CPC COOPERATIVE PATENT CLASSIFICATION

C CHEMISTRY; METALLURGY

(NOTES omitted)

CHEMISTRY

C07 ORGANIC CHEMISTRY

(NOTES omitted)

C07C ACYCLIC OR CARBOCYCLIC COMPOUNDS

NOTES

1. In this subclass, the following terms or expressions are used with meanings indicated:
   - "bridged" means the presence of at least one fusion other than ortho, peri or spiro;
   - two rings are "condensed" if they share at least one ring member, i.e. "spiro" and "bridged" are considered as condensed;
   - "condensed ring system" is a ring system in which all rings are condensed among themselves;
   - "number of rings" in a condensed ring system equals the number of scissions necessary to convert the ring system into one acyclic chain;
   - "quinones" are compounds derived from compounds containing a six-membered aromatic ring or a system comprising six-membered aromatic rings (which system may be condensed or not condensed) by replacing two or four CH groups of the six-membered aromatic rings by C=O groups, and by removing one or two carbon-to-carbon double bonds, respectively, and rearranging the remaining carbon-to-carbon double bonds to give a ring or ring system with alternating double bonds, including the carbon-to-oxygen bonds; this means that acenaphthenequinone or camphorquinone are not considered as quinones.
2. In this subclass, in the absence of an indication to the contrary, a process is classified in the last appropriate place.
3. In this subclass, in the absence of an indication to the contrary, "quaternary ammonium compounds" are classified with the corresponding "non-quaternised nitrogen compounds".
4. For the classification of compounds in groups C07C 1/00 - C07C 71/00 and C07C 401/00 - C07C 409/00 :
   - a compound is classified considering the molecule as a whole (rule of the "whole molecule approach");
   - a compound is considered to be saturated if it does not contain carbon atoms bound to each other by multiple bonds;
   - a compound is considered to be unsaturated if it contains carbon atoms bound to each other by multiple bonds, which includes six-membered aromatic ring, unless otherwise specified or implicitely derivable from the subdivision.
5. For the classification of compounds in groups C07C 201/00 - C07C 395/00, i.e. after the functional group has been determined according to the"last place rule", a compound is classified according to the following principles:
   - compounds are classified in accordance with the nature of the carbon atom to which the functional group is attached;
   - a carbon skeleton is a carbon atom, other than a carbon atom of a carboxyl group, or a chain of carbon atoms bound to each other, a carbon skeleton is considered to be terminated by every bond to an element other than carbon or to a carbon atom of a carboxyl group;
   - when the molecule contains several functional groups, only functional groups linked to the same carbon skeleton as the one first determined are considered;
   - a carbon sekeleton is considered to be saturated if it does not contain carbon atoms bound to each other by multiple bonds;
   - a carbon skeleton is considered to be unsaturated if it contains carbon atoms bound to each other by multiple bonds, which includes a six-membered aromatic ring.
6. 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.
7. When a process is classified in a process group, combination sets are used to indicate the product of the process. A combination set consists of a process group, followed by and linked to the group of the product. The products are selected from the corresponding product groups.

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

C07C 27/02	covered by	C07C 29/00, C07C 51/00
C07C 47/042, C07C 47/045, C07C 47/048, C07C 47/052, C07C 47/055, C07C 47/058	covered by	C07C 47/04
C07C 47/07, C07C 47/09	covered by	C07C 47/06
C07C 53/04	covered by	C07C 53/02
C07C 57/045, C07C 57/05, C07C 57/055, C07C 57/065, C07C 57/07, C07C 57/075	covered by	C07C 57/04
C07C 69/025, C07C 69/03, C07C 69/035	covered by	C07C 69/003 - C07C 69/017 and C07C 69/02
C07C 69/347, C07C 69/353	covered by	C07C 69/003 - C07C 69/017 and C07C 69/34
C07C 69/527	covered by	C07C 69/003 - C07C 69/017 and C07C 69/52

C07C (continued)

C07C 69/767, C07C 69/773	covered by	C07C 69/003 - C07C 69/017 and C07C 69/76
C07C 69/83	covered by	C07C 69/003 - C07C 69/017 and C07C 69/82

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Hydrocarbons (derivatives of cyclohexane or of a cyclohexene {or of cyclohexadiene}, having a side-chain containing an acyclic unsatureted part of at least four carbon atoms, this part being directly attached to the cyclohexane or cyclohexene {or cyclohexadiene} rings C07C 403/00; preparation of macromolecular compounds C08; production or separation from undefined hydrocarbon mixtures such as petroleum oil C10G; natural gas, synthetic natural gas, liquefied petroleum gas C10L 3/00; electrolytic or electrophoretic processes C25B)

1/00 Preparation of hydrocarbons from one or more compounds, none of them being a hydrocarbon

1/02 . from oxides of a carbon (preparation of liquid hydrocarbon mixtures of undefined composition C10G 2/00; of synthetic natural gas C10L 3/06)
1/04 . . from carbon monoxide with hydrogen
1/0405 . . . {Apparatus}
1/041 . . . . {Reactors}
1/0415 . . . . . {with moving catalysts}
1/042 . . . . {Temperature controlling devices; Heat exchangers}
1/0425 . . . {Catalysts; their physical properties}
1/043 . . . . {characterised by the composition}
1/0435 . . . . . {containing a metal of group 8 or a compound thereof}
1/044 . . . . . {containing iron}
1/0445 . . . . {Preparation; Activation}
1/045 . . . . {Regeneration}
1/0455 . . . {Reaction conditions}
1/046 . . . . {Numerical values of parameters}
1/0465 . . . . {concerning fluidisation}
1/047 . . . . {Processes in which one or more parameters are changed during the process; Starting-up of the process}
1/0475 . . . . {Regulating}
1/048 . . . . {Temperature controlling measures}
1/0485 . . . {Set-up of reactors or accessories; Multi-step processes}
1/049 . . . . {Coupling of the reaction and regeneration of the catalyst}
1/0495 . . . {Non-catalytic processes; Catalytic processes in which there is also another way of activation, e.g. radiation}
1/06 . . . in the presence of organic compounds, e.g. hydrocarbons {(multi-step processes in which the feed to a subsequent reaction zone comprises at least a part of the reaction-product of a previous reaction zone C07C 1/0485)}
1/063 . . . . {the organic compound being the catalyst or a part of the catalyst system}
1/066 . . . . . {used for dissolving, suspending or transporting the catalyst}
1/08 . . . Isosyntheses
1/10 . . from carbon monoxide with water vapour
1/12 . . from carbon dioxide with hydrogen
1/20 . starting from organic compounds containing only oxygen atoms as heteroatoms
1/207 . . from carbonyl compounds
1/2072 . . . {by condensation (C07C 2/86 takes precedence)}
1/2074 . . . . {of only one compound}
1/2076 . . . {by a transformation in which at least one -C(=O)- moiety is eliminated}
1/2078 . . . {by a transformation in which at least one -C(=O)-O- moiety is eliminated}
1/213 . . . by splitting of esters
1/22 . . by reduction
1/24 . . by elimination of water
1/247 . . by splitting of cyclic ethers
1/26 . starting from organic compounds containing only halogen atoms as hetero-atoms
1/28 . . by ring closure
1/30 . . by splitting-off the elements of hydrogen halide from a single molecule
1/32 . starting from compounds containing hetero-atoms other than or in addition to oxygen or halogen
1/321 . . {the hetero-atom being a non-metal atom}
1/322 . . . {the hetero-atom being a sulfur atom}
1/323 . . . {the hetero-atom being a nitrogen atom}
1/324 . . . {the hetero-atom being a phosphorus atom (C07C 1/34 takes precedence)}
1/325 . . {the hetero-atom being a metal atom}
1/326 . . . {the hetero-atom being a magnesium atom}
1/327 . . . {the hetero-atom being an aluminium atom (C07C 2/88 takes precedence)}
1/328 . . . {the hetero-atom being an alkali metal atom}
1/34 . . reacting phosphines with aldehydes or ketones, e.g. Wittig reaction
1/36 . by splitting of esters (C07C 1/213, C07C 1/30 take precedence)

2/00 Preparation of hydrocarbons from hydrocarbons containing a smaller number of carbon atoms (redistribution reactions involving splitting C07C 6/00)

2/02 . by addition between unsaturated hydrocarbons
2/04 . . by oligomerisation of well-defined unsaturated hydrocarbons without ring formation
2/06 . . . of alkenes, i.e. acyclic hydrocarbons having only one carbon-to-carbon double bond
2/08 . . . . Catalytic processes
2/10 . . . . . with metal oxides
2/12 . . . . . with crystalline alumino-silicates {or with catalysts comprising} molecular sieves
2/14 . . . . . with inorganic acids; with salts or anhydrides of acids
2/16 . . . . . Acids of sulfur; Salts thereof; Sulfur oxides
2/18 . . . . . Acids of phosphorus; Salts thereof; Phosphorus oxides
2/20 . . . . . Acids of halogen; Salts thereof {; Complexes thereof with organic compounds}
2/22 . . . . . Metal halides; Complexes thereof with organic compounds
2/24 . . . . . with metals

2/26 . . . . . with hydrides or organic compounds (C07C 2/20 takes precedence)
2/28 . . . . . with ion-exchange resins
2/30 . . . . . containing metal-to-carbon bond; Metal hydrides
2/32 . . . . . as complexes, e.g. acetyl-acetonates {(complexes of salts of acids of halogen C07C 2/20)}
2/34 . . . . . Metal-hydrocarbon complexes
2/36 . . . . . as phosphines, arsines, stilbines or bismuthines
2/38 . . . of dienes or alkynes
2/40 . . . . of conjugated dienes
2/403 . . . . . {Catalytic processes}
2/406 . . . . . {with hydrides or organic compounds}
2/42 . . homo- or co-oligomerisation with ring formation, not being a Diels-Alder conversion
2/44 . . . of conjugated dienes only
2/46 . . . . Catalytic processes
2/465 . . . . . {with hydrides or organic compounds}
2/48 . . . of only hydrocarbons containing a carbon-to-carbon triple bond
2/50 . . Diels-Alder conversion
2/52 . . . Catalytic processes
2/54 . by addition of unsaturated hydrocarbons to saturated hydrocarbons or to hydrocarbons containing a six-membered aromatic ring with no unsaturation outside the aromatic ring
2/56 . . Addition to acyclic hydrocarbons
2/58 . . . Catalytic processes
2/60 . . . . with halides
2/62 . . . . with acids
2/64 . . Addition to a carbon atom of a six-membered aromatic ring
2/66 . . . Catalytic processes
2/68 . . . . with halides
2/70 . . . . with acids
2/72 . . Addition to a non-aromatic carbon atom of hydrocarbons containing a six-membered aromatic ring
2/74 . by addition with simultaneous hydrogenation
2/76 . by condensation of hydrocarbons with partial elimination of hydrogen
2/78 . . Processes with partial combustion
2/80 . . Processes with the aid of electrical means
2/82 . . oxidative coupling
2/84 . . . catalytic
2/86 . by condensation between a hydrocarbon and a non-hydrocarbon
2/861 . . {the non-hydrocarbon contains only halogen as hetero-atoms}
2/862 . . {the non-hydrocarbon contains only oxygen as hetero-atoms}
2/864 . . . {the non-hydrocarbon is an alcohol}
2/865 . . . {the non-hydrocarbon is an ether}
2/867 . . . {the non-hydrocarbon is an aldehyde or a ketone}
2/868 . . {the non-hydrocarbon contains sulfur as hetero-atom}
2/88 . . Growth and elimination reactions {(preparation of metallo-organic compounds C07F)}

4/00 Preparation of hydrocarbons from hydrocarbons containing a larger number of carbon atoms (redistribution reactions involving splitting C07C 6/00; cracking hydrocarbon oils C10G)
4/02 . by cracking a single hydrocarbon or a mixture of individually defined hydrocarbons or a normally gaseous hydrocarbon fraction
4/025 . . {Oxidative cracking, autothermal cracking or cracking by partial combustion}
4/04 . . Thermal processes {(C07C 4/025 takes precedence)}
4/06 . . Catalytic processes {(C07C 4/025 takes precedence)}
4/08 . by splitting-off an aliphatic or cycloaliphatic part from the molecule
4/10 . . from acyclic hydrocarbons
4/12 . . from hydrocarbons containing a six-membered aromatic ring, e.g. propyltoluene to vinyltoluene
4/14 . . . splitting taking place at an aromatic-aliphatic bond
4/16 . . . . Thermal processes
4/18 . . . . Catalytic processes
4/20 . . . . Hydrogen being formed in situ, e.g. from steam
4/22 . by depolymerisation to the original monomer, e.g. dicyclopentadiene to cyclopentadiene
4/24 . by splitting polyarylsubstituted aliphatic compounds at an aliphatic-aliphatic bond, e.g. 1,4-diphenylbutane to styrene
4/26 . by splitting polyaryl compounds at a bond between uncondensed six-membered aromatic rings, e.g. biphenyl to benzene

5/00 Preparation of hydrocarbons from hydrocarbons containing the same number of carbon atoms
5/02 . by hydrogenation (simultaneous hydrogenation and dehydrogenation C07C 5/52)
5/03 . . of non-aromatic carbon-to-carbon double bonds
5/05 . . . Partial hydrogenation
5/08 . . of carbon-to-carbon triple bonds
5/09 . . . to carbon-to-carbon double bonds
5/10 . . of aromatic six-membered rings
5/11 . . . Partial hydrogenation
5/13 . . with simultaneous isomerisation
5/22 . by isomerisation (with simultaneous hydrogenation C07C 5/13; with simultaneous dehydrogenation C07C 5/373)
5/2206 . . {Catalytic processes not covered by C07C 5/23 - C07C 5/31}
5/2213 . . . {with metal oxides}
5/222 . . . {with crystalline alumino-silicates, e.g. molecular sieves}
5/2226 . . . {with inorganic acids; with salt or anhydrides of acids}
5/2233 . . . . {Acids of sulfur; Salts thereof; Sulfur oxides}
5/224 . . . . {Acids of phosphorus; Salts thereof; Phosphorus oxides}
5/2246 . . . . {Acids of halogen; Salts thereof}
5/2253 . . . . . {Metal halides; Complexes thereof with organic compounds}
5/226 . . . {with metals}
5/2266 . . . {with hydrides or organic compounds (C07C 5/2246 takes precedence)}

5/2273 . . . . {with ion-exchange resins}
5/228 . . . . {containing metal-to-carbon bond; Metal hydrides}
5/2286 . . . . {containing complexes, e.g. acetyl-acetonates (complexes of salts of acids of halogen C07C 5/2246)}
5/2293 . . . . {containing phosphines, arsines, stibines, or bismuthines}
5/23 . . Rearrangement of carbon-to-carbon unsaturated bonds
5/25 . . . Migration of carbon-to-carbon double bonds
5/2506 . . . . {Catalytic processes}
5/2512 . . . . . {with metal oxides}
5/2518 . . . . . {with crystalline alumino-silicates, e.g. molecular sieves}
5/2525 . . . . . {with inorganic acids; with salts or anhydrides of acids}
5/2531 . . . . . {Acids of sulfur; Salts thereof; Sulfur oxides}
5/2537 . . . . . {Acids of phosphorus; Salts thereof; Phosphorus oxides}
5/2543 . . . . . {Acids of halogen; Salts thereof}
5/255 . . . . . {Metal halides; Complexes thereof with organic compounds}
5/2556 . . . . . {with metals}
5/2562 . . . . . {with hydrides or organic compounds (C07C 5/2543 takes precedence)}
5/2568 . . . . . {with ion-exchange resins}
5/2575 . . . . . {containing metal-to-carbon bond; Metal hydrides}
5/2581 . . . . . {containing complexes, e.g. acetyl-acetonates (complexes of salts of acids of halogen C07C 5/2543)}
5/2587 . . . . . {Metal-hydrocarbon complexes}
5/2593 . . . . . {containing phosphines, arsines, stibines or bismuthines}
5/27 . . Rearrangement of carbon atoms in the hydrocarbon skeleton
5/2702 . . . {Catalytic processes not covered by C07C 5/2732 - C07C 5/31; Catalytic processes covered by both C07C 5/2732 and C07C 5/277 simultaneously}
5/2705 . . . . {with metal oxides}
5/2708 . . . . {with crystalline alumino-silicates, e.g. molecular sieves}
5/271 . . . . {with inorganic acids; with salts or anhydrides of acids}
5/2713 . . . . . {Acids of sulfur; Salts thereof; Sulfur oxides}
5/2716 . . . . . {Acids of phosphorus; Salts thereof; Phosphorus oxides}
5/2718 . . . . . {Acids of halogen; Salts thereof; complexes thereof with organic compounds}
5/2721 . . . . . {Metal halides; Complexes thereof with organic compounds}
5/2724 . . . . {with metals}
5/2727 . . . . {with hydrides or organic compounds (C07C 5/2718 takes precedence)}
5/2729 . . . {Changing the branching point of an open chain or the point of substitution on a ring}
5/2732 . . . . {Catalytic processes}
5/2735 . . . . . {with metal oxides}
5/2737 . . . . . {with crystalline alumino-silicates, e.g. molecular sieves}
5/274 . . . . . {with inorganic acids; with salts or anhydrides of acids}
5/2743 . . . . . {Acids of sulfur; Salts thereof; Sulfur oxides}
5/2745 . . . . . {Acids of phosphorus; Salts thereof; Phosphorus acids}
5/2748 . . . . . {Acids of halogen; Salts thereof}
5/2751 . . . . . {Metal halides; Complexes thereof with organic compounds}
5/2754 . . . . . {with metals}
5/2756 . . . . . {with hydrides or organic compounds (C07C 5/2748 takes precedence)}
5/2759 . . . . . {containing metal-to-carbon bond; Metal hydrides}
5/2762 . . . . . {containing complexes, e.g. acetyl-acetonates (complexes of salts of acids of halogen C07C 5/2748)}
5/2764 . . . . . {Metal-hydrocarbon complexes}
5/2767 . . . {Changing the number of side-chains}
5/277 . . . . {Catalytic processes}
5/2772 . . . . . {with metal oxides}
5/2775 . . . . . {with crystalline alumino-silicates, e.g. molecular sieves}
5/2778 . . . . . {with inorganic acids; with salts or anhydrides of acids}
5/2781 . . . . . {Acids of sulfur; Salts thereof; Sulfur oxides}
5/2783 . . . . . {Acids of phosphorus; Salts thereof; Phosphorus oxides}
5/2786 . . . . . {Acids of halogen; Salts thereof}
5/2789 . . . . . {Metal halides; Complexes thereof with organic compounds}
5/2791 . . . . . {with metals}
5/2794 . . . . . {with hydrides or organic compounds (C07C 5/2786 takes precedence)}
5/2797 . . . . . {with ion-exchange resins}
5/29 . . . changing the number of carbon atoms in a ring while maintaining the number of rings
5/31 . . . changing the number of rings
5/32 . by dehydrogenation with formation of free hydrogen
5/321 . . {Catalytic processes}
5/322 . . . {with metal oxides or metal sulfides}
5/324 . . . {with metals}
5/325 . . . . {of the platinum group}
5/327 . . Formation of non-aromatic carbon-to-carbon double bonds only
5/333 . . . Catalytic processes
5/3332 . . . . {with metal oxides or metal sulfides}
5/3335 . . . . {with metals}
5/3337 . . . . . {of the platinum group}
5/35 . . Formation of carbon-to-carbon triple bonds only
5/367 . . Formation of an aromatic six-membered ring from an existing six-membered ring, e.g. dehydrogenation of ethylcyclohexane to ethylbenzene
5/373 . . with simultaneous isomerisation
5/387 . . . of cyclic compounds containing non six-membered ring to compounds containing a six-membered aromatic ring

5/393 . . . with cyclisation to an aromatic six-membered ring, e.g. dehydrogenation of n-hexane to benzene
5/41 . . . . Catalytic processes
5/412 . . . . . {with metal oxides or metal sulfides}
5/415 . . . . . {with metals}
5/417 . . . . . {of the platinum group}
5/42 . by dehydrogenation with a hydrogen acceptor

NOTES

1. The catalyst is considered as forming part of the acceptor system in case of simultaneous catalyst reduction.
2. The acceptor system is classified according to the supplying substances in case of in situ formation of the acceptor system or of in situ regeneration of the reduced acceptor system.
3. Compounds added for binding the reduced acceptor system are not considered as belonging to the acceptor system.

