

- 35/02 . Reduction
- 35/04 . Dehydrogenation
- 35/06 . Decomposition, e.g. elimination of halogens, water or hydrogen halides
- 35/08 . Isomerisation

- 41/02 . of hydroxy or O-metal groups
- 41/04 . of ether, acetal or ketal groups
- 41/06 . of carbonyl groups
- 41/08 . of carboxyl groups or salts, halides or anhydrides thereof
- 41/10 . . Salts, halides or anhydrides of carboxyl groups
- 41/12 . of carboxylic acid ester groups
- 41/14 . of peroxy of hydroperoxy groups

**37/00 Reactions without formation or introduction of functional groups containing hetero atoms, involving either the formation of a carbon-to-carbon bond between two carbon atoms not directly linked already or the disconnection of two directly linked carbon atoms**

**43/00 Formation or introduction of functional groups containing nitrogen**

- 37/02 . Addition
- 37/04 . Substitution
- 37/06 . Decomposition, e.g. elimination of carbon dioxide
- 37/08 . Isomerisation
- 37/10 . Cyclisation

- 43/02 . of nitro or nitroso groups
- 43/04 . of amino groups
- 43/06 . of amide groups
- 43/08 . of cyano groups
- 43/10 . of isocyanate groups

**45/00 Formation or introduction of functional groups containing sulfur**

- 45/02 . of sulfo or sulfonyldioxy groups

- 45/04 . of sulfonyl or sulfinyl groups
- 45/06 . of mercapto or sulfide groups
- 47/00 Formation or introduction of functional groups not provided for in groups [C07B 39/00](#) - [C07B 45/00](#)**
- 49/00 Grignard reactions**
- 51/00 Introduction of protecting groups or activating groups, not provided for in the preceding groups**
- 53/00 Asymmetric syntheses**
- 55/00 Racemisation; Complete or partial inversion**
- 57/00 Separation of optically-active compounds**
- 59/00 Introduction of isotopes of elements into organic compounds {; Labelled organic compounds per se}**
  - 59/001 . {Acyclic or carbocyclic compounds}
  - 59/002 . {Heterocyclic compounds}
  - 59/004 . {Acyclic, carbocyclic or heterocyclic compounds containing elements other than carbon, hydrogen, halogen, oxygen, nitrogen, sulfur, selenium or tellurium}
  - 59/005 . {Sugars; Derivatives thereof; Nucleosides; Nucleotides; Nucleic acids}
  - 59/007 . {Steroids}
  - 59/008 . {Peptides; Proteins}
- 61/00 Other general methods**
  - 61/02 . {Generation of organic free radicals; Organic free radicals per se}

**Purification; Separation; Stabilisation**

- 63/00 Purification; Separation (separation of optically-active compounds [C07B 57/00](#)); Stabilisation; Use of additives**
- 63/02 . by treatment giving rise to a chemical modification
- 63/04 . Use of additives { (anti-oxidant compositions or compositions inhibiting chemical change in general [C09K 15/00](#)) }

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**2200/00 Indexing scheme relating to specific properties of organic compounds**

- 2200/01 . Charge-transfer complexes
- 2200/03 . Free radicals
- 2200/05 . Isotopically modified compounds, e.g. labelled
- 2200/07 . Optical isomers
- 2200/09 . Geometrical isomers
- 2200/11 . Compounds covalently bound to a solid support
- 2200/13 . Crystalline forms, e.g. polymorphs