5/44 . . with halogen or a halogen-containing compound as an acceptor
5/46 . . with sulfur or a sulfur-containing compound as an acceptor
5/48 . . with oxygen as an acceptor
5/50 . . with an organic compound as an acceptor
5/52 . . . with a hydrocarbon as an acceptor, e.g. hydrocarbon disproportionation, i.e. $2C_nH_p$ -> $C_nH_{p+q} + C_nH_{p-q}$
5/54 . . with an acceptor system containing at least two compounds provided for in more than one of the sub-groups C07C 5/44 - C07C 5/50
5/56 . . . containing only oxygen and either halogens or halogen-containing compounds

6/00 Preparation of hydrocarbons from hydrocarbons containing a different number of carbon atoms by redistribution reactions

6/02 . Metathesis reactions at an unsaturated carbon-to-carbon bond
6/04 . . at a carbon-to-carbon double bond
6/06 . . . at a cyclic carbon-to-carbon double bond
6/08 . by conversion at a saturated carbon-to-carbon bond
6/10 . . in hydrocarbons containing no six-membered aromatic rings
6/12 . . of exclusively hydrocarbons containing a six-membered aromatic ring
6/123 . . . {of only one hydrocarbon}
6/126 . . . {of more than one hydrocarbon}

7/00 Purification; Separation; Use of additives (working-up undefined gaseous mixtures obtained by cracking hydrocarbon oils C10G 70/00)

7/005 . {Processes comprising at least two steps in series}
7/04 . by distillation
7/05 . . with the aid of auxiliary compounds
7/06 . . . by azeotropic distillation
7/08 . . . by extractive distillation
7/09 . by fractional condensation
7/10 . by extraction, i.e. purification or separation of liquid hydrocarbons with the aid of liquids
7/11 . by absorption, i.e. purification or separation of gaseous hydrocarbons with the aid of liquids
7/12 . by adsorption, i.e. purification or separation of hydrocarbons with the aid of solids, e.g. with ion-exchangers
7/13 . . by molecular-sieve technique
7/135 . by gas-chromatography
7/14 . by crystallisation; Purification or separation of the crystals
7/144 . using membranes, e.g. selective permeation
7/148 . by treatment giving rise to a chemical modification of at least one compound

NOTE

In the following sub-groups contact masses and catalysts are disregarded for classification purposes

7/14808 . . {with non-metals as element (hydrogenation C07C 7/163)}
7/14816 . . . {oxygen; ozone}
7/14825 . . . {halogens}
7/14833 . . {with metals or their inorganic compounds}
7/14841 . . . {metals}
7/1485 . . . {oxides; hydroxides; salts (C07C 7/156 takes precedence)}
7/14858 . . {with inorganic compounds not provided for before (acids, sulfur oxides C07C 7/17)}
7/14866 . . . {water (hydrate formation C07C 7/152)}
7/14875 . . {with organic compounds (organo-metallic compounds C07C 7/173)}
7/14883 . . . {hydrocarbons}
7/14891 . . . {alcohols}
7/152 . . by forming adducts or complexes
7/156 . . . with solutions of copper salts
7/163 . . by hydrogenation
7/167 . . . for removal of compounds containing a triple carbon-to-carbon bond
7/17 . . with acids or sulfur oxides
7/171 . . . Sulfuric acid or oleum
7/173 . . with the aid of organo-metallic compounds
7/177 . . by selective oligomerisation or polymerisation of at least one compound of the mixture
7/20 . Use of additives, e.g. for stabilisation

9/00 Aliphatic saturated hydrocarbons

9/02 . with one to four carbon atoms (liquefied petroleum gas C10L 3/12)
9/04 . . Methane (production by treatment of sewage C02F 11/04; natural gas, synthetic natural gas C10L 3/06)
9/06 . . Ethane
9/08 . . Propane
9/10 . . with four carbon atoms
9/12 . . . Iso-butane
9/14 . with five to fifteen carbon atoms
9/15 . . Straight-chain hydrocarbons
9/16 . . Branched-chain hydrocarbons
9/18 . . . with five carbon atoms
9/21 . . . 2, 2, 4-Trimethylpentane
9/22 . with more than fifteen carbon atoms

11/00 Aliphatic unsaturated hydrocarbons

11/02 . Alkenes
11/04 . . Ethene
11/06 . . Propene

11/08 . . with four carbon atoms
11/09 . . . Isobutene
11/10 . . with five carbon atoms
11/107 . . with six carbon atoms
11/113 . . . Methylpentenes
11/12 . Alkadienes
11/14 . . Allene
11/16 . . with four carbon atoms
11/167 . . . 1, 3-Butadiene
11/173 . . with five carbon atoms
11/18 . . . Isoprene
11/20 . . . 1, 3-Pentadiene
11/21 . Alkatrienes; Alkatetraenes; Other alkapolyenes
11/22 . containing carbon-to-carbon triple bonds
11/24 . . Acetylene (production of acetylene gas by wet methods C10H)
11/28 . containing carbon-to-carbon double bonds and carbon-to-carbon triple bonds
11/30 . . Butenyne

13/00 Cyclic hydrocarbons containing rings other than, or in addition to, six-membered aromatic rings

13/02 . Monocyclic hydrocarbons or acyclic hydrocarbon derivatives thereof
13/04 . . with a three-membered ring
13/06 . . with a four-membered ring
13/08 . . with a five-membered ring
13/10 . . . with a cyclopentane ring
13/11 . . . . substituted by unsaturated hydrocarbon groups
13/12 . . . with a cyclopentene ring
13/15 . . . with a cyclopentadiene ring
13/16 . . with a six-membered ring
13/18 . . . with a cyclohexane ring
13/19 . . . . substituted by unsaturated hydrocarbon groups
13/20 . . . with a cyclohexene ring
13/21 . . . . Menthadienes
13/23 . . . with a cyclohexadiene ring
13/24 . . with a seven-membered ring
13/26 . . with an eight-membered ring
13/263 . . . with a cyclo-octene or cyclo-octadiene ring
13/267 . . . with a cyclo-octatriene or cyclo-octatetraene ring
13/271 . . with a nine- to ten- membered ring
13/273 . . with a twelve-membered ring
13/275 . . . the twelve-membered ring being unsaturated
13/277 . . . . with a cyclododecatriene ring
13/28 . Polycyclic hydrocarbons or acyclic hydrocarbon derivatives thereof

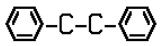
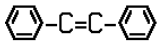
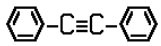
NOTE

Ring systems consisting only of condensed six-membered ring with maximum number of non-cumulative double bonds are classified in group C07C 15/00.

13/32 . . with condensed rings
13/34 . . . with a bicyclo ring system containing four carbon atoms
13/36 . . . with a bicyclo ring system containing five carbon atoms
13/38 . . . with a bicyclo ring system containing six carbon atoms
13/39 . . . with a bicyclo ring system containing seven carbon atoms
13/40 . . . . with a bicycloheptane ring structure
13/42 . . . . with a bicycloheptene ring structure
13/43 . . . . . substituted by unsaturated acyclic hydrocarbon
13/44 . . . with a bicyclo ring system containing eight carbon atoms
13/45 . . . with a bicyclo ring system containing nine carbon atoms
13/465 . . . . Indenes; Completely or partially hydrogenated indenes
13/47 . . . with a bicyclo ring system containing ten carbon atoms
13/48 . . . . Completely or partially hydrogenated naphthalenes
13/50 . . . . . Decahydronaphthalenes
13/52 . . . . Azulenes; Completely or partially hydrogenated azulenes
13/54 . . . with three condensed rings
13/547 . . . . at least one ring not being six-membered, the other rings being at the most six-membered
13/553 . . . . . with an indacene or hydrogenated indacene ring system
13/567 . . . . . with a fluorene or hydrogenated fluorene ring system
13/573 . . . . with three six-membered rings
13/58 . . . . . Completely or partially hydrogenated anthracenes
13/60 . . . . . Completely or partially hydrogenated phenanthrenes
13/605 . . . . with a bridged ring system
13/61 . . . . . with a bridged indene ring, e.g. dicyclopentadiene
13/615 . . . . . with an adamantane ring
13/62 . . . with more than three condensed rings
13/64 . . . . with a bridged ring system
13/66 . . . . the condensed ring system contains only four rings
13/68 . . . . . with a bridged ring system
13/70 . . . with a condensed ring system consisting of at least two, mutually uncondensed aromatic ring systems, linked by an annular structure formed by carbon chains on non-adjacent positions of the aromatic ring, e.g. cyclophanes
13/72 . . . Spiro hydrocarbons

15/00 Cyclic hydrocarbons containing only six-membered aromatic rings as cyclic parts

15/02 . Monocyclic hydrocarbons
15/04 . . Benzene
15/06 . . Toluene
15/067 . . C_8H_{10} hydrocarbons
15/073 . . . Ethylbenzene
15/08 . . . Xylenes
15/085 . . Isopropylbenzene
15/107 . . having saturated side-chain containing at least six carbon atoms, e.g. detergent alkylates
15/113 . . . having at least two saturated side-chains, each containing at least six carbon atoms
15/12 . Polycyclic non-condensed hydrocarbons
15/14 . . all phenyl groups being directly linked
15/16 . . containing at least two phenyl groups linked by one single acyclic carbon atom

15/18 . . containing at least one group with formula 
15/20 . Polycyclic condensed hydrocarbons
15/24 . . containing two rings
15/27 . . containing three rings
15/28 . . . Anthracenes
15/30 . . . Phenanthrenes
15/38 . . containing four rings
15/40 . substituted by unsaturated carbon radicals
15/42 . . monocyclic
15/44 . . . the hydrocarbon substituent containing a carbon-to-carbon double bond
15/46 . . . . Styrene; Ring-alkylated styrenes
15/48 . . . the hydrocarbon substituent containing a carbon-to-carbon triple bond
15/50 . . polycyclic non-condensed
15/52 . . . containing a group with formula 
15/54 . . . containing a group with formula 
15/56 . . polycyclic condensed
15/58 . . . containing two rings
15/60 . . . containing three rings
15/62 . . . containing four rings

Compounds containing carbon and halogens with or without hydrogen (derivatives of cyclohexane or of a cyclohexene having an unsaturated side chain with at least four carbon atoms C07C 403/00)

17/00 Preparation of halogenated hydrocarbons
17/007 . from carbon or from carbides and halogens
17/013 . by addition of halogens
17/02 . . to unsaturated hydrocarbons
17/04 . . to unsaturated halogenated hydrocarbons
17/06 . . combined with replacement of hydrogen atoms by halogens
17/07 . by addition of hydrogen halides
17/08 . . to unsaturated hydrocarbons
17/087 . . to unsaturated halogenated hydrocarbons
17/093 . by replacement by halogens
17/10 . . of hydrogen atoms (combined with addition of halogens to unsaturated hydrocarbons C07C 17/06)
17/12 . . . in the ring of aromatic compounds
17/14 . . . in the side-chain of aromatic compounds
17/15 . . with oxygen as auxiliary reagent, e.g. oxychlorination
17/152 . . . of hydrocarbons
17/154 . . . . of saturated hydrocarbons
17/156 . . . . of unsaturated hydrocarbons
17/158 . . . of halogenated hydrocarbons
17/16 . . of hydroxyl groups
17/18 . . of oxygen atoms of carbonyl groups
17/20 . . of halogen atoms by other halogen atoms
17/202 . . . {two or more compounds being involved in the reaction}
17/204 . . . . {the other compound being a halogen}
17/206 . . . . {the other compound being HX}
17/208 . . . . {the other compound being MX}
17/21 . . . with simultaneous increase of the number of halogen atoms
17/23 . by dehalogenation
17/25 . by splitting-off hydrogen halides from halogenated hydrocarbons
17/26 . by reactions involving an increase in the number of carbon atoms in the skeleton
17/263 . . by condensation reactions
17/2632 . . . {involving an organo-magnesium compound, e.g. Grignard synthesis}
17/2635 . . . {involving a phosphorus compound, e.g. Wittig synthesis}
17/2637 . . . {between a compound containing only oxygen and possibly halogen as hetero-atoms and a halogenated hydrocarbon}
17/266 . . . of hydrocarbons and halogenated hydrocarbons
17/269 . . . of only halogenated hydrocarbons
17/272 . . by addition reactions
17/275 . . . of hydrocarbons and halogenated hydrocarbons
17/278 . . . of only halogenated hydrocarbons
17/281 . . . . of only one compound
17/30 . . by a Diels-Alder synthesis
17/32 . . by introduction of halogenated alkyl groups into ring compounds
17/35 . by reactions not affecting the number of carbon or of halogen atoms in the reaction
17/354 . . by hydrogenation
17/357 . . by dehydrogenation
17/358 . . by isomerisation
17/361 . by reactions involving a decrease in the number of carbon atoms
17/363 . . by elimination of carboxyl groups
17/367 . . by depolymerisation
17/37 . by disproportionation of halogenated hydrocarbons
17/38 . Separation; Purification; Stabilisation; Use of additives
17/383 . . by distillation
17/386 . . . with auxiliary compounds
17/389 . . by adsorption on solids
17/392 . . by crystallisation; Purification or separation of the crystals
17/395 . . by treatment giving rise to a chemical modification of at least one compound
17/42 . . Use of additives, e.g. for stabilisation

19/00 Acyclic saturated compounds containing halogen atoms
19/01 . containing chlorine
19/03 . . Chloromethanes
19/04 . . . Chloroform
19/041 . . . Carbon tetrachloride
19/043 . . Chloroethanes
19/045 . . . Dichloroethanes
19/05 . . . Trichloroethanes
19/055 . . . Tetrachloroethanes
19/07 . containing iodine
19/075 . containing bromine
19/08 . containing fluorine
19/10 . . and chlorine
19/12 . . . having two carbon atoms
19/14 . . and bromine
19/16 . . and iodine

21/00 Acyclic unsaturated compounds containing halogen atoms

21/02 . containing carbon-to-carbon double bonds
21/04 . . Chloro-alkenes
21/06 . . . Vinyl chloride
21/067 . . . Allyl chloride; Methallyl chloride
21/073 . . . Dichloro-alkenes
21/08 . . . . Vinylidene chloride
21/09 . . . . Dichloro-butenes
21/10 . . . Trichloroethene
21/12 . . . Tetrachloroethene
21/14 . . containing bromine
21/16 . . . Crotyl bromide
21/17 . . containing iodine
21/18 . . containing fluorine
21/185 . . . Tetrafluoroethene
21/19 . . Halogenated dienes
21/20 . . . Halogenated butadienes
21/21 . . . . Chloroprene
21/215 . . Halogenated polyenes with more than two carbon-to-carbon double bonds
21/22 . containing carbon-to-carbon triple bonds

22/00 Cyclic compounds containing halogen atoms bound to an acyclic carbon atom
22/02 . having unsaturation in the rings
22/04 . . containing six-membered aromatic rings
22/06 . . . Trichloromethylbenzene
22/08 . . . containing fluorine

23/00 Compounds containing at least one halogen atom bound to a ring other than a six-membered aromatic ring
23/02 . Monocyclic halogenated hydrocarbons
23/04 . . with a three-membered ring
23/06 . . with a four-membered ring
23/08 . . with a five-membered ring
23/10 . . with a six-membered ring
23/12 . . . Hexachlorocyclohexanes
23/14 . . with a seven-membered ring
23/16 . . with an eight-membered ring
23/18 . Polycyclic halogenated hydrocarbons
23/20 . . with condensed rings none of which is aromatic
23/22 . . . with a bicyclo ring system containing four carbon atoms
23/24 . . . with a bicyclo ring system containing five carbon atoms
23/26 . . . with a bicyclo ring system containing six carbon atoms
23/27 . . . with a bicyclo ring system containing seven carbon atoms
23/28 . . . . Saturated bicyclo ring system
23/30 . . . . Mono-unsaturated bicyclo ring system
23/32 . . . with a bicyclo ring system containing eight carbon atoms
23/34 . . . Halogenated completely or partially hydrogenated indenes
23/36 . . . Halogenated completely or partially hydrogenated naphthalenes
23/38 . . . with three condensed rings
23/40 . . . . Halogenated completely or partially hydrogenated fluorenes
23/42 . . . . Halogenated completely or partially hydrogenated anthracenes
23/44 . . . . Halogenated completely or partially hydrogenated phenanthrenes
23/46 . . . with more than three condensed rings

25/00 Compounds containing at least one halogen atom bound to a six-membered aromatic ring
25/02 . Monocyclic aromatic halogenated hydrocarbons
25/06 . . Monochloro-benzene
25/08 . . Dichloro-benzenes
25/10 . . Trichloro-benzenes
25/12 . . Hexachloro-benzene
25/125 . . Halogenated xylenes
25/13 . . containing fluorine
25/18 . Polycyclic aromatic halogenated hydrocarbons
25/20 . . Dichloro-diphenyl-trichloro-ethane
25/22 . . with condensed rings
25/24 . Halogenated aromatic hydrocarbons with unsaturated side chains
25/28 . . Halogenated styrenes

Compounds containing carbon and oxygen, with or without hydrogen or halogens (irradiation products of cholesterol or its derivatives C07C 401/00; vitamin D derivatives, 9,10-seco cyclopenta[a]phenanthrene or analogues obtained by chemical preparation without irradiation C07C 401/00; derivatives of cyclohexane or of a cyclohexene {or of cyclohexadiene}, having a side-chain containing an acyclic unsaturated part of at least four carbon atoms, this part being directly attached to the cyclohexane or cyclohexene {or cyclohexadiene} rings C07C 403/00; prostaglandins or derivatives thereof C07C 405/00; peroxy compounds C07C 407/00, C07C 409/00)

27/00 Processes involving the simultaneous production of more than one class of oxygen-containing compounds
27/04 . by reduction of oxygen-containing compounds (C07C 29/14 takes precedence)
27/06 . . by hydrogenation of oxides of carbon
27/08 . . . with moving catalysts
27/10 . by oxidation of hydrocarbons
27/12 . . with oxygen
27/14 . . . wholly gaseous reactions
27/16 . . with other oxidising agents
27/18 . by addition of alkynes to aldehydes, ketones, or alkylene oxides
27/20 . by oxo-reaction
27/22 . . with the use of catalysts which are specific for this process
27/24 . . with moving catalysts
27/26 . Purification; Separation; Stabilisation
27/28 . . by distillation
27/30 . . . by azeotropic distillation
27/32 . . . by extractive distillation
27/34 . . by extraction

29/00 Preparation of compounds having hydroxy or O-metal groups bound to a carbon atom not belonging to a six-membered aromatic ring
29/03 . by addition of hydroxy groups to unsaturated carbon-to-carbon bonds, e.g. with the aid of H_2O_2 (by simultaneous introduction of -OH groups and halogens C07C 29/64)
29/04 . . by hydration of carbon-to-carbon double bonds

29/05 . . . with formation of absorption products in mineral acids and their hydrolysis (characterised by the method of hydrolysis C07C 29/12)
29/06 . . . . the acid being sulfuric acid
29/08 . . . . the acid being phosphoric acid
29/09 . by hydrolysis
29/095 . . {of esters of organic acids}
29/10 . . of ethers, including cyclic ethers, e.g. oxiranes
29/103 . . . {of cyclic ethers}
29/106 . . . . {of oxiranes}
29/12 . . of esters of mineral acids
29/124 . . . of halides
29/128 . by alcoholysis
29/1285 . . {of esters of organic acids}
29/132 . by reduction of an oxygen containing functional group
29/136 . . of >C=O containing groups, e.g. —COOH
29/14 . . . of a —CHO group
29/141 . . . . with hydrogen or hydrogen-containing gases
29/143 . . . of ketones
29/145 . . . . with hydrogen or hydrogen-containing gases
29/147 . . . of carboxylic acids or derivatives thereof
29/149 . . . . with hydrogen or hydrogen-containing gases
29/15 . by reduction of oxides of carbon exclusively
29/151 . . with hydrogen or hydrogen-containing gases
29/1512 . . . {characterised by reaction conditions}
29/1514 . . . . {the solvents being characteristic}
29/1516 . . . {Multisteps}
29/1518 . . . . {one step being the formation of initial mixture of carbon oxides and hydrogen for synthesis}
29/152 . . . characterised by the reactor used
29/153 . . . characterised by the catalyst used
29/154 . . . . containing copper, silver, gold, or compounds thereof
29/156 . . . . containing iron group metals, platinum group metals or compounds thereof
29/157 . . . . . containing platinum group metals or compounds thereof
29/158 . . . . . containing rhodium or compounds thereof
29/159 . . with reducing agents other than hydrogen or hydrogen-containing gases
29/16 . by oxo-reaction combined with reduction
29/17 . by hydrogenation of carbon-to-carbon double or triple bonds
29/172 . . {with the obtention of a fully saturated alcohol}
29/175 . . {with simultaneous reduction of an oxo group}
29/177 . . {with simultaneous reduction of a carboxy group}
29/19 . . in six-membered aromatic rings
29/20 . . . in a non-condensed rings substituted with hydroxy groups
29/32 . increasing the number of carbon atoms by reactions without formation of -OH groups
29/34 . . by condensation involving hydroxy groups or the mineral ester groups derived therefrom, e.g. Guerbet reaction
29/36 . increasing the number of carbon atoms by reactions with formation of hydroxy groups, which may occur via intermediates being derivatives of hydroxy, e.g. O-metal
29/38 . . by reaction with aldehydes or ketones
29/40 . . . with compounds containing carbon-to-metal bonds
29/42 . . . with compounds containing triple carbon-to-carbon bonds, e.g. with metal-alkynes
29/44 . increasing the number of carbon atoms by addition reactions, i.e. reactions involving at least one carbon-to-carbon double or triple bond (C07C 29/16 takes precedence)
29/46 . . by diene-synthesis
29/48 . by oxidation reactions with formation of hydroxy groups
29/50 . . with molecular oxygen only
29/52 . . . in the presence of mineral boron compounds with, when necessary, hydrolysis of the intermediate formed
29/54 . . . starting from compounds containing carbon-to-metal bonds and followed by conversion of the -O- metal to -OH groups
29/56 . by isomerisation
29/58 . by elimination of halogen, e.g. by hydrogenolysis, splitting-off (C07C 29/124 takes precedence)
29/60 . by elimination of -OH groups, e.g. by dehydration (C07C 29/34 takes precedence)
29/62 . by introduction of halogen; by substitution of halogen atoms by other halogen atoms
29/64 . by simultaneous introduction of -OH groups and halogens
29/66 . . by addition of hypohalogenous acids, which may be formed in situ, to carbon-to-carbon unsaturated bonds
29/68 . Preparation of metal alcoholates (C07C 29/42, C07C 29/54 take precedence)
29/685 . . {by converting O-metal groups to other O-metal groups}
29/70 . . by converting hydroxy groups to O-metal groups {(C07C 29/09 takes precedence)}
29/705 . . . {by transalcoholysis (for the same reaction with the emphasis on alcohol preparation see C07C 29/128)}
29/72 . . by oxidation of carbon-to-metal bonds
29/74 . Separation; Purification; Use of additives, e.g. for stabilisation
29/76 . . by physical treatment
29/78 . . . by condensation or crystallisation
29/80 . . . by distillation
29/82 . . . . by azeotropic distillation
29/84 . . . . by extractive distillation
29/86 . . . by liquid-liquid treatment
29/88 . . by treatment giving rise to a chemical modification of at least one compound (chemisorption C07C 29/76)
29/90 . . . using hydrogen only
29/92 . . . by a consecutive conversion and reconstruction
29/94 . . Use of additives, e.g. for stabilisation

31/00 Saturated compounds having hydroxy or O-metal groups bound to acyclic carbon atoms

31/02 . Monohydroxylic acyclic alcohols
31/04 . . Methanol
31/08 . . Ethanol
31/10 . . containing three carbon atoms
31/12 . . containing four carbon atoms
31/125 . . containing five to twenty-two carbon atoms
31/13 . Monohydroxylic alcohols containing saturated rings

31/133 . . monocyclic
31/1333 . . . {with a three-membered ring}
31/1336 . . . {with a four-membered ring}
31/135 . . . with a five or six-membered rings; Naphthenic alcohols
31/1355 . . . . {with a six-membered ring}
31/137 . . polycyclic with condensed ring systems
31/18 . Polyhydroxylic acyclic alcohols
31/20 . . Dihydroxylic alcohols
31/202 . . . {Ethylene glycol}
31/205 . . . {1,3-Propanediol; 1,2-Propanediol}
31/207 . . . {1,4-Butanediol; 1,3-Butanediol; 1,2-Butanediol; 2,3-Butanediol}
31/22 . . Trihydroxylic alcohols, e.g. glycerol
31/225 . . . {Glycerol}
31/24 . . Tetrahydroxylic alcohols, e.g. pentaerythritol
31/245 . . . {Pentaerythritol}
31/26 . . Hexahydroxylic alcohols
31/27 . Polyhydroxylic alcohols containing saturated rings
31/272 . . {Monocyclic}
31/274 . . . {with a three to five-membered ring}
31/276 . . . {with a six-membered ring}
31/278 . . {Polycyclic with condensed rings}
31/28 . Metal alcoholates (titanates, zirconates C07F 7/00)
31/30 . . Alkali metal or alkaline earth metal alcoholates
31/32 . . Aluminium alcoholates
31/34 . Halogenated alcohols
31/36 . . the halogen not being fluorine
31/38 . . containing only fluorine as halogen
31/40 . . perhalogenated
31/42 . . Polyhydroxylic acyclic alcohols
31/44 . . Halogenated alcohols containing saturated rings

33/00 Unsaturated compounds having hydroxy or O-metal groups bound to acyclic carbon atoms

NOTE

In condensed ring systems of six-membered aromatic rings and other rings, the double bond belonging to a benzene ring is not considered as unsaturated for the non-aromatic ring condensed thereon, e.g. the 1, 2, 3, 4-tetrahydronaphtalene ring is considered to be saturated outside the aromatic ring

33/02 . Acyclic alcohols with carbon-to-carbon double bonds
33/025 . . with only one double bond
33/03 . . . in beta-position, e.g. allyl alcohol, methallyl alcohol
33/035 . . . Alkenediols
33/04 . Acyclic alcohols with carbon-to-carbon triple bonds
33/042 . . with only one triple bond
33/044 . . . Alkynediols
33/046 . . . . Butynediols
33/048 . . with double and triple bonds
33/05 . Alcohols containing rings other than six-membered aromatic rings
33/12 . . containing five-membered rings
33/14 . . containing six-membered rings
33/16 . . containing rings with more than six ring members
33/18 . Monohydroxylic alcohols containing only six-membered aromatic rings as cyclic part
33/20 . . monocyclic
33/22 . . . Benzylalcohol; phenethyl alcohol
33/24 . . polycyclic without condensed ring systems
33/26 . Polyhydroxylic alcohols containing only six-membered aromatic rings as cyclic part
33/28 . Alcohols containing only six-membered aromatic rings as cyclic part with unsaturation outside the aromatic rings
33/30 . . monocyclic
33/32 . . . Cinnamyl alcohol
33/34 . Monohydroxylic alcohols containing six-membered aromatic rings and other rings
33/36 . Polyhydroxylic alcohols containing six-membered aromatic rings and other rings
33/38 . Alcohols containing six-membered aromatic rings and other rings and having unsaturation outside the aromatic rings
33/40 . Halogenated unsaturated alcohols
33/42 . . acyclic
33/423 . . . {containing only double bonds as unsaturation}
33/426 . . . {containing only triple bonds as unsaturation}
33/44 . . containing rings other than six-membered aromatic rings
33/46 . . containing only six-membered aromatic rings as cyclic parts
33/48 . . . with unsaturation outside the aromatic rings
33/483 . . . . {Monocyclic}
33/486 . . . . {Polycyclic}
33/50 . . containing six-membered aromatic rings and other rings

35/00 Compounds having at least one hydroxy or O-metal group bound to a carbon atom of a ring other than a six-membered aromatic ring

35/02 . monocyclic
35/04 . . containing a three or four-membered rings
35/045 . . . {containing a four-membered ring}
35/06 . . containing a five-membered rings
35/08 . . containing a six-membered rings
35/12 . . . Menthol
35/14 . . . with more than one hydroxy group bound to the ring
35/16 . . . . Inositols
35/17 . . . with unsaturation only outside the ring
35/18 . . . with unsaturation at least in the ring
35/20 . . containing a seven or eight-membered rings
35/205 . . containing a nine to twelve-membered rings, e.g. cyclododecanols
35/21 . polycyclic, at least one hydroxy group bound to a non-condensed ring
35/22 . polycyclic, at least one hydroxy group bound to a condensed ring system
35/23 . . with hydroxy on a condensed ring system having two rings
35/24 . . . the condensed ring system containing five carbon atoms
35/26 . . . . Bicyclopentadienols
35/27 . . . the condensed ring system containing six carbon atoms
35/28 . . . the condensed ring system containing seven carbon atoms
35/29 . . . . being a (2.2.1) system
35/30 . . . . . Borneol; Isoborneol
35/31 . . . the condensed ring system containing eight carbon atoms

35/32 . . . the condensed ring system being a (4.3.0) system, e.g. indenols
35/34 . . . the condensed ring system being a (5.3.0.) system, e.g. azulenols
35/36 . . . the condensed ring system being a [4.4.0] system, e.g. hydrogenated naphthols
35/37 . . with a hydroxy group on a condensed system having three rings
35/38 . . . derived from the fluorene skeleton
35/40 . . . derived from the anthracene skeleton
35/42 . . . derived from the phenanthrene skeleton
35/44 . . with a hydroxy group on a condensed ring system having more than three rings
35/46 . O-metal derivatives of the cyclically bound hydroxy groups
35/48 . Halogenated derivatives
35/50 . . Alcohols with at least two rings
35/52 . . Alcohols with a condensed ring system

37/00 Preparation of compounds having hydroxy or O-metal groups bound to a carbon atom of a six-membered aromatic ring

37/001 . {by modification in a side chain}
37/002 . . {by transformation of a functional group, e.g. oxo, carboxyl}
37/003 . . {by hydrogenation of an unsaturated part}
37/004 . {by obtaining phenols from plant material or from animal material}
37/005 . {by obtaining phenols from products, waste products or side-products of processes, not directed to the production of phenols, by conversion or working-up}
37/006 . . {from the petroleum industry}
37/007 . . {from the tar industry}
37/008 . . {from coke ovens}
37/009 . . {from waste water (treatment of waste water C02F)}
37/01 . by replacing functional groups bound to a six-membered aromatic ring by hydroxy groups, e.g. by hydrolysis
37/02 . . by substitution of halogen
37/04 . . by substitution of SO_3H groups or a derivative thereof
37/045 . . by substitution of a group bound to the ring by nitrogen
37/05 . . . by substitution of a NH_2 group
37/055 . . the substituted group being bound to oxygen, e.g. ether group
37/0555 . . . {being esterified hydroxy groups}
37/06 . by conversion of non-aromatic six-membered rings or of such rings formed in situ into aromatic six-membered rings, e.g. by dehydrogenation
37/07 . . with simultaneous reduction of C=O group in that ring
37/08 . by decomposition of hydroperoxides, e.g. cumene hydroperoxide
37/11 . by reactions increasing the number of carbon atoms
37/115 . . {using acetals}
37/14 . . by addition reactions, i.e. reactions involving at least one carbon-to-carbon unsaturated bond
37/16 . . by condensation involving hydroxy groups of phenols or alcohols or the ether or mineral ester group derived therefrom
37/18 . . by condensation involving halogen atoms of halogenated compounds
37/20 . . using aldehydes or ketones
37/48 . by exchange of hydrocarbon groups, which may be substituted, from the same of other compounds, e.g. transalkylation
37/50 . by reactions decreasing the number of carbon atoms (C07C 37/04, C07C 37/045, C07C 37/055, C07C 37/08 take precedence)
37/52 . . by splitting polyaromatic compounds, e.g. polyphenolalkanes
37/54 . . . by hydrolysis of lignin or sulfite waste liquor
37/56 . . by replacing a carboxyl or aldehyde group by a hydroxy group
37/58 . by oxidation reactions introducing directly hydroxy groups on a =CH-group belonging to a six-membered aromatic ring with the aid of molecular oxygen
37/60 . by oxidation reactions introducing directly hydroxy groups on a =CH-group belonging to a six-membered aromatic ring with the aid of other oxidants than molecular oxygen or their mixtures with molecular oxygen
37/62 . by introduction of halogen; by substitution of halogen atoms by other halogen atoms
37/64 . Preparation of O-metal compounds with O-metal group bound to a carbon atom belonging to a six-membered aromatic ring
37/66 . . by conversion of hydroxy groups to O-metal groups
37/68 . Purification; separation; Use of additives, e.g. for stabilisation {(C07C 37/004 and C07C 37/005 take precedence)}
37/685 . . {Processes comprising at least two steps in series}
37/70 . . by physical treatment
37/72 . . . by liquid-liquid treatment
37/74 . . . by distillation
37/76 . . . . by steam distillation
37/78 . . . . by azeotropic distillation
37/80 . . . . by extractive distillation
37/82 . . . by solid-liquid treatment; by chemisorption
37/84 . . . by crystallisation
37/86 . . by treatment giving rise to a chemical modification (chemisorption C07C 37/82)
37/88 . . Use of additives, e.g. for stabilisation

39/00 Compounds having at least one hydroxy or O-metal group bound to a carbon atom of a six-membered aromatic ring

NOTE

In condensed ring systems of six-membered aromatic rings and other rings, the double bond belonging to the benzene ring is not considered as unsaturated for the non-aromatic ring condensed thereon.

39/02 . monocyclic with no unsaturation outside the aromatic ring
39/04 . . Phenol
39/06 . . Alkylated phenols
39/07 . . . containing only methyl groups, e.g. cresols, xylenols

39/08 . . Dihydroxy benzenes; Alkylated derivatives thereof

39/10 . . Polyhydroxy benzenes; Alkylated derivatives thereof (C07C 39/08 takes precedence)

39/11 . . Alkylated hydroxy benzenes containing also acyclically bound hydroxy groups, e.g. saligenol

39/12 . polycyclic with no unsaturation outside the aromatic rings

39/14 . . with at least one hydroxy group on a condensed ring system containing two rings

39/15 . . with all hydroxy groups on non-condensed rings {, e.g. phenylphenol}

39/16 . . . Bis-(hydroxyphenyl) alkanes; Tris-(hydroxyphenyl)alkanes

39/17 . . containing other rings in addition to the six-membered aromatic rings {, e.g. cyclohexylphenol}

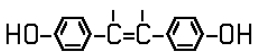
39/18 . monocyclic with unsaturation outside the aromatic ring

39/19 . . containing carbon-to-carbon double bonds but no carbon-to-carbon triple bonds

39/20 . . . Hydroxy-styrenes

39/205 . polycyclic, containing only six-membered aromatic rings as cyclic parts with unsaturation outside the rings

39/21 . . with at least one hydroxy group on a non-condensed ring

39/215 . . . containing  , e.g. diethylstilbestrol

39/225 . . with at least one hydroxy group on a condensed ring system

39/23 . polycyclic, containing six-membered aromatic rings and other rings, with unsaturation outside the aromatic rings

39/235 . Metal derivatives of a hydroxy group bound to a six-membered aromatic ring

39/24 . Halogenated derivatives

39/245 . . {monocyclic polyhydroxylic containing halogens bound to ring carbon atoms}

39/26 . . monocyclic monohydroxylic containing halogen bound to ring carbon atoms

39/27 . . . all halogen atoms being bound to ring carbon atoms

39/28 . . . . the halogen being one chlorine atom

39/30 . . . . the halogen being two chlorine atoms

39/32 . . . . the halogen being three chlorine atoms

39/34 . . . . the halogen being four chlorine atoms

39/36 . . . . Pentachlorophenol

39/367 . . polycyclic non-condensed, containing only six-membered aromatic rings as cyclic parts, e.g. halogenated poly-hydroxyphenylalkanes

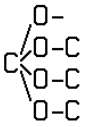
39/373 . . with all hydroxy groups on non-condensed rings and with unsaturation outside the aromatic rings

39/38 . . with at least one hydroxy group on a condensed ring system containing two rings

39/40 . . with at least one hydroxy group on a condensed ring system containing more than two rings

39/42 . . containing six-membered aromatic rings and other rings

39/44 . . Metal derivatives of an hydroxy group bound to a carbon atom of a six-membered aromatic ring

41/00 Preparation of ethers; Preparation of compounds having groups, groups or  groups

41/01 . Preparation of ethers

41/02 . . from oxiranes

41/03 . . . by reaction of oxirane rings with hydroxy groups

41/05 . . by addition of compounds to unsaturated compounds

41/06 . . . by addition of organic compounds only

41/08 . . . . to carbon-to-carbon triple bonds

41/09 . . by dehydration of compounds containing hydroxy groups

41/14 . . by exchange of organic parts on the ether-oxygen for other organic parts, e.g. by trans-etherification

41/16 . . by reaction of esters of mineral or organic acids with hydroxy or O-metal groups

41/18 . . by reactions not forming ether-oxygen bonds

41/20 . . . by hydrogenation of carbon-to-carbon double or triple bonds

41/22 . . . by introduction of halogens; by substitution of halogen atoms by other halogen atoms

41/24 . . . by elimination of halogens, e.g. elimination of HCl

41/26 . . . by introduction of hydroxy or O-metal groups

41/28 . . . from acetals, e.g. by dealcoholysis

41/30 . . . by increasing the number of carbon atoms, e.g. by oligomerisation

41/32 . . by isomerisation

41/34 . . Separation; Purification; Stabilisation; Use of additives

41/36 . . . by solid-liquid treatment; by chemisorption

41/38 . . . by liquid-liquid treatment

41/40 . . . by change of physical state, e.g. by crystallisation

41/42 . . . . by distillation

41/44 . . . by treatments giving rise to a chemical modification (by chemisorption C07C 41/36)

41/46 . . . Use of additives, e.g. for stabilisation

41/48 . Preparation of compounds having groups

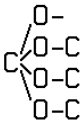
41/50 . . by reactions producing groups

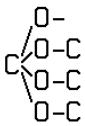
41/52 . . . by substitution of halogen only

41/54 . . . by addition of compounds to unsaturated carbon-to-carbon bonds

41/56 . . . by condensation of aldehydes, paraformaldehyde, or ketones

41/58 . . Separation; Purification; Stabilisation; Use of additives

41/60 . Preparation of compounds having groups or  groups

43/00 Ethers; Compounds having **groups,** **groups or**  **groups**

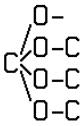
43/02 . Ethers
43/03 . . having all ether-oxygen atoms bound to acyclic carbon atoms
43/04 . . . Saturated ethers
43/043 . . . . {Dimethyl ether}
43/046 . . . . {Alkyl tert-alkyl ether, e.g. $CH_3OC(CH_3)_3$}
43/06 . . . . Diethyl ether
43/10 . . . . of polyhydroxy compounds
43/11 . . . . . Polyethers containing —O—(C—C—O—)$_n$ units with ≤ 2 n≤ 10
43/115 . . . . containing carbocyclic rings
43/12 . . . . containing halogen
43/123 . . . . . {both carbon chains are substituted by halogen atoms}
43/126 . . . . . {having more than one ether bond}
43/13 . . . . containing hydroxy or O-metal groups (C07C 43/11 takes precedence)
43/132 . . . . . {both carbon chains being substituted by hydroxy or O-metal groups}
43/135 . . . . . {having more than one ether bond}
43/137 . . . . . {containing halogen}
43/14 . . . Unsaturated ethers
43/15 . . . . containing only non-aromatic carbon-to-carbon double bonds
43/16 . . . . . Vinyl ethers
43/162 . . . . containing rings other than six-membered aromatic rings
43/164 . . . . containing six-membered aromatic rings
43/166 . . . . . having unsaturation outside the aromatic rings
43/168 . . . . . containing six-membered aromatic rings and other rings
43/17 . . . . containing halogen
43/172 . . . . . containing rings other than six-membered aromatic rings
43/174 . . . . . containing six-membered aromatic rings
43/1742 . . . . . {with halogen atoms bound to the aromatic rings}
43/1745 . . . . . {having more than one ether bound}
43/1747 . . . . . {containing six membered aromatic rings and other rings}
43/176 . . . . . having unsaturation outside the aromatic rings
43/178 . . . . containing hydroxy or O-metal groups
43/1781 . . . . . {containing rings other than six-membered aromatic rings}
43/1782 . . . . . {containing six-membered aromatic rings}
43/1783 . . . . . {with hydroxy or -O-metal groups bound to the aromatic rings}
43/1785 . . . . . {having more than one ether bound}
43/1786 . . . . . {containing halogen}
43/1787 . . . . . {containing six-membered aromatic rings and having unsaturation outside the aromatic rings}
43/1788 . . . . . {containing six-membered aromatic rings and other rings}
43/18 . . having an ether-oxygen atom bound to a carbon atom of a ring other than a six-membered aromatic ring
43/184 . . . to a carbon atom of a non-condensed ring
43/188 . . . Unsaturated ethers
43/192 . . . containing halogen
43/196 . . . containing hydroxy or O-metal groups
43/20 . . having an ether-oxygen atom bound to a carbon atom of a six-membered aromatic ring
43/202 . . . {the aromatic ring being a naphthalene}
43/205 . . . the aromatic ring being a non-condensed ring
43/2055 . . . . {containing more than one ether bond}
43/21 . . . containing rings other than six-membered aromatic rings
43/215 . . . having unsaturation outside the six-membered aromatic rings
43/225 . . . containing halogen
43/23 . . . containing hydroxy or O-metal groups
43/235 . . having an ether-oxygen atom bound to a carbon atom of a six-membered aromatic ring and to a carbon atom of a ring other than a six-membered aromatic ring
43/243 . . . having unsaturation outside the six-membered aromatic rings
43/247 . . . containing halogen
43/253 . . . containing hydroxy or O-metal groups
43/257 . . having an ether-oxygen atom bound to carbon atoms both belonging to six-membered aromatic rings
43/263 . . . the aromatic rings being non-condensed
43/267 . . . containing other rings
43/275 . . . having all ether-oxygen atoms bound to carbon atoms of six-membered aromatic rings
43/285 . . . having unsaturation outside the six-membered aromatic rings
43/29 . . . containing halogen
43/295 . . . containing hydroxy or O-metal groups
43/30 . Compounds having groups

NOTE

The acetal carbon atom is the carbon atom of the group

43/303 . . having acetal carbon atoms bound to acyclic carbon atoms
43/305 . . having acetal carbon atoms as rings members or bound to carbon atoms of rings other than six-membered aromatic rings
43/307 . . having acetal carbon atoms bound to carbon atoms of six-membered aromatic rings
43/313 . . containing halogen
43/315 . . containing oxygen atoms singly bound to carbon atoms not being acetal carbon atoms

43/317 . . having groups, X being hydrogen or metal

43/32 . Compounds having groups or  groups

45/00 Preparation of compounds having >C = O groups bound only to carbon or hydrogen atoms; Preparation of chelates of such compounds

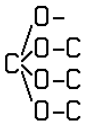
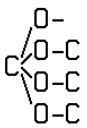
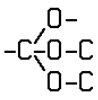
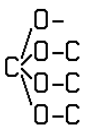
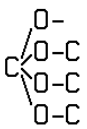
45/002 . {by dehydrogenation}
45/004 . {by reaction with organometalhalides}
45/006 . {by hydrogenation of aromatic hydroxy compounds}
45/008 . {by reaction with tri- or tetrahalomethyl compounds}
45/26 . by hydration of carbon-to-carbon triple bonds
45/27 . by oxidation (with ozone C07C 45/40)
45/28 . . of CH_x-moieties
45/29 . . of hydroxy groups
45/292 . . . {with chromium derivatives}
45/294 . . . {with hydrogen peroxide}
45/296 . . . {with lead derivatives}
45/298 . . . {with manganese derivatives}
45/30 . . with halogen containing compounds, e.g. hypohalogenation
45/305 . . . {with halogenochromate reagents, e.g. pyridinium chlorochromate}
45/31 . . with compounds containing mercury atoms, which may be regenerated in situ, e.g. by oxygen
45/32 . . with molecular oxygen
45/33 . . . of CH_x-moieties
45/34 . . . . in unsaturated compounds
45/35 . . . . . in propene or isobutene
45/36 . . . . . in compounds containing six-membered aromatic rings
45/37 . . . of >C—O—functional groups to >C=O groups
45/38 . . . . being a primary hydroxyl group
45/39 . . . . being a secondary hydroxyl group
45/40 . by oxidation with ozone; by ozonolysis
45/41 . by hydrogenolysis or reduction of carboxylic groups or functional derivatives thereof
45/42 . by hydrolysis
45/43 . . of $>CX_2$ groups, X being halogen
45/44 . by reduction and hydrolysis of nitriles
45/45 . by condensation
45/455 . . {with carboxylic acids or their derivatives}
45/46 . . Friedel-Crafts reactions
45/47 . . using phosgene
45/48 . . involving decarboxylation
45/49 . by reaction with carbon monoxide
45/50 . . by oxo-reactions
45/505 . . . {Asymmetric hydroformylation}
45/51 . by pyrolysis, rearrangement or decomposition
45/511 . . {involving transformation of singly bound oxygen functional groups to >C = O groups (involving two hydroxy groups C07C 45/52; hydroperoxides C07C 45/53)}
45/512 . . . {the singly bound functional group being a free hydroxyl group}
45/513 . . . {the singly bound functional group being an etherified hydroxyl group}
45/515 . . . {the singly bound functional group being an acetalised, ketalised hemi-acetalised, or hemi-ketalised hydroxyl group (cyclic acetals or ketals C07C 45/59, C07C 45/60)}
45/516 . . {involving transformation of nitrogen-containing compounds to >C = O groups}
45/517 . . {involving transformation of peroxy-compounds to >C = O groups}
45/518 . . {involving transformation of sulfur-containing compounds to >C = O groups}
45/52 . . by dehydration and rearrangement involving two hydroxy groups in the same molecule
45/53 . . of hydroperoxides
45/54 . . of compounds containing doubly bound oxygen atoms, e.g. esters
45/55 . . of oligo- or polymeric oxo-compounds
45/56 . from heterocyclic compounds (C07C 45/55 takes precedence)
45/562 . . {with nitrogen as the only hetero atom}
45/565 . . . {by reaction with hexamethylene-tetramine}
45/567 . . {with sulfur as the only hetero atom}
45/57 . . with oxygen as the only heteroatom
45/58 . . . in three-membered rings
45/59 . . . in five-membered rings (from ozonides C07C 45/40)
45/60 . . . in six-membered rings
45/61 . by reactions not involving the formation of >C = O groups
45/62 . . by hydrogenation of carbon-to-carbon double or triple bonds
45/63 . . by introduction of halogen; by substitution of halogen atoms by other halogen atoms
45/64 . . by introduction of functional groups containing oxygen only in singly bound form
45/65 . . by splitting-off hydrogen atoms or functional groups; by hydrogenolysis of functional groups
45/66 . . . by dehydration
45/67 . . by isomerisation; by change of size of the carbon skeleton
45/673 . . . {by change of size of the carbon skeleton}
45/676 . . . . {by elimination of carboxyl groups}
45/68 . . . by increase in the number of carbon atoms
45/69 . . . . by addition to carbon-to-carbon double or triple bonds
45/70 . . . . by reaction with functional groups containing oxygen only in singly bound form
45/71 . . . . . being hydroxy groups
45/72 . . . . by reaction of compounds containing >C = O groups with the same or other compounds containing >C = O groups
45/73 . . . . . combined with hydrogenation
45/74 . . . . . combined with dehydration
45/75 . . . . . Reactions with formaldehyde
45/76 . . . with the aid of ketenes
45/77 . Preparation of chelates of aldehydes or ketones
45/78 . Separation; Purification; Stabilisation; Use of additives
45/783 . . {by gas-liquid treatment, e.g. by gas-liquid absorption}
45/786 . . {by membrane separation process, e.g. pervaporation, perstraction, reverse osmosis}

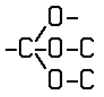
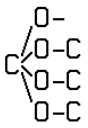
45/79 . . by solid-liquid treatment; by chemisorption
45/80 . . by liquid-liquid treatment
45/81 . . by change in the physical state, e.g. crystallisation
45/82 . . . by distillation
45/83 . . . . by extractive distillation
45/84 . . . . by azeotropic distillation
45/85 . . by treatment giving rise to a chemical modification (by chemisorption C07C 45/79)
45/86 . . Use of additives, e.g. for stabilisation
45/87 . Preparation of ketenes or dimeric ketenes (heterocyclic compounds C07D)
45/88 . . from ketones
45/89 . . from carboxylic acids, their anhydrides, esters or halides
45/90 . . Separation; Purification; Stabilisation; Use of additives

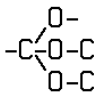
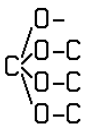
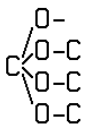
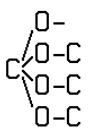
46/00 Preparation of quinones

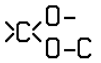
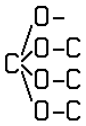
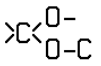
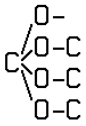
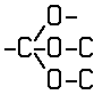
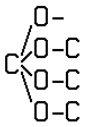
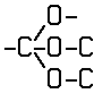
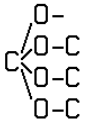
46/02 . by oxidation giving rise to quinoid structures
46/04 . . of unsubstituted ring carbon atoms in six-membered aromatic rings
46/06 . . of at least one hydroxy group on a six-membered aromatic ring
46/08 . . . with molecular oxygen
46/10 . Separation; Purification; Stabilisation; Use of additives

47/00 Compounds having —CHO groups

47/02 . Saturated compounds having —CHO groups bound to acyclic carbon atoms or to hydrogen
47/04 . . Formaldehyde
47/06 . . Acetaldehyde
47/105 . . containing rings
47/11 . . . monocyclic
47/115 . . . containing condensed ring systems
47/12 . . containing more than one —CHO group
47/127 . . . Glyoxal
47/133 . . . containing rings
47/14 . . containing halogen
47/16 . . . Trichloroacetaldehyde
47/17 . . . containing rings
47/19 . . containing hydroxy groups (sugars C07H)
47/192 . . . containing rings
47/195 . . . containing halogen
47/198 . . containing ether groups, groups, groups, or  groups
47/20 . Unsaturated compounds having —CHO groups bound to acyclic carbon atoms
47/21 . . with only carbon-to-carbon double bonds as unsaturation
47/22 . . . Acryaldehyde; Methacryaldehyde
47/222 . . with only carbon-to-carbon triple bonds as unsaturation
47/225 . . containing rings other than six-membered aromatic rings
47/228 . . containing six-membered aromatic rings, e.g. phenylacetaldehyde
47/23 . . . polycyclic
47/232 . . . having unsaturation outside the aromatic rings
47/235 . . containing six-membered aromatic rings and other rings
47/238 . . . having unsaturation outside the aromatic rings
47/24 . . containing halogen
47/26 . . containing hydroxy groups
47/263 . . . acyclic
47/267 . . . containing rings other than six-membered aromatic rings
47/27 . . . containing six-membered aromatic rings
47/273 . . . containing halogen
47/277 . . containing ether groups, groups, groups, or  groups
47/28 . Saturated compounds having —CHO groups bound to carbon atoms of rings other than six—membered aromatic rings
47/293 . . with three- or four-membered ring
47/30 . . with a five-membered ring
47/32 . . with a six-membered ring
47/33 . . with a seven- to twelve-membered ring
47/34 . . polycyclic
47/347 . . . having a —CHO group on a condensed ring system
47/353 . . containing halogen
47/36 . . containing hydroxy groups
47/37 . . containing ether groups, groups,  groups, or  groups
47/38 . Unsaturated compounds having —CHO groups bound to carbon atoms of rings other than six—membered aromatic rings
47/395 . . with a three- or four-membered ring
47/40 . . with a five-membered ring
47/42 . . with a six-membered ring
47/43 . . with a seven- to twelve-membered ring
47/44 . . polycyclic
47/445 . . . containing a condensed ring system
47/45 . . having unsaturation outside the rings
47/453 . . containing six-membered aromatic rings
47/457 . . containing halogen
47/46 . . containing hydroxy groups
47/47 . . containing ether groups, groups, groups, or  groups
47/52 . Compounds having —CHO groups bound to carbon atoms of six—membered aromatic rings
47/54 . . Benzaldehyde
47/542 . . Alkylated benzaldehydes
47/544 . . Diformyl benzenes; Alkylated derivatives thereof
47/546 . . polycyclic
47/548 . . having unsaturation outside the six-membered aromatic rings

47/55 . . containing halogen
47/56 . . containing hydroxy groups
47/565 . . . all hydroxy groups bound to the ring
47/57 . . . polycyclic
47/575 . . containing ether groups, groups,  groups, or  groups
47/58 . . . Vanillin

49/00 **Ketones; Ketenes; Dimeric ketenes** (heterocyclic compounds C07D, e.g. beta-lactones C07D 305/12)**; Ketonic chelates**
49/04 . Saturated compounds containing keto groups bound to acyclic carbon atoms
49/08 . . Acetone
49/10 . . Methyl-ethyl ketone
49/105 . . containing rings
49/11 . . . monocyclic
49/115 . . . containing condensed ring systems
49/12 . . Ketones containing more than one keto group
49/14 . . . Acetylacetone, i.e. 2,4-pentanedione
49/15 . . . containing rings
49/16 . . containing halogen
49/163 . . . containing rings
49/167 . . . containing only fluorine as halogen
49/17 . . containing hydroxy groups (sugars C07H)
49/172 . . . containing rings
49/173 . . . containing halogen
49/175 . . containing ether groups, groups,  groups, or  groups
49/185 . . containing —CHO groups
49/20 . Unsaturated compounds containing keto groups bound to acyclic carbon atoms
49/203 . . with only carbon-to-carbon double bonds as unsaturation
49/205 . . . Methyl-vinyl ketone
49/207 . . with only carbon-to-carbon triple bonds as unsaturation
49/21 . . containing rings other than six-membered aromatic rings
49/213 . . containing six-membered aromatic rings
49/215 . . . polycyclic
49/217 . . . having unsaturation outside the aromatic rings
49/223 . . . . polycyclic
49/225 . . containing six-membered aromatic rings and other rings
49/227 . . containing halogen
49/23 . . . containing rings other than six-membered aromatic rings
49/233 . . . containing six-membered aromatic rings
49/235 . . . . having unsaturation outside the aromatic rings
49/237 . . . containing six-membered aromatic rings and other rings
49/24 . . containing hydroxy groups
49/242 . . . containing rings other than six-membered aromatic rings
49/245 . . . containing six-membered aromatic rings
49/248 . . . . having unsaturation outside the aromatic rings
49/252 . . . containing six-membered aromatic rings and other rings
49/255 . . containing ether groups, groups, groups, or  groups
49/258 . . containing —CHO groups
49/29 . Saturated compounds containing keto groups bound to rings
49/293 . . to a three- or four-membered ring
49/297 . . to a five-membered ring
49/303 . . to a six-membered ring
49/307 . . to a seven- to twelve-membered ring
49/313 . . polycyclic
49/317 . . . both carbon atoms bound to the keto group belonging to rings
49/323 . . . having keto groups bound to condensed ring systems
49/327 . . containing halogen
49/333 . . . polycyclic
49/337 . . containing hydroxy groups
49/345 . . . polycyclic
49/35 . . containing ether groups, groups, groups, or  groups
49/355 . . containing —CHO groups
49/385 . Saturated compounds containing a keto group being part of a ring
49/39 . . of a three- or four-membered ring
49/395 . . of a five-membered ring
49/403 . . of a six-membered ring
49/407 . . . Menthones
49/413 . . of a seven- to twelve-membered ring
49/417 . . polycyclic
49/423 . . . a keto group being part of a condensed ring system
49/427 . . . . having two rings
49/433 . . . . . the condensed ring system containing seven carbon atoms
49/437 . . . . . Camphor; Fenchone
49/443 . . . . . the condensed ring system containing eight or nine carbon atoms
49/447 . . . . . the condensed ring system containing ten carbon atoms
49/453 . . . . having three rings
49/457 . . containing halogen
49/463 . . . a keto group being part of a six-membered ring
49/467 . . . polycyclic
49/473 . . . . a keto group being part of a condensed ring system
49/477 . . . . . having two rings

49/483 . . . . . having three rings
49/487 . . containing hydroxy groups
49/493 . . . a keto group being part of a three- to five-membered ring
49/497 . . . a keto group being part of a six-membered ring
49/503 . . . a keto group being part of a seven- to twelve-membered ring
49/507 . . . polycyclic
49/513 . . . . a keto group being part of a condensed ring system
49/517 . . containing ether groups,  groups, groups, or  groups
49/523 . . containing —CHO groups
49/527 . Unsaturated compounds containing keto groups bound to rings other than six-membered aromatic rings
49/533 . . to a three- or four-membered ring
49/537 . . to a five-membered ring
49/543 . . to a six-membered ring
49/547 . . to a seven- to twelve-membered ring
49/553 . . polycyclic
49/557 . . having unsaturation outside the rings
49/563 . . containing six-membered aromatic rings
49/567 . . containing halogen
49/573 . . containing hydroxy groups
49/577 . . containing ether groups,  groups, groups, or  groups
49/583 . . containing —CHO groups
49/587 . Unsaturated compounds containing a keto groups being part of a ring
49/593 . . of a three- or four-membered ring
49/597 . . of a five-membered ring
49/603 . . of a six-membered ring, e.g. quinone methides
49/607 . . of a seven-to twelve-membered ring
49/613 . . polycyclic
49/617 . . . a keto group being part of a condensed ring system
49/623 . . . . having two rings
49/627 . . . . . the condensed ring system containing seven carbon atoms
49/633 . . . . . the condensed ring system containing eight or nine carbon atoms
49/637 . . . . . the condensed ring system containing ten carbon atoms
49/643 . . . . having three rings
49/647 . . having unsaturation outside the ring
49/653 . . . polycyclic
49/657 . . containing six-membered aromatic rings
49/665 . . . a keto group being part of a condensed ring system
49/67 . . . . having two rings, e.g. tetralones
49/675 . . . . having three rings
49/683 . . . having unsaturation outside the aromatic rings
49/687 . . containing halogen
49/693 . . . polycyclic
49/697 . . . containing six-membered aromatic rings
49/703 . . containing hydroxy groups
49/707 . . . a keto group being part of a three- to five-membered ring
49/713 . . . a keto group being part of a six-membered ring
49/717 . . . a keto group being part of a seven- to twelve-membered ring
49/723 . . . polycyclic
49/727 . . . . a keto group being part of a condensed ring system
49/733 . . . . . having two rings
49/737 . . . . . having three rings
49/743 . . . having unsaturation outside the rings, e.g. humulones, lupulones
49/747 . . . containing six-membered aromatic rings
49/753 . . containing ether groups, groups,  groups, or  groups
49/755 . . . a keto group being part of a condensed ring system with two or three rings, at least one ring being a six-membered aromatic ring
49/757 . . containing —CHO groups
49/76 . Ketones containing a keto group bound to a six-membered aromatic ring (compounds having a keto group being part of a condensed ring system and being bound to a six-membered aromatic ring C07C 49/657 - C07C 49/757)
49/78 . . Acetophenone
49/782 . . polycyclic
49/784 . . . with all keto groups bound to a non-condensed ring
49/786 . . . . Benzophenone
49/788 . . . with keto groups bound to a condensed ring system
49/792 . . . containing rings other than six-membered aromatic rings
49/794 . . having unsaturation outside an aromatic ring
49/796 . . . polycyclic
49/798 . . . containing rings other than six-membered aromatic rings
49/80 . . containing halogen
49/807 . . . all halogen atoms bound to the ring
49/813 . . . polycyclic
49/82 . . containing hydroxy groups
49/825 . . . all hydroxy groups bound to the ring
49/83 . . . polycyclic
49/835 . . . having unsaturation outside an aromatic ring
49/84 . . containing ether groups, groups,  groups, or  groups
49/86 . . containing —CHO groups
49/88 . Ketenes; Dimeric ketenes
49/90 . . Ketene, i.e. C_2H_2O

49/92 . Ketonic chelates

50/00 Quinones

NOTE

In this group, quinhydrones are classified according to their quinoid part.

50/02 . with monocyclic quinoid structure
50/04 . . Benzoquinones, i.e. $C_6H_4O_2$
50/06 . . with unsaturation outside the quinoid structure
50/08 . with polycyclic non-condensed quinoid structure
50/10 . the quinoid structure being part of a condensed ring system containing two rings
50/12 . . Naphthoquinones, i.e. $C_{10}H_6O_2$
50/14 . . with unsaturation outside the ring system, e.g. vitamin K_1
50/16 . the quinoid structure being part of a condensed ring system containing three rings
50/18 . . Anthraquinones, i.e. $C_{14}H_8O_2$
50/20 . . with unsaturation outside the ring system
50/22 . the quinoid structure being part of a condensed ring system containing four or more rings
50/24 . containing halogen
50/26 . containing groups having oxygen atoms singly bound to carbon atoms
50/28 . . with monocyclic quinoid structure
50/30 . . with polycyclic non-condensed quinoid structure
50/32 . . the quinoid structure being part of a condensed ring system having two rings
50/34 . . the quinoid structure being part of a condensed ring system having three rings
50/36 . . the quinoid structure being part of a condensed ring system having four or more rings
50/38 . containing —CHO or non—quinoid keto groups

51/00 Preparation of carboxylic acids or their salts, halides or anhydrides (of acids by hydrolysis of oils, fats or waxes C11C)

51/02 . from salts of carboxylic acids
51/04 . from carboxylic acid halides
51/06 . from carboxylic acid amides
51/08 . from nitriles
51/083 . from carboxylic acid anhydrides
51/087 . . by hydrolysis
51/09 . from carboxylic acid esters or lactones
51/093 . by hydrolysis of —CX_3 groups, X being halogen
51/097 . from or via nitro-substituted organic compounds
51/10 . by reaction with carbon monoxide
51/12 . . on an oxygen-containing group in organic compounds, e.g. alcohols
51/14 . . on a carbon-to-carbon unsaturated bond in organic compounds
51/145 . . with simultaneous oxidation
51/15 . by reaction of organic compounds with carbon dioxide, e.g. Kolbe-Schmitt synthesis
51/16 . by oxidation (C07C 51/145 takes precedence)
51/21 . . with molecular oxygen
51/215 . . . of saturated hydrocarbyl groups
51/225 . . . . of paraffin waxes
51/23 . . . of oxygen-containing groups to carboxyl groups
51/235 . . . . of —CHO groups or primary alcohol groups
51/245 . . . . of keto groups or secondary alcohol groups
51/25 . . . of unsaturated compounds containing no six-membered aromatic ring
51/252 . . . . {of propene, butenes, acrolein or methacrolein}
51/255 . . . of compounds containing six-membered aromatic rings without ring-splitting
51/265 . . . . having alkyl side chains which are oxidised to carboxyl groups

NOTE

Reactions of the Katzschmann type, i.e. oxidation of a dialkyl-aromatic compound with intermediate esterification of the mono-acid, see relevant ester groups, even when the end product is a carboxylic acid

51/27 . . with oxides of nitrogen or nitrogen-containing mineral acids
51/275 . . . of hydrocarbyl groups
51/285 . . with peroxy-compounds
51/29 . . with halogen-containing compounds which may be formed in situ
51/295 . . with inorganic bases, e.g. by alkali fusion
51/305 . . with sulfur or sulfur-containing compounds
51/31 . . of cyclic compounds with ring-splitting
51/313 . . . {with molecular oxygen}
51/316 . . . {with oxides of nitrogen or nitrogen-containing mineral acids}
51/34 . by oxidation with ozone; by hydrolysis of ozonides
51/347 . by reactions not involving formation of carboxyl groups
51/353 . . by isomerisation; by change of size of the carbon skeleton
51/36 . . by hydrogenation of carbon-to-carbon unsaturated bonds
51/363 . . by introduction of halogen; by substitution of halogen atoms by other halogen atoms
51/367 . . by introduction of functional groups containing oxygen only in singly bound form
51/373 . . by introduction of functional groups containing oxygen only in doubly bound form
51/377 . . by splitting-off hydrogen or functional groups; by hydrogenolysis of functional groups {(C07C 51/36 - C07C 51/373 take precedence)}
51/38 . . . by decarboxylation
51/41 . Preparation of salts of carboxylic acids ({C07C 51/093 - C07C 51/34 take precedence} preparation of soap C11D)
51/412 . . {by conversion of the acids, their salts, esters or anhydrides with the same carboxylic acid part}
51/414 . . {Preparation of superbasic salts}
51/416 . . {Henkel reaction and related reactions, i.e. rearrangement of carboxylate salt groups linked to six-membered aromatic rings, in the absence or in the presence of CO or CO_2, (e.g. preparation of terepholates from benzoates); no additional classification for the subsequent hydrolysis of the salt groups has to be given}
51/418 . . {Preparation of metal complexes containing carboxylic acid moieties}
51/42 . Separation; Purification; Stabilisation; Use of additives
51/43 . . by change of the physical state, e.g. crystallisation
51/44 . . . by distillation

51/445 . . . . {by steam distillation}
51/46 . . . . by azeotropic distillation
51/47 . . by solid-liquid treatment; by chemisorption
51/48 . . by liquid-liquid treatment
51/487 . . by treatment giving rise to chemical modification (by chemisorption C07C 51/47)
51/493 . . . whereby carboxylic acid esters are formed
51/50 . . Use of additives, e.g. for stabilisation
51/54 . Preparation of carboxylic acid anhydrides (by oxidation C07C 51/16)
51/56 . . from organic acids, their salts, their esters {or their halides, e.g. by carboxylation}
51/567 . . by reactions not involving carboxylic acid anhydride groups
51/573 . . Separation; Purification; Stabilisation; Use of additives
51/58 . Preparation of carboxylic acid halides
51/60 . . by conversion of carboxylic acids or their anhydrides {or esters, lactones, salts} into halides with the same carboxylic acid part
51/62 . . by reactions not involving the carboxylic acid halide group
51/64 . . Separation; Purification; Stabilisation; Use of additives

53/00 Saturated compounds having only one carboxyl group bound to an acyclic carbon atom or hydrogen

53/02 . Formic acid
53/06 . . Salts thereof
53/08 . Acetic acid (pyroligneous acid C10C; preparation of vinegar C12J)
53/10 . . Salts thereof
53/12 . Acetic anhydride (ketene C07C 49/90)
53/122 . Propionic acid
53/124 . Acids containing four carbon atoms
53/126 . Acids containing more than four carbon atoms
53/128 . . the carboxylic group being bound to a carbon atom bound to at least two other carbon atoms, e.g. neo-acids
53/132 . containing rings
53/134 . . monocyclic
53/136 . . containing condensed ring systems
53/138 . . . containing an adamantane ring system
53/15 . containing halogen
53/16 . . Halogenated acetic acids
53/18 . . . containing fluorine
53/19 . . Acids containing three or more carbon atoms
53/21 . . . containing fluorine
53/23 . . containing rings
53/38 . Acyl halides
53/40 . . Acetyl halides
53/42 . . of acids containing three or more carbon atoms
53/44 . . containing rings
53/46 . . containing halogen outside the carbonyl halide group
53/48 . . . Halogenated acetyl halides
53/50 . . . of acids containing three or more carbon atoms

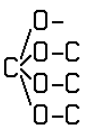
55/00 Saturated compounds having more than one carboxyl group bound to acyclic carbon atoms

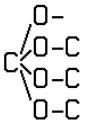
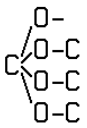
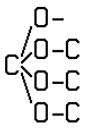
55/02 . Dicarboxylic acids
55/06 . . Oxalic acid
55/07 . . . Salts thereof
55/08 . . Malonic acid
55/10 . . Succinic acid
55/12 . . Glutaric acid
55/14 . . Adipic acid
55/16 . . Pimelic acid
55/18 . . Azelaic acid
55/20 . . Sebacic acid
55/21 . . Dicarboxylic acids containing twelve carbon atoms
55/22 . Tricarboxylic acids
55/24 . containing more than three carboxyl groups
55/26 . containing rings {other than aromatic rings}
55/28 . . monocyclic
55/30 . . containing condensed ring systems
55/32 . containing halogen
55/34 . . containing rings
55/36 . Acyl halides
55/38 . . containing rings
55/40 . . containing halogen outside the carboxyl halide group

57/00 Unsaturated compounds having carboxyl groups bound to acyclic carbon atoms

57/02 . with only carbon-to-carbon double bonds as unsaturation
57/03 . . Monocarboxylic acids
57/04 . . . Acrylic acid; Methacrylic acid
57/08 . . . Crotonic acid
57/10 . . . Sorbic acid
57/12 . . . Straight chain carboxylic acids containing eighteen carbon atoms
57/13 . . Dicarboxylic acids
57/145 . . . Maleic acid
57/15 . . . Fumaric acid
57/155 . . . Citraconic acid
57/16 . . . Muconic acid
57/18 . with only carbon-to-carbon triple bonds as unsaturation
57/20 . . Propiolic acid
57/22 . . Acetylene dicarboxylic acid
57/24 . . Diacetylene or polyacetylene dicarboxylic acids
57/26 . containing rings other than six-membered aromatic rings
57/28 . . containing an adamantane ring system
57/30 . containing six-membered aromatic rings
57/32 . . Phenylacetic acid
57/34 . . containing more than one carboxyl group
57/36 . . . Phenymalonic acid
57/38 . . polycyclic
57/40 . . . containing condensed ring systems
57/42 . . having unsaturation outside the rings
57/44 . . . Cinnamic acid
57/46 . containing six-membered aromatic rings and other rings, e.g. cyclohexylphenylacetic acid
57/48 . . having unsaturation outside the aromatic rings
57/50 . . containing condensed ring systems
57/52 . containing halogen
57/54 . . Halogenated acrylic or methacrylic acids
57/56 . . containing rings other than six-membered aromatic rings
57/58 . . containing six-membered aromatic rings
57/60 . . . having unsaturation outside the rings

57/62 . . containing six-membered aromatic rings and other rings
57/64 . Acyl halides
57/66 . . with only carbon-to-carbon double bonds as unsaturation
57/68 . . with only carbon-to-carbon triple bonds as unsaturation
57/70 . . containing rings other than six-membered aromatic rings
57/72 . . containing six-membered aromatic rings
57/74 . . containing six-membered aromatic rings and other rings
57/76 . . containing halogen outside the carbonyl halide groups

59/00 Compounds having carboxyl groups bound to acyclic carbon atoms and containing any of the groups OH, O—metal, —CHO, keto, ether, **groups,** **groups, or**  **groups**

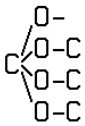
59/01 . Saturated compounds having only one carboxyl group and containing hydroxy or O-metal groups
59/06 . . Glycolic acid
59/08 . . Lactic acid
59/10 . . Polyhydroxy carboxylic acids
59/105 . . . having five or more carbon atoms, e.g. aldonic acids
59/11 . . containing rings
59/115 . . containing halogen
59/125 . Saturated compounds having only one carboxyl group and containing ether groups, groups, groups, or  groups
59/13 . . containing rings
59/135 . . containing halogen
59/147 . Saturated compounds having only one carboxyl group and containing —CHO groups
59/153 . . Glyoxylic acid
59/185 . Saturated compounds having only one carboxyl group and containing keto groups
59/19 . . Pyruvic acid
59/195 . . Acetoacetic acid
59/205 . . containing rings
59/21 . . containing halogen
59/215 . . containing singly bound oxygen containing groups
59/225 . . containing —CHO groups
59/235 . Saturated compounds containing more than one carboxyl group
59/245 . . containing hydroxy or O-metal groups
59/255 . . . Tartaric acid
59/265 . . . Citric acid
59/285 . . . Polyhydroxy dicarboxylic acids having five or more carbon atoms, e.g. saccharic acids
59/29 . . . containing rings
59/295 . . . containing halogen
59/305 . . containing ether groups, groups, groups, or  groups
59/31 . . . containing rings
59/315 . . . containing halogen
59/325 . . containing —CHO groups
59/347 . . containing keto groups
59/353 . . . containing rings
59/40 . Unsaturated compounds
59/42 . . containing hydroxy or O-metal groups
59/44 . . . Ricinoleic acid
59/46 . . . containing rings other than six-membered aromatic rings
59/48 . . . containing six-membered aromatic rings
59/50 . . . . Mandelic acid
59/52 . . . a hydroxy or O-metal group being bound to a carbon atom of a six-membered aromatic ring
59/54 . . . containing six-membered aromatic rings and other rings
59/56 . . . containing halogen
59/58 . . containing ether groups, groups, groups, or  groups
59/60 . . . the non-carboxylic part of the ether being unsaturated
59/62 . . . containing rings other than six-membered aromatic rings
59/64 . . . containing six-membered aromatic rings
59/66 . . . . the non-carboxylic part of the ether containing six-membered aromatic rings
59/68 . . . . . the oxygen atom of the ether group being bound to a non-condensed six-membered aromatic ring
59/70 . . . . . Ethers of hydroxy-acetic acid {, e.g. substitutes on the ring}
59/72 . . . containing six-membered aromatic rings and other rings
59/74 . . containing —CHO groups
59/76 . . containing keto groups
59/80 . . . containing rings other than six-membered aromatic rings
59/82 . . . . the keto group being part of a ring
59/84 . . . containing six membered aromatic rings
59/86 . . . containing six-membered aromatic rings and other rings
59/88 . . . containing halogen
59/90 . . . containing singly bound oxygen-containing groups
59/92 . . . containing —CHO groups

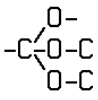
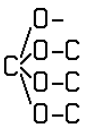
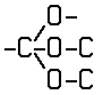
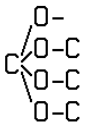
61/00 **Compounds having carboxyl groups bound to carbon atoms of rings other than six-membered aromatic rings**

NOTE

The oxidation mixture of naphthenes containing naphthenic acids, is classified in C07C 61/005

61/005 . {Naphthenic acids}
61/04 . Saturated compounds having a carboxyl group bound to a three or four-membered ring
61/06 . Saturated compounds having a carboxyl group bound to a five-membered ring
61/08 . Saturated compounds having a carboxyl group bound to a six-membered ring
61/09 . . Completely hydrogenated benzenedicarboxylic acids
61/10 . Saturated compounds having a carboxyl group bound to a seven-to-twelve-membered ring
61/12 . Saturated polycyclic compounds
61/125 . . having a carboxyl group bound to a condensed ring system
61/13 . . . having two rings
61/135 . . . having three rings
61/15 . Saturated compounds containing halogen
61/16 . Unsaturated compounds
61/20 . . having a carboxyl group bound to a five-membered ring
61/22 . . having a carboxyl group bound to a six-membered ring
61/24 . . . Partially hydrogenated benzenedicarboxylic acids
61/26 . . having a carboxyl group bound to a seven-to-twelve-membered ring
61/28 . . polycyclic
61/29 . . . having a carboxyl group bound to a condensed ring system
61/35 . . having unsaturation outside the rings
61/37 . . . Chrysanthemumic acid
61/39 . . containing six-membered aromatic rings
61/40 . . containing halogen

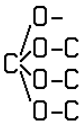
62/00 **Compounds having carboxyl groups bound to carbon atoms of rings other than six—membered aromatic rings and containing any of the groups OH, O—metal, —CHO, keto, ether,** **groups,** **groups, or**  **groups**

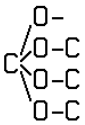
62/02 . Saturated compounds containing hydroxy or O-metal groups
62/04 . . with a six-membered ring
62/06 . . polycyclic
62/08 . Saturated compounds containing ether groups, groups,  groups, or  groups
62/10 . . with a six-membered ring
62/12 . . polycyclic
62/14 . . . having a carboxyl group on a condensed ring system
62/16 . Saturated compounds containing —CHO groups
62/18 . Saturated compounds containing keto groups
62/20 . . with a {saturated} six-membered ring
62/22 . . polycyclic
62/24 . . the keto group being part of a ring
62/26 . . containing singly bound oxygen-containing groups
62/28 . . containing —CHO groups
62/30 . Unsaturated compounds
62/32 . . containing hydroxy or O-metal groups
62/34 . . containing ether groups, groups,  groups, or  groups
62/36 . . containing —CHO groups
62/38 . . containing keto groups

63/00 **Compounds having carboxyl groups bound to a carbon atoms of six-membered aromatic rings**

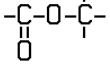
63/04 . Monocyclic monocarboxylic acids
63/06 . . Benzoic acid
63/08 . . . Salts thereof
63/10 . . . Halides thereof
63/14 . Monocyclic dicarboxylic acids
63/15 . . all carboxyl groups bound to carbon atoms of the six-membered aromatic ring
63/16 . . . 1,2 - Benzenedicarboxylic acid
63/20 . . . . Salts thereof
63/22 . . . . Halides thereof
63/24 . . . 1,3 - Benzenedicarboxylic acid
63/26 . . . 1,4 - Benzenedicarboxylic acid
63/28 . . . . Salts thereof
63/30 . . . . Halides thereof
63/307 . Monocyclic tricarboxylic acids
63/313 . Monocyclic acids containing more than three carboxyl groups
63/33 . Polycyclic acids
63/331 . . with all carboxyl groups bound to non-condensed rings
63/333 . . . 4,4' - Diphenyldicarboxylic acids
63/337 . . with carboxyl groups bound to condensed ring systems
63/34 . . . containing two {condensed} rings
63/36 . . . . containing one carboxyl group
63/38 . . . . containing two carboxyl groups both bound to carbon atoms of the condensed ring system
63/40 . . . . containing three or more carboxyl groups all bound to carbon atoms of the condensed ring system
63/42 . . . containing three or more {condensed} rings
63/44 . . . . containing one carboxyl group
63/46 . . . . containing two carboxyl groups both bound to carbon atoms of the condensed ring system
63/48 . . . . containing three or more carboxyl groups all bound to carbon atoms of the condensed ring system

63/49 . . containing rings other than six-membered aromatic rings
63/64 . Monocyclic acids with unsaturation outside the aromatic ring
63/66 . Polycyclic acids with unsaturation outside the aromatic rings
63/68 . containing halogen
63/70 . . Monocarboxylic acids
63/72 . . Polycyclic acids
63/74 . . having unsaturation outside the aromatic rings

65/00 Compounds having carboxyl groups bound to carbon atoms of six—membered aromatic rings and containing any of the groups OH, O—metal, —CHO, keto, ether, groups, groups, or  groups (cyclic anhydrides C07D)

65/01 . containing hydroxy or O-metal groups
65/03 . . monocyclic and having all hydroxy or O-metal groups bound to the ring
65/05 . . . o-Hydroxy carboxylic acids
65/10 . . . . Salicylic acid
65/105 . . polycyclic
65/11 . . . with carboxyl groups on a condensed ring system containing two rings
65/15 . . . with carboxyl groups on a condensed ring system containing more than two rings
65/17 . . containing rings other than six-membered aromatic rings
65/19 . . having unsaturation outside the aromatic ring
65/21 . containing ether groups, groups, groups, or  groups
65/24 . . polycyclic
65/26 . . . containing rings other than six-membered aromatic rings
65/28 . . having unsaturation outside the aromatic rings
65/30 . containing —CHO groups
65/32 . containing keto groups
65/34 . . polycyclic
65/36 . . . containing rings other than six-membered aromatic rings
65/38 . . having unsaturation outside the aromatic rings
65/40 . . containing singly bound oxygen-containing groups
65/42 . . containing —CHO groups

66/00 Quinone carboxylic acids
66/02 . Anthraquinone carboxylic acids

67/00 Preparation of carboxylic acid esters
67/02 . by interreacting ester groups, i.e. transesterification
67/03 . by reacting an ester group with a hydroxy group
67/035 . by reacting carboxylic acids or symmetrical anhydrides with saturated hydrocarbons
67/04 . by reacting carboxylic acids or symmetrical anhydrides onto unsaturated carbon-to-carbon bonds
67/05 . . with oxidation
67/055 . . . in the presence of platinum group metals or their compounds
67/08 . by reacting carboxylic acids or symmetrical anhydrides with the hydroxy or O-metal group of organic compounds
67/10 . by reacting carboxylic acids or symmetrical anhydrides with ester groups or with a carbon-halogen bond (preparation from carboxylic acid halides C07C 67/14)
67/11 . . being mineral ester groups
67/12 . from asymmetrical anhydrides
67/14 . from carboxylic acid halides
67/16 . from carboxylic acids, esters or anhydrides wherein one oxygen atom has been replaced by a sulfur, selenium or tellurium atom
67/18 . by conversion of a group containing nitrogen into an ester group
67/20 . . from amides or lactams
67/22 . . from nitriles
67/24 . by reacting carboxylic acids or derivatives thereof with a carbon-to-oxygen ether bond, e.g. acetal, tetrahydrofuran
67/26 . . with an oxirane ring
67/27 . from ortho-esters
67/28 . by modifying the hydroxylic moiety of the ester, such modification not being an introduction of an ester group
67/283 . . by hydrogenation of unsaturated carbon-to-carbon bonds
67/287 . . by introduction of halogen; by substitution of halogen atoms by other halogen atoms
67/29 . . by introduction of oxygen-containing functional groups
67/293 . . by isomerisation; by change of size of the carbon skeleton
67/297 . . by splitting-off hydrogen or functional groups; by hydrogenolysis of functional groups
67/30 . by modifying the acid moiety of the ester, such modification not being an introduction of an ester group
67/303 . . by hydrogenation of unsaturated carbon-to-carbon bonds
67/307 . . by introduction of halogen; by substitution of halogen atoms by other halogen atoms
67/31 . . by introduction of functional groups containing oxygen only in singly bound form
67/313 . . by introduction of doubly bound oxygen containing functional groups, e.g. carboxyl groups
67/317 . . by splitting-off hydrogen or functional groups; by hydrogenolysis of functional groups
67/32 . . . Decarboxylation
67/327 . . . by elimination of functional groups containing oxygen only in singly bound form
67/333 . . by isomerisation; by change of size of the carbon skeleton (introduction or elimination of carboxyl groups C07C 67/313, C07C 67/32)
67/34 . . . Migration of  groups in the molecule

67/343 . . . by increase in the number of carbon atoms
67/347 . . . . by addition to unsaturated carbon-to-carbon bonds
67/36 . by reaction with carbon monoxide or formates (C07C 67/02, C07C 67/03, C07C 67/10 take precedence)
67/37 . . by reaction of ethers with carbon monoxide
67/38 . . by addition to an unsaturated carbon-to-carbon bond
67/39 . by oxidation of groups which are precursors for the acid moiety of the ester
67/40 . . by oxidation of primary alcohols
67/42 . . by oxidation of secondary alcohols or ketones
67/44 . by oxidation-reduction of aldehydes, e.g. Tishchenko reaction
67/46 . from ketenes or polyketenes
67/465 . by oligomerisation
67/47 . by telomerisation (macromolecular compounds C08)
67/475 . by splitting of carbon-to-carbon bonds and redistribution, e.g. disproportionation or migration of groups between different molecules
67/48 . Separation; Purification; Stabilisation; Use of additives
67/52 . . by change in the physical state, e.g. crystallisation
67/54 . . . by distillation
67/56 . . by solid-liquid treatment; by chemisorption
67/58 . . by liquid-liquid treatment
67/60 . . by treatment giving rise to chemical modification (by chemisorption C07C 67/56)
67/62 . . Use of additives, e.g. for stabilisation

68/00 Preparation of esters of carbonic or haloformic acids
68/01 . from carbon monoxide and oxygen
68/02 . from phosgene or haloformates
68/04 . from carbon dioxide or inorganic carbonates
68/06 . from organic carbonates
68/065 . . from alkylene carbonates
68/08 . Purification; Separation; Stabilisation

69/00 Esters of carboxylic acids; Esters of carbonic or haloformic acids (ortho esters, see the relevant groups, e.g. C07C 43/32)

NOTE

In this group esters having a variably-specified acid moiety, i.e. covered by more than one of groups C07C 69/02, C07C 69/34, C07C 69/52, C07C 69/608, C07C 69/612, C07C 69/62, C07C 69/66, C07C 69/74, C07C 69/76, C07C 69/95, C07C 69/96, are covered by groups C07C 69/003 - C07C 69/017 according to their hydroxylic moiety

69/003 . Esters of saturated alcohols having the esterified hydroxy group bound to an acyclic carbon atom
69/007 . Esters of unsaturated alcohols having the esterified hydroxy group bound to an acyclic carbon atom
69/01 . . Vinyl esters
69/013 . Esters of alcohols having the esterified hydroxy group bound to a carbon atom of a ring other than a six-membered aromatic ring
69/017 . Esters of hydroxy compounds having the esterified hydroxy group bound to a carbon atom of a six-membered aromatic ring
69/02 . Esters of acyclic saturated monocarboxylic acids having the carboxyl group bound to an acyclic carbon atom or to hydrogen
69/04 . . Formic acid esters
69/06 . . . of monohydroxylic compounds
69/07 . . . . of unsaturated alcohols
69/08 . . . of dihydroxylic compounds
69/10 . . . of trihydroxylic compounds
69/12 . . Acetic acid esters
69/14 . . . of monohydroxylic compounds
69/145 . . . . of unsaturated alcohols
69/15 . . . . . Vinyl acetate
69/155 . . . . . Allyl acetate
69/157 . . . . . containing six-membered aromatic rings
69/16 . . . of dihydroxylic compounds
69/18 . . . of trihydroxylic compounds
69/21 . . . of hydroxy compounds with more than three hydroxy groups (esters of sugars C07H)
69/22 . . having three or more carbon atoms in the acid moiety
69/24 . . . esterified with monohydroxylic compounds
69/26 . . . . Synthetic waxes
69/28 . . . esterified with dihydroxylic compounds
69/30 . . . esterified with trihydroxylic compounds (fats, oils C11B, C11C)
69/33 . . . esterified with hydroxy compounds having more than three hydroxy groups (esters of sugars C07H)
69/34 . Esters of acyclic saturated polycarboxylic acids having an esterified carboxyl group bound to an acyclic carbon atom
69/36 . . Oxalic acid esters
69/38 . . Malonic acid esters
69/40 . . Succinic acid esters
69/42 . . Glutaric acid esters
69/44 . . Adipic acid esters
69/46 . . Pimelic acid esters
69/48 . . Azelaic acid esters
69/50 . . Sebacic acid esters
69/52 . Esters of acyclic unsaturated carboxylic acids having the esterified carboxyl group bound to an acyclic carbon atom
69/533 . . Monocarboxylic acid esters having only one carbon-to-carbon double bond
69/54 . . . Acrylic acid esters; Methacrylic acid esters
69/56 . . . Crotonic acid esters; Vinyl acetic acid esters
69/58 . . . Esters of straight chain acids with eighteen carbon atoms in the acid moiety
69/587 . . Monocarboxylic acid esters having at least two carbon-to-carbon double bonds
69/593 . . Dicarboxylic acid esters having only one carbon-to-carbon double bond
69/60 . . . Maleic acid esters; Fumaric acid esters
69/602 . . Dicarboxylic acid esters having at least two carbon-to-carbon double bonds
69/604 . . Polycarboxylic acid esters, the acid moiety containing more than two carboxyl groups
69/606 . . having only {or additionally} carbon-to-carbon triple bonds as unsaturation in the carboxylic acid moiety

69/608 . Esters of carboxylic acids having a carboxyl group bound to an acyclic carbon atom and having a ring other than a six-membered aromatic ring in the acid moiety

69/612 . Esters of carboxylic acids having a carboxyl group bound to an acyclic carbon atom and having a six-membered aromatic ring in the acid moiety

69/614 . . of phenylacetic acid

69/616 . . polycyclic

69/618 . . having unsaturation outside the six-membered aromatic ring

69/62 . Halogen-containing esters (haloformic acid esters C07C 69/96)

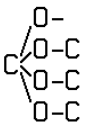
69/63 . . of saturated acids

69/635 . . . containing rings in the acid moiety

69/65 . . of unsaturated acids

69/653 . . . Acrylic acid esters; Methacrylic acid esters; Haloacrylic acid esters; Halomethacrylic acid esters

69/657 . . . Maleic acid esters; Fumaric acid esters; Halomaleic acid esters; Halofumaric acid esters

69/66 . Esters of carboxylic acids having esterified carboxylic groups bound to acyclic carbon atoms and having any of the groups OH, O—metal, —CHO, keto, ether, acyloxy, groups, groups, or  in the acid moiety

69/67 . . of saturated acids

69/675 . . . of saturated hydroxy-carboxylic acids

69/68 . . . . Lactic acid esters

69/70 . . . . Tartaric acid esters

69/704 . . . . Citric acid esters

69/708 . . . Ethers

69/712 . . . . the hydroxy group of the ester being etherified with a hydroxy compound having the hydroxy group bound to a carbon atom of a six-membered aromatic ring

69/716 . . . Esters of keto-carboxylic acids {or aldehydo-carboxylic acids}

69/72 . . . . Acetoacetic acid esters

69/73 . . of unsaturated acids

69/732 . . . of unsaturated hydroxy carboxylic acids

69/734 . . . Ethers

69/736 . . . . the hydroxy group of the ester being etherified with a hydroxy compound having the hydroxy group bound to a carbon atom of a six-membered aromatic ring

69/738 . . . Esters of keto-carboxylic acids {or aldehydo-carboxylic acids}

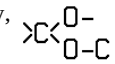
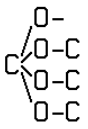
69/74 . Esters of carboxylic acids having an esterified carboxyl group bound to a carbon atom of a ring other than a six-membered aromatic ring

69/743 . . of acids with a three-membered ring and with unsaturation outside the ring

69/747 . . . Chrysanthemumic acid esters

69/75 . . of acids with a six-membered ring

69/753 . . of polycyclic acids

69/757 . . having any of the groups OH, O—metal, —CHO, keto, ether, acyloxy,  groups, groups, or  in the acid moiety

69/76 . Esters of carboxylic acids having a carboxyl group bound to a carbon atom of a six-membered aromatic ring

69/78 . . Benzoic acid esters

69/80 . . Phthalic acid esters

69/82 . . . Terephthalic acid esters

69/84 . . of monocyclic hydroxy carboxylic acids, the hydroxy groups and the carboxyl groups of which are bound to carbon atoms of a six-membered aromatic ring

69/86 . . . with esterified hydroxyl groups

69/88 . . . with esterified carboxyl groups

69/90 . . . with esterified hydroxyl and carboxyl groups

69/92 . . . with etherified hydroxyl groups

69/94 . . of polycyclic hydroxy carboxylic acids, the hydroxy groups and the carboxyl groups of which are bound to carbon atoms of six-membered aromatic rings

69/95 . Esters of quinone carboxylic acids

69/96 . Esters of carbonic or haloformic acids

71/00 Esters of oxyacids of halogens

Compounds containing carbon and nitrogen with or without hydrogen, halogens or oxygen (irradiation products of cholesterol or its derivatives C07C 401/00; vitamin D derivatives, 9,10-seco cyclopenta[a]phenanthrene or analogues obtained by chemical preparation without irradiation C07C 401/00; derivatives of cyclohexane or of a cyclohexene {or of cyclohexadiene}, having a side-chain containing an acyclic unsaturated part of at least four carbon atoms, this part being directly attached to the cyclohexane or cyclohexene {or cyclohexadiene} rings C07C 403/00; protaglandins or derivatives thereof C07C 405/00; peroxy compounds C07C 407/00, C07C 409/00)

201/00 Preparation of esters of nitric or nitrous acid or of compounds containing nitro or nitroso groups bound to a carbon skeleton

201/02 . Preparation of esters of nitric acid

201/04 . Preparation of esters of nitrous acid

201/06 . Preparation of nitro compounds

201/08 . . by substitution of hydrogen atoms by nitro groups

201/10 . . by substitution of functional groups by nitro groups

201/12 . . by reactions not involving the formation of nitro groups

201/14 . . by formation of nitro groups together with reactions not involving the formation of nitro groups

201/16 . . Separation; Purification; Stabilisation; Use of additives

203/00 Esters of nitric or nitrous acid

203/02 . Esters of nitric acid

203/04 . . having nitrate groups bound to acyclic carbon atoms

203/06 . . . Glycerol trinitrate

203/08 . . having nitrate groups bound to carbon atoms of rings other than six-membered aromatic rings
203/10 . . having nitrate groups bound to carbon atoms of six-membered aromatic rings

205/00 Compounds containing nitro groups bound to a carbon skeleton
205/01 . having nitro groups bound to acyclic carbon atoms
205/02 . . of a saturated carbon skeleton
205/03 . . of an unsaturated carbon skeleton
205/04 . . . containing six-membered aromatic rings
205/05 . having nitro groups bound to carbon atoms of rings other than six-membered aromatic rings
205/06 . having nitro groups bound to carbon atoms of six-membered aromatic rings
205/07 . the carbon skeleton being further substituted by halogen atoms
205/08 . . having nitro groups bound to acyclic carbon atoms
205/09 . . . of an unsaturated carbon skeleton
205/10 . . having nitro groups bound to carbon atoms of rings other than six-membered aromatic rings
205/11 . . having nitro groups bound to carbon atoms of six-membered aromatic rings
205/12 . . . the six-membered aromatic ring or a condensed ring system containing that ring being substituted by halogen atoms
205/13 . the carbon skeleton being further substituted by hydroxy groups
205/14 . . having nitro groups and hydroxy groups bound to acyclic carbon atoms
205/15 . . . of a saturated carbon skeleton
205/16 . . . of a carbon skeleton containing six-membered aromatic rings
205/17 . . having nitro groups bound to acyclic carbon atoms and hydroxy groups bound to carbon atoms of six-membered aromatic rings
205/18 . . having nitro groups or hydroxy groups bound to carbon atoms of rings other than six-membered aromatic rings
205/19 . . having nitro groups bound to carbon atoms of six-membered aromatic rings and hydroxy groups bound to acyclic carbon atoms
205/20 . . having nitro groups and hydroxy groups bound to carbon atoms of six-membered aromatic rings
205/21 . . . having nitro groups and hydroxy groups bound to carbon atoms of the same non-condensed six-membered aromatic ring
205/22 . . . . having one nitro groups bound to the ring
205/23 . . . . having two nitro groups bound to the ring
205/24 . . . . having three, and only three, nitro groups bound to the ring
205/25 . . . having nitro groups bound to carbon atoms of six-membered aromatic rings being part of a condensed ring system
205/26 . . and being further substituted by halogen atoms
205/27 . the carbon skeleton being further substituted by etherified hydroxy groups
205/28 . . having nitro groups and etherified hydroxy groups bound to acyclic carbon atoms of the carbon skeleton
205/29 . . . the carbon skeleton being saturated
205/30 . . . . the oxygen atom of at least one of the etherified hydroxy groups being further bound to a carbon atom of a six-membered aromatic ring
205/31 . . . the carbon skeleton containing six-membered aromatic rings
205/32 . . having nitro groups bound to acyclic carbon atoms and etherified hydroxy groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton
205/33 . . having nitro groups or etherified hydroxy groups bound to carbon atoms of rings other than six-membered aromatic rings of the carbon skeleton
205/34 . . having nitro groups bound to carbon atoms of six-membered aromatic rings and etherified hydroxy groups bound to acyclic carbon atoms of the carbon skeleton
205/35 . . having nitro groups and etherified hydroxy groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton
205/36 . . . to carbon atoms of the same non-condensed six-membered aromatic ring or to carbon atoms of six-membered aromatic rings being part of the same condensed ring system
205/37 . . . . the oxygen atom of at least one of the etherified hydroxy groups being further bound to an acyclic carbon atom
205/38 . . . . the oxygen atom of at least one of the etherified hydroxy groups being further bound to a carbon atom of a six-membered aromatic ring, e.g. nitrodiphenyl ethers
205/39 . the carbon skeleton being further substituted by esterified hydroxy groups
205/40 . . having nitro groups and esterified hydroxy groups bound to acyclic carbon atoms of the carbon skeleton
205/41 . . having nitro groups or esterified hydroxy groups bound to carbon atoms of rings other than six-membered aromatic rings of the carbon skeleton
205/42 . . having nitro groups or esterified hydroxy groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton
205/43 . . . to carbon atoms of the same non-condensed six-membered aromatic ring or to carbon atoms of six-membered aromatic rings being part of the same condensed ring system
205/44 . the carbon skeleton being further substituted by —CHO groups
205/45 . the carbon skeleton being further substituted by at least one doubly—bound oxygen atom, not being part of a —CHO group
205/46 . . the carbon skeleton containing carbon atoms of quinone rings
205/47 . . . Anthraquinones containing nitro groups
205/48 . . . . the carbon skeleton being further substituted by singly-bound oxygen atoms
205/49 . the carbon skeleton being further substituted by carboxyl groups
205/50 . . having nitro groups and carboxyl groups bound to acyclic carbon atoms of the carbon skeleton
205/51 . . . the carbon skeleton being saturated
205/52 . . . . Nitro-acetic acids
205/53 . . . the carbon skeleton containing six-membered aromatic rings

205/54 . . having nitro groups bound to acyclic carbon atoms and carboxyl groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton
205/55 . . having nitro groups or carboxyl groups bound to carbon atoms of rings other than six-membered aromatic rings of the carbon skeleton
205/56 . . having nitro groups bound to carbon atoms of six-membered aromatic rings and carboxyl groups bound to acyclic carbon atoms of the carbon skeleton
205/57 . . having nitro groups and carboxyl groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton
205/58 . . . the carbon skeleton being further substituted by halogen atoms
205/59 . . . the carbon skeleton being further substituted by singly-bound oxygen atoms
205/60 . . . . in ortho-position to the carboxyl group, e.g. nitro-salicylic acids
205/61 . . . the carbon skeleton being further substituted by doubly-bound oxygen atoms

207/00 Compounds containing nitroso groups bound to a carbon skeleton

207/02 . the carbon skeleton not being further substituted
207/04 . the carbon skeleton being further substituted by singly-bound oxygen atoms

209/00 Preparation of compounds containing amino groups bound to a carbon skeleton

209/02 . by substitution of hydrogen atoms by amino groups
209/04 . by substitution of functional groups by amino groups
209/06 . . by substitution of halogen atoms
209/08 . . . with formation of amino groups bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings
209/10 . . . with formation of amino groups bound to carbon atoms of six-membered aromatic rings or from amines having nitrogen atoms bound to carbon atoms of six-membered aromatic rings
209/12 . . . with formation of quaternary ammonium compounds
209/14 . . by substitution of hydroxy groups or of etherified or esterified hydroxy groups
209/16 . . . with formation of amino groups bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings
209/18 . . . with formation of amino groups bound to carbon atoms of six-membered aromatic rings or from amines having nitrogen atoms bound to carbon atoms of six-membered aromatic rings
209/20 . . . with formation of quaternary ammonium compounds
209/22 . . by substitution of other functional groups
209/24 . by reductive alkylation of ammonia, amines or compounds having groups reducible to amino groups, with carbonyl compounds
209/26 . . by reduction with hydrogen
209/28 . . by reduction with other reducing agents
209/30 . by reduction of nitrogen-to-oxygen or nitrogen-to-nitrogen bonds
209/32 . . by reduction of nitro groups
209/325 . . . {reduction by other means than indicated in C07C 209/34 or C07C 209/36}
209/34 . . . by reduction of nitro groups bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings {in presence of hydrogen-containing gases and a catalyst}
209/36 . . . by reduction of nitro groups bound to carbon atoms of six-membered aromatic rings {in presence of hydrogen-containing gases and a catalyst}
209/365 . . . . {by reduction with preservation of halogen-atoms in compounds containing nitro groups and halogen atoms bound to the same carbon skeleton}
209/38 . . by reduction of nitroso groups
209/40 . . by reduction of hydroxylamino or oxyimino groups
209/42 . . by reduction of nitrogen-to-nitrogen bonds
209/44 . by reduction of carboxylic acids or esters thereof in presence of ammonia or amines, or by reduction of nitriles, carboxylic acid amides, imines or imino-ethers
209/46 . . by reduction of carboxylic acids or esters thereof in presence of ammonia or amines
209/48 . . by reduction of nitriles
209/50 . . by reduction of carboxylic acid amides
209/52 . . by reduction of imines or imino-ethers (C07C 209/24 takes precedence)
209/54 . by rearrangement reactions
209/56 . . from carboxylic acids involving a Hofmann, Curtius, Schmidt, or Lossen-type rearrangement
209/58 . . from or via amides
209/60 . by condensation or addition reactions, e.g. Mannich reaction, addition of ammonia or amines to alkenes or to alkynes or addition of compounds containing an active hydrogen atom to Schiff's bases, quinone imines, or aziranes
209/62 . by cleaving carbon-to-nitrogen, sulfur-to-nitrogen, or phosphorus-to-nitrogen bonds, e.g. hydrolysis of amides, N-dealkylation of amines or quaternary ammonium compounds (C07C 209/24 takes precedence)
209/64 . by disproportionation
209/66 . from or via metallo-organic compounds
209/68 . from amines, by reactions not involving amino groups, e.g. reduction of unsaturated amines, aromatisation, or substitution of the carbon skeleton
209/70 . . by reduction of unsaturated amines
209/72 . . . by reduction of six-membered aromatic rings
209/74 . . by halogenation, hydrohalogenation, dehalogenation, or dehydrohalogenation
209/76 . . by nitration
209/78 . . from carbonyl compounds, e.g. from formaldehyde, and amines having amino groups bound to carbon atoms of six-membered aromatic rings, with formation of methylene-diarylamines
209/80 . by photochemical reactions; by using free radicals
209/82 . Purification; Separation; Stabilisation; Use of additives
209/84 . . Purification
209/86 . . Separation
209/88 . . . Separation of optical isomers
209/90 . . Stabilisation; Use of additives

211/00 **Compounds containing amino groups bound to a carbon skeleton**

211/01 . having amino groups bound to acyclic carbon atoms
211/02 . . of an acyclic saturated carbon skeleton
211/03 . . . Monoamines
211/04 . . . . Mono-, di- or tri-methylamine
211/05 . . . . Mono-, di- or tri-ethylamine
211/06 . . . . containing only n- or iso-propyl groups
211/07 . . . . containing one, two or three alkyl groups, each having the same number of carbon atoms in excess of three
211/08 . . . . containing alkyl groups having a different number of carbon atoms
211/09 . . . Diamines
211/10 . . . . Diaminoethanes
211/11 . . . . Diaminopropanes
211/12 . . . . 1,6-Diaminohexanes
211/13 . . . Amines containing three or more amino groups bound to the carbon skeleton
211/14 . . . Amines containing amino groups bound to at least two aminoalkyl groups, e.g. diethylenetriamines
211/15 . . . the carbon skeleton being further substituted by halogen atoms or by nitro or nitroso groups
211/16 . . of a saturated carbon skeleton containing rings other than six-membered aromatic rings
211/17 . . . containing only non-condensed rings
211/18 . . . containing at least two amino groups bound to the carbon skeleton
211/19 . . . containing condensed ring systems
211/20 . . of an acyclic unsaturated carbon skeleton
211/21 . . . Monoamines
211/22 . . . containing at least two amino groups bound to the carbon skeleton
211/23 . . . the carbon skeleton containing carbon-to-carbon triple bonds
211/24 . . . the carbon skeleton being further substituted by halogen atoms or by nitro or nitroso groups
211/25 . . of an unsaturated carbon skeleton containing rings other than six-membered aromatic rings
211/26 . . of an unsaturated carbon skeleton containing at least one six-membered aromatic ring
211/27 . . . having amino groups linked to the six-membered aromatic ring by saturated carbon chains
211/28 . . . having amino groups linked to the six-membered aromatic ring by unsaturated carbon chains
211/29 . . . the carbon skeleton being further substituted by halogen atoms or by nitro or nitroso groups
211/30 . . . the six-membered aromatic ring being part of a condensed ring system formed by two rings
211/31 . . . the six-membered aromatic ring being part of a condensed ring system formed by at least three rings
211/32 . . . . containing dibenzocycloheptane or dibenzocycloheptene ring systems or condensed derivatives thereof
211/33 . having amino groups bound to carbon atoms of rings other than six-membered aromatic rings
211/34 . . of a saturated carbon skeleton
211/35 . . . containing only non-condensed rings
211/36 . . . containing at least two amino groups bound to the carbon skeleton
211/37 . . . being further substituted by halogen atoms or by nitro or nitroso groups
211/38 . . . containing condensed ring systems
211/39 . . of an unsaturated carbon skeleton
211/40 . . . containing only non-condensed rings
211/41 . . . containing condensed ring systems
211/42 . . . . with six-membered aromatic rings being part of the condensed ring systems
211/43 . having amino groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton
211/44 . . having amino groups bound to only one six-membered aromatic ring
211/45 . . . Monoamines
211/46 . . . . Aniline
211/47 . . . . Toluidines; Homologues thereof
211/48 . . . . N-alkylated amines
211/49 . . . having at least two amino groups bound to the carbon skeleton
211/50 . . . . with at least two amino groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton
211/51 . . . . . Phenylenediamines
211/52 . . . the carbon skeleton being further substituted by halogen atoms or by nitro or nitroso groups
211/53 . . . having the nitrogen atom of at least one of the amino groups further bound to a hydrocarbon radical substituted by amino groups
211/54 . . having amino groups bound to two or three six-membered aromatic rings
211/55 . . . Diphenylamines
211/56 . . . the carbon skeleton being further substituted by halogen atoms or by nitro or nitroso groups
211/57 . . having amino groups bound to carbon atoms of six-membered aromatic rings being part of condensed ring systems of the carbon skeleton
211/58 . . . Naphthylamines; N-substituted derivatives thereof
211/59 . . . the carbon skeleton being further substituted by halogen atoms or by nitro or nitroso groups
211/60 . . . containing a ring other than a six-membered aromatic ring forming part of at least one of the condensed ring systems
211/61 . . . with at least one of the condensed ring systems formed by three or more rings
211/62 . Quaternary ammonium compounds
211/63 . . having quaternised nitrogen atoms bound to acyclic carbon atoms
211/64 . . having quaternised nitrogen atoms bound to carbon atoms of six-membered aromatic rings
211/65 . Metal complexes of amines

213/00 **Preparation of compounds containing amino and hydroxy, amino and etherified hydroxy or amino and esterified hydroxy groups bound to the same carbon skeleton**

213/02 . by reactions involving the formation of amino groups from compounds containing hydroxy groups or etherified or esterified hydroxy groups
213/04 . by reaction of ammonia or amines with olefin oxides or halohydrins
213/06 . from hydroxy amines by reactions involving the etherification or esterification of hydroxy groups

213/08 . by reactions not involving the formation of amino groups, hydroxy groups or etherified or esterified hydroxy groups
213/10 . Separation; Purification; Stabilisation; Use of additives

215/00 Compounds containing amino and hydroxy groups bound to the same carbon skeleton

215/02 . having hydroxy groups and amino groups bound to acyclic carbon atoms of the same carbon skeleton
215/04 . . the carbon skeleton being saturated
215/06 . . . and acyclic
215/08 . . . . with only one hydroxy group and one amino group bound to the carbon skeleton
215/10 . . . . with one amino group and at least two hydroxy groups bound to the carbon skeleton
215/12 . . . . the nitrogen atom of the amino group being further bound to hydrocarbon groups substituted by hydroxy groups
215/14 . . . . the nitrogen atom of the amino group being further bound to hydrocarbon groups substituted by amino groups
215/16 . . . . the nitrogen atom of the amino group being further bound to carbon atoms of six-membered aromatic rings
215/18 . . . . with hydroxy groups and at least two amino groups bound to the carbon skeleton
215/20 . . . the carbon skeleton being saturated and containing rings
215/22 . . the carbon skeleton being unsaturated
215/24 . . . and acyclic
215/26 . . . and containing rings other than six-membered aromatic rings
215/28 . . . and containing six-membered aromatic rings
215/30 . . . . containing hydroxy groups and carbon atoms of six-membered aromatic rings bound to the same carbon atom of the carbon skeleton
215/32 . . . . . containing hydroxy groups and carbon atoms of two six-membered aromatic rings bound to the same carbon atom of the carbon skeleton
215/34 . . . . containing hydroxy groups and carbon atoms of six-membered aromatic rings bound to the same carbon atom of the carbon skeleton and at least one hydroxy group bound to another carbon atom of the carbon skeleton
215/36 . . . . . 1-Aryl-2-amino-1,3-propane diols
215/38 . . . . with rings other than six-membered aromatic rings being part of the carbon skeleton
215/40 . . with quaternised nitrogen atoms bound to carbon atoms of the carbon skeleton
215/42 . having amino groups or hydroxy groups bound to carbon atoms of rings other than six-membered aromatic rings of the same carbon skeleton
215/44 . . bound to carbon atoms of the same ring or condensed ring system
215/46 . having hydroxy groups bound to carbon atoms of at least one six-membered aromatic ring and amino groups bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings of the same carbon skeleton
215/48 . . with amino groups linked to the six-membered aromatic ring, or to the condensed ring system containing that ring, by carbon chains not further substituted by hydroxy groups
215/50 . . . with amino groups and the six-membered aromatic ring, or the condensed ring system containing that ring, bound to the same carbon atom of the carbon chain
215/52 . . . linked by carbon chains having two carbon atoms between the amino groups and the six-membered aromatic ring or the condensed ring system containing that ring
215/54 . . . linked by carbon chains having at least three carbon atoms between the amino groups and the six-membered aromatic ring or the condensed ring system containing that ring
215/56 . . with amino groups linked to the six-membered aromatic ring, or to the condensed ring system containing that ring, by carbon chains further substituted by hydroxy groups
215/58 . . . with hydroxy groups and the six-membered aromatic ring, or the condensed ring system containing that ring, bound to the same carbon atom of the carbon chain
215/60 . . . . the chain having two carbon atoms between the amino groups and the six-membered aromatic ring or the condensed ring system containing that ring
215/62 . . . . the chain having at least three carbon atoms between the amino groups and the six-membered aromatic ring or the condensed ring system containing that ring
215/64 . . with rings other than six-membered aromatic rings being part of the carbon skeleton
215/66 . . with quaternised amino groups bound to the carbon skeleton
215/68 . having amino groups bound to carbon atoms of six-membered aromatic rings and hydroxy groups bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings of the same carbon skeleton
215/70 . . with rings other than six-membered aromatic rings being part of the carbon skeleton
215/72 . . with quaternised amino groups bound to the carbon skeleton
215/74 . having hydroxy groups and amino groups bound to carbon atoms of six-membered aromatic rings of the same carbon skeleton
215/76 . . of the same non-condensed six-membered aromatic ring
215/78 . . . containing at least two hydroxy groups bound to the carbon skeleton
215/80 . . . containing at least two amino groups bound to the carbon skeleton
215/82 . . . having the nitrogen atom of at least one of the amino groups further bound to a carbon atom of another six-membered aromatic ring
215/84 . . having amino groups bound to carbon atoms of six-membered aromatic rings being part of condensed ring systems
215/86 . . . being formed by two rings
215/88 . . . being formed by at least three rings
215/90 . . with quaternised amino groups bound to the carbon skeleton

217/00 Compounds containing amino and etherified hydroxy groups bound to the same carbon skeleton

217/02 . having etherified hydroxy groups and amino groups bound to acyclic carbon atoms of the same carbon skeleton
217/04 . . the carbon skeleton being acyclic and saturated
217/06 . . . having only one etherified hydroxy group and one amino group bound to the carbon skeleton, which is not further substituted
217/08 . . . . the oxygen atom of the etherified hydroxy group being further bound to an acyclic carbon atom
217/10 . . . . . to an acyclic carbon atom of a hydrocarbon radical containing six-membered aromatic rings
217/12 . . . . the oxygen atom of the etherified hydroxy group being further bound to a carbon atom of a ring other than a six-membered aromatic ring
217/14 . . . . the oxygen atom of the etherified hydroxy group being further bound to a carbon atom of a six-membered aromatic ring
217/16 . . . . . the six-membered aromatic ring or condensed ring system containing that ring not being further substituted
217/18 . . . . . the six-membered aromatic ring or condensed ring system containing that ring being further substituted
217/20 . . . . . by halogen atoms, by trihalomethyl, nitro or nitroso groups, or by singly-bound oxygen atoms
217/22 . . . . . by carbon atoms having at least two bonds to oxygen atoms
217/24 . . . . . the six-membered aromatic ring being part of a condensed ring system containing rings other than six-membered aromatic rings
217/26 . . . having only one etherified hydroxy group and one amino group bound to the carbon skeleton, which is further substituted by halogen atoms or by nitro or nitroso groups
217/28 . . . having one amino group and at least two singly-bound oxygen atoms, with at least one being part of an etherified hydroxy group, bound to the carbon skeleton, e.g. ethers of polyhydroxy amines
217/30 . . . . having the oxygen atom of at least one of the etherified hydroxy groups further bound to a carbon atom of a six-membered aromatic ring
217/32 . . . . . the six-membered aromatic ring or condensed ring system containing that ring being further substituted
217/34 . . . . . by halogen atoms, by trihalomethyl, nitro or nitroso groups, or by singly-bound oxygen atoms
217/36 . . . . . by carbon atoms having at least two bonds to oxygen atoms
217/38 . . . . . the six-membered aromatic ring being part of a condensed ring system containing rings other than six-membered aromatic rings
217/40 . . . . having at least two singly-bound oxygen atoms, with at least one being part of an etherified hydroxy group, bound to the same carbon atom of the carbon skeleton, e.g. amino-ketals, ortho esters
217/42 . . . having etherified hydroxy groups and at least two amino groups bound to the carbon skeleton
217/44 . . the carbon skeleton being saturated and containing rings
217/46 . . the carbon skeleton being acyclic and unsaturated
217/48 . . the carbon skeleton being unsaturated and containing rings
217/50 . . Ethers of hydroxy amines of undetermined structure, e.g. obtained by reactions of epoxides with hydroxy amines
217/52 . having etherified hydroxy groups or amino groups bound to carbon atoms of rings other than six-membered aromatic rings of the same carbon skeleton
217/54 . having etherified hydroxy groups bound to carbon atoms of at least one six-membered aromatic ring and amino groups bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings of the same carbon skeleton
217/56 . . with amino groups linked to the six-membered aromatic ring, or to the condensed ring system containing that ring, by carbon chains not further substituted by singly-bound oxygen atoms
217/58 . . . with amino groups and the six-membered aromatic ring, or the condensed ring system containing that ring, bound to the same carbon atom of the carbon chain
217/60 . . . linked by carbon chains having two carbon atoms between the amino groups and the six-membered aromatic ring or the condensed ring system containing that ring
217/62 . . . linked by carbon chains having at least three carbon atoms between the amino groups and the six-membered aromatic ring or the condensed ring system containing that ring
217/64 . . with amino groups linked to the six-membered aromatic ring, or to the condensed ring system containing that ring, by carbon chains further substituted by singly-bound oxygen atoms
217/66 . . . with singly-bound oxygen atoms and six-membered aromatic rings bound to the same carbon atom of the carbon chain
217/68 . . . . with singly-bound oxygen atoms, six-membered aromatic rings and amino groups bound to the same carbon atom of the carbon chain
217/70 . . . . linked by carbon chains having two carbon atoms between the amino groups and the six-membered aromatic ring or the condensed ring system containing that ring
217/72 . . . . linked by carbon chains having at least three carbon atoms between the amino groups and the six-membered aromatic ring or the condensed ring system containing that ring
217/74 . . with rings other than six-membered aromatic rings being part of the carbon skeleton
217/76 . having amino groups bound to carbon atoms of six-membered aromatic rings and etherified hydroxy groups bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings of the same carbon skeleton
217/78 . having amino groups and etherified hydroxy groups bound to carbon atoms of six-membered aromatic rings of the same carbon skeleton

217/80 . . having amino groups and etherified hydroxy groups bound to carbon atoms of non-condensed six-membered aromatic rings
217/82 . . . of the same non-condensed six-membered aromatic ring
217/84 . . . . the oxygen atom of at least one of the etherified hydroxy groups being further bound to an acyclic carbon atom
217/86 . . . . . to an acyclic carbon atom of a hydrocarbon radical containing six-membered aromatic rings
217/88 . . . . the oxygen atom of at least one of the etherified hydroxy groups being further bound to a carbon atom of a ring other than a six-membered aromatic ring
217/90 . . . . the oxygen atom of at least one of the etherified hydroxy groups being further bound to a carbon atom of a six-membered aromatic ring, e.g. amino-diphenylethers
217/92 . . . . the nitrogen atom of at least one of the amino groups being further bound to a carbon atom of a six-membered aromatic ring
217/94 . . having amino groups bound to carbon atoms of six-membered aromatic rings being part of condensed ring systems and etherified hydroxy groups bound to carbon atoms of six-membered aromatic rings of the same carbon skeleton

219/00 Compounds containing amino and esterified hydroxy groups bound to the same carbon skeleton

219/02 . having esterified hydroxy groups and amino groups bound to acyclic carbon atoms of the same carbon skeleton
219/04 . . the carbon skeleton being acyclic and saturated
219/06 . . . having the hydroxy groups esterified by carboxylic acids having the esterifying carboxyl groups bound to hydrogen atoms or to acyclic carbon atoms of an acyclic saturated carbon skeleton
219/08 . . . having at least one of the hydroxy groups esterified by a carboxylic acid having the esterifying carboxyl group bound to an acyclic carbon atom of an acyclic unsaturated carbon skeleton
219/10 . . . having at least one of the hydroxy groups esterified by a carboxylic acid having the esterifying carboxyl group bound to an acyclic carbon atom of a carbon skeleton containing rings
219/12 . . . having at least one of the hydroxy groups esterified by a carboxylic acid having the esterifying carboxyl group bound to a carbon atom of a ring other than a six-membered aromatic ring
219/14 . . . having at least one of the hydroxy groups esterified by a carboxylic acid having the esterifying carboxyl group bound to a carbon atom of a six-membered aromatic ring
219/16 . . . having at least one of the hydroxy groups esterified by an inorganic acid or a derivative thereof
219/18 . . the carbon skeleton being saturated and containing rings
219/20 . . the carbon skeleton being unsaturated
219/22 . . . and containing six-membered aromatic rings
219/24 . having esterified hydroxy groups or amino groups bound to carbon atoms of rings other than six-membered aromatic rings of the same carbon skeleton
219/26 . having esterified hydroxy groups bound to carbon atoms of at least one six-membered aromatic ring and amino groups bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings of the same carbon skeleton
219/28 . . having amino groups bound to acyclic carbon atoms of the carbon skeleton
219/30 . . . with amino groups linked to the six-membered aromatic ring, or to the condensed ring system containing that ring, by carbon chains further substituted by singly-bound oxygen atoms
219/32 . having amino groups bound to carbon atoms of six-membered aromatic rings and esterified hydroxy groups bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings of the same carbon skeleton
219/34 . having amino groups and esterified hydroxy groups bound to carbon atoms of six-membered aromatic rings of the same carbon skeleton

221/00 Preparation of compounds containing amino groups and doubly-bound oxygen atoms bound to the same carbon skeleton

223/00 Compounds containing amino and —CHO groups bound to the same carbon skeleton

223/02 . having amino groups bound to acyclic carbon atoms of the carbon skeleton
223/04 . having amino groups bound to carbon atoms of rings other than six-membered aromatic rings of the carbon skeleton
223/06 . having amino groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton

225/00 Compounds containing amino groups and doubly —bound oxygen atoms bound to the same carbon skeleton, at least one of the doubly—bound oxygen atoms not being part of a —CHO group, e.g. amino ketones

225/02 . having amino groups bound to acyclic carbon atoms of the carbon skeleton
225/04 . . the carbon skeleton being saturated
225/06 . . . and acyclic
225/08 . . . and containing rings
225/10 . . . . with doubly-bound oxygen atoms bound to carbon atoms not being part of rings
225/12 . . . . with doubly-bound oxygen atoms bound to carbon atoms being part of rings
225/14 . . the carbon skeleton being unsaturated
225/16 . . . and containing six-membered aromatic rings
225/18 . . . . the carbon skeleton containing also rings other than six-membered aromatic rings
225/20 . having amino groups bound to carbon atoms of rings other than six-membered aromatic rings of the carbon skeleton
225/22 . having amino groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton
225/24 . the carbon skeleton containing carbon atoms of quinone rings
225/26 . . having amino groups bound to carbon atoms of quinone rings or of condensed ring systems containing quinone rings

225/28 . . . of non-condensed quinone rings
225/30 . . . of condensed quinone ring systems formed by two rings
225/32 . . . of condensed quinone ring systems formed by at least three rings
225/34 . . . . Amino anthraquinones
225/36 . . . . . the carbon skeleton being further substituted by singly-bound oxygen atoms

227/00 Preparation of compounds containing amino and carboxyl groups bound to the same carbon skeleton

227/02 . Formation of carboxyl groups in compounds containing amino groups, e.g. by oxidation of amino alcohols
227/04 . Formation of amino groups in compounds containing carboxyl groups
227/06 . . by addition or substitution reactions, without increasing the number of carbon atoms in the carbon skeleton of the acid
227/08 . . . by reaction of ammonia or amines with acids containing functional groups
227/10 . . with simultaneously increasing the number of carbon atoms in the carbon skeleton
227/12 . Formation of amino and carboxyl groups
227/14 . from compounds containing already amino and carboxyl groups or derivatives thereof
227/16 . . by reactions not involving the amino or carboxyl groups
227/18 . . by reactions involving amino or carboxyl groups, e.g. hydrolysis of esters or amides, by formation of halides, salts or esters
227/20 . . . by hydrolysis of N-acylated amino-acids or derivatives thereof, e.g. hydrolysis of carbamates
227/22 . from lactams, cyclic ketones or cyclic oximes, e.g. by reactions involving Beckmann rearrangement
227/24 . from hydantoins
227/26 . from compounds containing carboxyl groups by reaction with HCN, or a salt thereof, and amines, or from aminonitriles
227/28 . from natural products
227/30 . Preparation of optical isomers
227/32 . . by stereospecific synthesis
227/34 . . by separation of optical isomers
227/36 . Racemisation of optical isomers
227/38 . Separation; Purification; Stabilisation; Use of additives (separation of optical isomers C07C 227/34)
227/40 . . Separation; Purification
227/42 . . . Crystallisation
227/44 . . Stabilisation; Use of additives

229/00 Compounds containing amino and carboxyl groups bound to the same carbon skeleton

229/02 . having amino and carboxyl groups bound to acyclic carbon atoms of the same carbon skeleton
229/04 . . the carbon skeleton being acyclic and saturated
229/06 . . . having only one amino and one carboxyl group bound to the carbon skeleton
229/08 . . . . the nitrogen atom of the amino group being further bound to hydrogen atoms
229/10 . . . . the nitrogen atom of the amino group being further bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings
229/12 . . . . . to carbon atoms of acyclic carbon skeletons
229/14 . . . . . to carbon atoms of carbon skeletons containing rings
229/16 . . . . . to carbon atoms of hydrocarbon radicals substituted by amino or carboxyl groups, e.g. ethylenediamine-tetra-acetic acid, iminodiacetic acids
229/18 . . . . the nitrogen atom of the amino group being further bound to carbon atoms of six-membered aromatic rings
229/20 . . . the carbon skeleton being further substituted by halogen atoms or by nitro or nitroso groups
229/22 . . . the carbon skeleton being further substituted by oxygen atoms
229/24 . . . having more than one carboxyl group bound to the carbon skeleton, e.g. aspartic acid
229/26 . . . having more than one amino group bound to the carbon skeleton, e.g. lysine
229/28 . . the carbon skeleton being saturated and containing rings
229/30 . . the carbon skeleton being acyclic and unsaturated
229/32 . . the carbon skeleton being unsaturated and containing rings other than six-membered aromatic rings
229/34 . . the carbon skeleton containing six-membered aromatic rings
229/36 . . . with at least one amino group and one carboxyl group bound to the same carbon atom of the carbon skeleton
229/38 . having amino groups bound to acyclic carbon atoms and carboxyl groups bound to carbon atoms of six-membered aromatic rings of the same carbon skeleton
229/40 . having amino groups bound to carbon atoms of at least one six-membered aromatic ring and carboxyl groups bound to acyclic carbon atoms of the same carbon skeleton
229/42 . . with carboxyl groups linked to the six-membered aromatic ring, or to the condensed ring system containing that ring, by saturated carbon chains
229/44 . . with carboxyl groups linked to the six-membered aromatic ring, or to the condensed ring system containing that ring, by unsaturated carbon chains
229/46 . having amino or carboxyl groups bound to carbon atoms of rings other than six-membered aromatic rings of the same carbon skeleton
229/48 . . with amino groups and carboxyl groups bound to carbon atoms of the same non-condensed ring
229/50 . . with amino groups and carboxyl groups bound to carbon atoms being part of the same condensed ring system
229/52 . having amino and carboxyl groups bound to carbon atoms of six-membered aromatic rings of the same carbon skeleton
229/54 . . with amino and carboxyl groups bound to carbon atoms of the same non-condensed six-membered aromatic ring
229/56 . . . with amino and carboxyl groups bound in ortho-position

229/58 . . . . having the nitrogen atom of at least one of the amino groups further bound to a carbon atom of a six-membered aromatic ring, e.g. N-phenyl-anthranilic acids
229/60 . . . with amino and carboxyl groups bound in meta- or para- positions
229/62 . . . with amino groups and at least two carboxyl groups bound to carbon atoms of the same six-membered aromatic ring
229/64 . . . the carbon skeleton being further substituted by singly-bound oxygen atoms
229/66 . . . the carbon skeleton being further substituted by doubly-bound oxygen atoms
229/68 . . with amino and carboxyl groups bound to carbon atoms of six-membered aromatic rings being part of the same condensed ring system
229/70 . . . the carbon skeleton being further substituted by singly-bound oxygen atoms
229/72 . . . the carbon skeleton being further substituted by doubly-bound oxygen atoms
229/74 . . . . the condensed ring system being formed by at least three rings, e.g. amino anthraquinone carboxylic acids
229/76 . Metal complexes of amino carboxylic acids

231/00 Preparation of carboxylic acid amides

231/02 . from carboxylic acids or from esters, anhydrides, or halides thereof by reaction with ammonia or amines
231/04 . from ketenes by reaction with ammonia or amines
231/06 . from nitriles by transformation of cyano groups into carboxamide groups
231/065 . . {By hydration using metals or metallic ions as catalyst}
231/08 . from amides by reaction at nitrogen atoms of carboxamide groups
231/10 . from compounds not provided for in groups C07C 231/02 - C07C 231/08
231/12 . by reactions not involving the formation of carboxamide groups
231/14 . by formation of carboxamide groups together with reactions not involving the carboxamide groups
231/16 . Preparation of optical isomers
231/18 . . by stereospecific synthesis
231/20 . . by separation of optical isomers
231/22 . Separation; Purification; Stabilisation; Use of additives (separation of optical isomers C07C 231/20)
231/24 . . Separation; Purification

233/00 Carboxylic acid amides

233/01 . having carbon atoms of carboxamide groups bound to hydrogen atoms or to acyclic carbon atoms
233/02 . . having nitrogen atoms of carboxamide groups bound to hydrogen atoms or to carbon atoms of unsubstituted hydrocarbon radicals
233/03 . . . with carbon atoms of carboxamide groups bound to hydrogen atoms
233/04 . . . with carbon atoms of carboxamide groups bound to acyclic carbon atoms of an acyclic saturated carbon skeleton
233/05 . . . . having the nitrogen atoms of the carboxamide groups bound to hydrogen atoms or to acyclic carbon atoms
233/06 . . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring
233/07 . . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a six-membered aromatic ring
233/08 . . . with carbon atoms of carboxamide groups bound to acyclic carbon atoms of a saturated carbon skeleton containing rings
233/09 . . . with carbon atoms of carboxamide groups bound to carbon atoms of an acyclic unsaturated carbon skeleton
233/10 . . . with carbon atoms of carboxamide groups bound to carbon atoms of an unsaturated carbon skeleton containing rings other than six-membered aromatic rings
233/11 . . . with carbon atoms of carboxamide groups bound to carbon atoms of an unsaturated carbon skeleton containing six-membered aromatic rings
233/12 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by halogen atoms or by nitro or nitroso groups
233/13 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by an acyclic carbon atom
233/14 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a ring other than a six-membered aromatic ring
233/15 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a six-membered aromatic ring
233/16 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by singly-bound oxygen atoms
233/17 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by an acyclic carbon atom
233/18 . . . . having the carbon atom of the carboxamide group bound to a hydrogen atom or to a carbon atom of an acyclic saturated carbon skeleton
233/19 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of a saturated carbon skeleton containing rings
233/20 . . . . having the carbon atom of the carboxamide group bound to a carbon atom of an acyclic unsaturated carbon skeleton
233/21 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of an unsaturated carbon skeleton containing rings other than six-membered aromatic rings
233/22 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of a carbon skeleton containing six-membered aromatic rings
233/23 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a ring other than a six-membered aromatic ring

233/24 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a six-membered aromatic ring

233/25 . . . . having the carbon atom of the carboxamide group bound to a hydrogen atom or to a carbon atom of an acyclic saturated carbon skeleton

233/26 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of a saturated carbon skeleton containing rings

233/27 . . . . having the carbon atom of the carboxamide group bound to a carbon atom of an acyclic unsaturated carbon skeleton

233/28 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of an unsaturated carbon skeleton containing rings other than six-membered aromatic rings

233/29 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of a carbon skeleton containing six-membered aromatic rings

233/30 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by doubly-bound oxygen atoms

233/31 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by an acyclic carbon atom

233/32 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a ring other than a six-membered aromatic ring

233/33 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a six-membered aromatic ring

233/34 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by amino groups

233/35 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by an acyclic carbon atom

233/36 . . . . having the carbon atom of the carboxamide group bound to a hydrogen atom or to a carbon atom of an acyclic saturated carbon skeleton

233/37 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of a saturated carbon skeleton containing rings

233/38 . . . . having the carbon atom of the carboxamide group bound to a carbon atom of an acyclic unsaturated carbon skeleton

233/39 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of an unsaturated carbon skeleton containing rings other than six-membered aromatic rings

233/40 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of a carbon skeleton containing six-membered aromatic rings

233/41 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a ring other than a six-membered aromatic ring

233/42 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a six-membered aromatic ring

233/43 . . . . having the carbon atom of the carboxamide group bound to a hydrogen atom or to a carbon atom of a saturated carbon skeleton

233/44 . . . . having the carbon atom of the carboxamide group bound to a carbon atom of an unsaturated carbon skeleton

233/45 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by carboxyl groups

233/46 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by an acyclic carbon atom

233/47 . . . . having the carbon atom of the carboxamide group bound to a hydrogen atom or to a carbon atom of an acyclic saturated carbon skeleton

233/48 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of a saturated carbon skeleton containing rings

233/49 . . . . having the carbon atom of the carboxamide group bound to a carbon atom of an acyclic unsaturated carbon skeleton

233/50 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of an unsaturated carbon skeleton containing rings other than six-membered aromatic rings

233/51 . . . . having the carbon atom of the carboxamide group bound to an acyclic carbon atom of a carbon skeleton containing six-membered aromatic rings

233/52 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a ring other than a six-membered aromatic ring

233/53 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a six-membered aromatic ring

233/54 . . . . having the carbon atom of the carboxamide group bound to a hydrogen atom or to a carbon atom of a saturated carbon skeleton

233/55 . . . . having the carbon atom of the carboxamide group bound to a carbon atom of an unsaturated carbon skeleton

233/56 . . having carbon atoms of carboxamide groups bound to carbon atoms of carboxyl groups, e.g. oxamides

233/57 . having carbon atoms of carboxamide groups bound to carbon atoms of rings other than six-membered aromatic rings

233/58 . . having the nitrogen atoms of the carboxamide groups bound to hydrogen atoms or to carbon atoms of unsubstituted hydrocarbon radicals

233/59 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by halogen atoms or by nitro or nitroso groups

233/60 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by singly-bound oxygen atoms
233/61 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by doubly-bound oxygen atoms
233/62 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by amino groups
233/63 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by carboxyl groups
233/64 . having carbon atoms of carboxamide groups bound to carbon atoms of six-membered aromatic rings
233/65 . . having the nitrogen atoms of the carboxamide groups bound to hydrogen atoms or to carbon atoms of unsubstituted hydrocarbon radicals
233/66 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by halogen atoms or by nitro or nitroso groups
233/67 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by singly-bound oxygen atoms
233/68 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by an acyclic carbon atom
233/69 . . . . of an acyclic saturated carbon skeleton
233/70 . . . . of a saturated carbon skeleton containing rings
233/71 . . . . of an acyclic unsaturated carbon skeleton
233/72 . . . . of an unsaturated carbon skeleton containing rings other than six-membered aromatic rings
233/73 . . . . of a carbon skeleton containing six-membered aromatic rings
233/74 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a ring other than a six-membered aromatic ring
233/75 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a six-membered aromatic ring
233/76 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by doubly-bound oxygen atoms
233/77 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by amino groups
233/78 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by an acyclic carbon atom
233/79 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a ring other than a six-membered aromatic ring
233/80 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by a carbon atom of a six-membered aromatic ring
233/81 . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a hydrocarbon radical substituted by carboxyl groups
233/82 . . . with the substituted hydrocarbon radical bound to the nitrogen atom of the carboxamide group by an acyclic carbon atom
233/83 . . . . of an acyclic saturated carbon skeleton
233/84 . . . . of a saturated carbon skeleton containing rings
233/85 . . . . of an acyclic unsaturated carbon skeleton
233/86 . . . . of an unsaturated carbon skeleton containing rings other than six-membered aromatic rings
233/87 . . . . of a carbon skeleton containing six-membered aromatic rings
233/88 . having nitrogen atoms of carboxamide groups bound to an acyclic carbon atom and to a carbon atom of a six-membered aromatic ring wherein at least one ortho-hydrogen atom has been replaced
233/89 . having nitrogen atoms of carboxamide groups quaternised
233/90 . having nitrogen atoms of carboxamide groups further acylated
233/91 . . with carbon atoms of the carboxamide groups bound to acyclic carbon atoms
233/92 . . with at least one carbon atom of the carboxamide groups bound to a carbon atom of a six-membered aromatic ring

235/00 Carboxylic acid amides, the carbon skeleton of the acid part being further substituted by oxygen atoms

235/02 . having carbon atoms of carboxamide groups bound to acyclic carbon atoms and singly-bound oxygen atoms bound to the same carbon skeleton
235/04 . . the carbon skeleton being acyclic and saturated
235/06 . . . having the nitrogen atoms of the carboxamide groups bound to hydrogen atoms or to acyclic carbon atoms
235/08 . . . having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom of a hydrocarbon radical substituted by singly-bound oxygen atoms
235/10 . . . having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom of a hydrocarbon radical substituted by nitrogen atoms not being part of nitro or nitroso groups
235/12 . . . having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom of a hydrocarbon radical substituted by carboxyl groups
235/14 . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring
235/16 . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a six-membered aromatic ring
235/18 . . . having at least one of the singly-bound oxygen atoms further bound to a carbon atom of a six-membered aromatic ring, e.g. phenoxyacetamides
235/20 . . . . having the nitrogen atoms of the carboxamide groups bound to hydrogen atoms or to acyclic carbon atoms

235/22 . . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring

235/24 . . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a six-membered aromatic ring

235/26 . . the carbon skeleton being saturated and containing rings

235/28 . . the carbon skeleton being acyclic and unsaturated

235/30 . . the carbon skeleton being unsaturated and containing rings other than six-membered aromatic rings

235/32 . . the carbon skeleton containing six-membered aromatic rings

235/34 . . . having the nitrogen atoms of the carboxamide groups bound to hydrogen atoms or to acyclic carbon atoms

235/36 . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring

235/38 . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a six-membered aromatic ring

235/40 . having carbon atoms of carboxamide groups bound to carbon atoms of rings other than six-membered aromatic rings and singly-bound oxygen atoms bound to the same carbon skeleton

235/42 . having carbon atoms of carboxamide groups bound to carbon atoms of six-membered aromatic rings and singly-bound oxygen atoms bound to the same carbon skeleton

235/44 . . with carbon atoms of carboxamide groups and singly-bound oxygen atoms bound to carbon atoms of the same non-condensed six-membered aromatic ring

235/46 . . . having the nitrogen atoms of the carboxamide groups bound to hydrogen atoms or to acyclic carbon atoms

235/48 . . . having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom of a hydrocarbon radical substituted by singly-bound oxygen atoms

235/50 . . . having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom of a hydrocarbon radical substituted by nitrogen atoms not being part of nitro or nitroso groups

235/52 . . . having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom of a hydrocarbon radical substituted by carboxyl groups

235/54 . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring

235/56 . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a six-membered aromatic ring

235/58 . . . with carbon atoms of carboxamide groups and singly-bound oxygen atoms, bound in ortho-position to carbon atoms of the same non-condensed six-membered aromatic ring

235/60 . . . . having the nitrogen atoms of the carboxamide groups bound to hydrogen atoms or to acyclic carbon atoms

235/62 . . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring

235/64 . . . . having the nitrogen atom of at least one of the carboxamide groups bound to a carbon atom of a six-membered aromatic ring

235/66 . . with carbon atoms of carboxamide groups bound to carbon atoms of six-membered aromatic rings being part of condensed ring systems and singly-bound oxygen atoms, bound to the same carbon skeleton

235/68 . having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom and to a carbon atom of a six-membered aromatic ring wherein at least one ortho-hydrogen atom has been replaced

235/70 . having carbon atoms of carboxamide groups and doubly-bound oxygen atoms bound to the same carbon skeleton

235/72 . . with the carbon atoms of the carboxamide groups bound to acyclic carbon atoms

235/74 . . . of a saturated carbon skeleton

235/76 . . . of an unsaturated carbon skeleton

235/78 . . . . the carbon skeleton containing rings

235/80 . . . having carbon atoms of carboxamide groups and keto groups bound to the same carbon atom, e.g. acetoacetamides

235/82 . . with the carbon atom of at least one of the carboxamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring

235/84 . . with the carbon atom of at least one of the carboxamide groups bound to a carbon atom of a six-membered aromatic ring

235/86 . having the nitrogen atom of at least one of the carboxamide groups quaternised

235/88 . having the nitrogen atom of at least one of the carboxamide groups further acylated

237/00 Carboxylic acid amides, the carbon skeleton of the acid part being further substituted by amino groups

237/02 . having the carbon atoms of the carboxamide groups bound to acyclic carbon atoms of the carbon skeleton

237/04 . . the carbon skeleton being acyclic and saturated

237/06 . . . having the nitrogen atoms of the carboxamide groups bound to hydrogen atoms or to acyclic carbon atoms

237/08 . . . having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom of a hydrocarbon radical substituted by singly-bound oxygen atoms

237/10 . . . having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom of a hydrocarbon radical substituted by nitrogen atoms not being part of nitro or nitroso groups

237/12 . . . having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom of a hydrocarbon radical substituted by carboxyl groups (peptides C07K)

237/14 . . the carbon skeleton being saturated and containing rings

237/16 . . the carbon skeleton being acyclic and unsaturated

237/18 . . the carbon skeleton being unsaturated and containing rings other than six-membered aromatic rings
237/20 . . the carbon skeleton containing six-membered aromatic rings
237/22 . . having nitrogen atoms of amino groups bound to the carbon skeleton of the acid part, further acylated (peptides C07K)
237/24 . having the carbon atom of at least one of the carboxamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring of the carbon skeleton
237/26 . . of a ring being part of a condensed ring system formed by at least four rings, e.g. tetracycline
237/28 . having the carbon atom of at least one of the carboxamide groups bound to a carbon atom of a non-condensed six-membered aromatic ring of the carbon skeleton
237/30 . . having the nitrogen atom of the carboxamide group bound to hydrogen atoms or to acyclic carbon atoms
237/32 . . having the nitrogen atom of the carboxamide group bound to an acyclic carbon atom of a hydrocarbon radical substituted by oxygen atoms
237/34 . . having the nitrogen atom of the carboxamide group bound to an acyclic carbon atom of a hydrocarbon radical substituted by nitrogen atoms not being part of nitro or nitroso groups
237/36 . . having the nitrogen atom of the carboxamide group bound to an acyclic carbon atom of a hydrocarbon radical substituted by carboxyl groups
237/38 . . having the nitrogen atom of the carboxamide group bound to a carbon atom of a ring other than a six-membered aromatic ring
237/40 . . having the nitrogen atom of the carboxamide group bound to a carbon atom of a six-membered aromatic ring
237/42 . . having nitrogen atoms of amino groups bound to the carbon skeleton of the acid part, further acylated
237/44 . . having carbon atoms of carboxamide groups, amino groups and singly-bound oxygen atoms bound to carbon atoms of the same non-condensed six-membered aromatic ring
237/46 . . having carbon atoms of carboxamide groups, amino groups and at least three atoms of bromine or iodine, bound to carbon atoms of the same non-condensed six-membered aromatic ring
237/48 . having the carbon atom of at least one of the carboxamide groups bound to a carbon atom of a six-membered aromatic ring being part of a condensed ring system of the same carbon skeleton
237/50 . having the nitrogen atom of at least one of the carboxamide groups quaternised
237/52 . having the nitrogen atom of at least one of the carboxamide groups further acylated

239/00 Compounds containing nitrogen-to-halogen bonds; Hydroxylamino compounds or ethers or esters thereof (oximes C07C 251/00; hydroxamic acids or derivatives thereof C07C 259/00)

239/02 . Compounds containing nitrogen-to-halogen bonds
239/04 . . N-halogenated amines
239/06 . . N-halogenated carboxamides
239/08 . Hydroxylamino compounds or their ethers or esters
239/10 . . having nitrogen atoms of hydroxylamino groups further bound to carbon atoms of unsubstituted hydrocarbon radicals or of hydrocarbon radicals substituted by halogen atoms or by nitro or nitroso groups
239/12 . . having nitrogen atoms of hydroxylamino groups further bound to carbon atoms of hydrocarbon radicals substituted by singly-bound oxygen atoms
239/14 . . having nitrogen atoms of hydroxylamino groups further bound to carbon atoms of hydrocarbon radicals substituted by doubly-bound oxygen atoms
239/16 . . having nitrogen atoms of hydroxylamino groups further bound to carbon atoms of hydrocarbon radicals substituted by nitrogen atoms not being part of nitro or nitroso groups
239/18 . . having nitrogen atoms of hydroxylamino groups further bound to carbon atoms of hydrocarbon radicals substituted by carboxyl groups
239/20 . . having oxygen atoms of hydroxylamino groups etherified
239/22 . . having oxygen atoms of hydroxylamino groups esterified

241/00 Preparation of compounds containing chains of nitrogen atoms singly-bound to each other, e.g. hydrazines, triazanes

241/02 . Preparation of hydrazines
241/04 . Preparation of hydrazides

243/00 Compounds containing chains of nitrogen atoms singly-bound to each other, e.g. hydrazines, triazanes

243/02 . N-nitro compounds
243/04 . N-nitroso compounds
243/06 . . N-nitroso-amines
243/08 . . N-nitroso-carboxamides
243/10 . Hydrazines
243/12 . . having nitrogen atoms of hydrazine groups bound to acyclic carbon atoms
243/14 . . . of a saturated carbon skeleton
243/16 . . . of an unsaturated carbon skeleton
243/18 . . . . containing rings
243/20 . . having nitrogen atoms of hydrazine groups bound to carbon atoms of rings other than six-membered aromatic rings
243/22 . . having nitrogen atoms of hydrazine groups bound to carbon atoms of six-membered aromatic rings
243/24 . Hydrazines having nitrogen atoms of hydrazine groups acylated by carboxylic acids
243/26 . . with acylating carboxyl groups bound to hydrogen atoms or to acyclic carbon atoms
243/28 . . . to hydrogen atoms or to carbon atoms of a saturated carbon skeleton
243/30 . . . to carbon atoms of an unsaturated carbon skeleton
243/32 . . . . the carbon skeleton containing rings
243/34 . . . to carbon atoms of a carbon skeleton further substituted by nitrogen atoms
243/36 . . with acylating carboxyl groups bound to carbon atoms of rings other than six-membered aromatic rings

243/38 . . with acylating carboxyl groups bound to carbon atoms of six-membered aromatic rings
243/40 . Hydrazines having nitrogen atoms of hydrazine groups being quaternised
243/42 . Hydrazines having nitrogen atoms of hydrazine groups further singly-bound to hetero atoms

245/00 Compounds containing chains of at least two nitrogen atoms with at least one nitrogen-to-nitrogen multiple bond (azoxy compounds C07C 291/08)
245/02 . Azo compounds, i.e. compounds having the free valencies of —N=N— groups attached to different atoms, e.g. diazohydroxides
245/04 . . with nitrogen atoms of azo groups bound to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings
245/06 . . with nitrogen atoms of azo groups bound to carbon atoms of six-membered aromatic rings
245/08 . . . with the two nitrogen atoms of azo groups bound to carbon atoms of six-membered aromatic rings, e.g. azobenzene
245/10 . . . with nitrogen atoms of azo groups bound to carbon atoms of six-membered aromatic rings being part of condensed ring systems
245/12 . Diazo compounds, i.e. compounds having the free valencies of $>N_2$ groups attached to the same carbon atom
245/14 . . having diazo groups bound to acyclic carbon atoms of a carbon skeleton
245/16 . . . Diazomethane
245/18 . . . the carbon skeleton being further substituted by carboxyl groups
245/20 . Diazonium compounds
245/22 . containing chains of three or more nitrogen atoms with one or more nitrogen-to-nitrogen double bonds
245/24 . . Chains of only three nitrogen atoms, e.g. diazoamines

247/00 Compounds containing azido groups
247/02 . with azido groups bound to acyclic carbon atoms of a carbon skeleton
247/04 . . being saturated
247/06 . . . and containing rings
247/08 . . being unsaturated
247/10 . . . and containing rings
247/12 . . being further substituted by carboxyl groups
247/14 . with azido groups bound to carbon atoms of rings other than six-membered aromatic rings
247/16 . with azido groups bound to carbon atoms of six-membered aromatic rings of a carbon skeleton
247/18 . . being further substituted by carboxyl groups
247/20 . with azido groups acylated by carboxylic acids
247/22 . . with the acylating carboxyl groups bound to hydrogen atoms, to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings
247/24 . . with at least one of the acylating carboxyl groups bound to a carbon atom of a six-membered aromatic ring

249/00 Preparation of compounds containing nitrogen atoms doubly-bound to a carbon skeleton (of diazo compounds C07C 245/12)
249/02 . of compounds containing imino groups
249/04 . of oximes
249/06 . . by nitrosation of hydrocarbons or substituted hydrocarbons
249/08 . . by reaction of hydroxylamines with carbonyl compounds
249/10 . . from nitro compounds or salts thereof
249/12 . . by reactions not involving the formation of oxyimino groups
249/14 . . Separation; Purification; Stabilisation; Use of additives
249/16 . of hydrazones

251/00 Compounds containing nitrogen atoms doubly-bound to a carbon skeleton (diazo compounds C07C 245/12)
251/02 . containing imino groups
251/04 . . having carbon atoms of imino groups bound to hydrogen atoms or to acyclic carbon atoms
251/06 . . . to carbon atoms of a saturated carbon skeleton
251/08 . . . . being acyclic
251/10 . . . to carbon atoms of an unsaturated carbon skeleton
251/12 . . . . being acyclic
251/14 . . . . containing rings other than six-membered aromatic rings
251/16 . . . . containing six-membered aromatic rings
251/18 . . having carbon atoms of imino groups bound to carbon atoms of rings other than six-membered aromatic rings
251/20 . . having carbon atoms of imino groups being part of rings other than six-membered aromatic rings
251/22 . . . Quinone imines
251/24 . . having carbon atoms of imino groups bound to carbon atoms of six-membered aromatic rings
251/26 . . having nitrogen atoms of imino groups further bound to halogen atoms
251/28 . . having nitrogen atoms of imino groups acylated
251/30 . . having nitrogen atoms of imino groups quaternised
251/32 . Oximes
251/34 . . with oxygen atoms of oxyimino groups bound to hydrogen atoms or to carbon atoms of unsubstituted hydrocarbon radicals
251/36 . . . with the carbon atoms of the oxyimino groups bound to hydrogen atoms or to acyclic carbon atoms
251/38 . . . . to carbon atoms of a saturated carbon skeleton
251/40 . . . . to carbon atoms of an unsaturated carbon skeleton
251/42 . . . with the carbon atom of at least one of the oxyimino groups bound to a carbon atom of a ring other than a six-membered aromatic ring
251/44 . . . with the carbon atom of at least one of the oxyimino groups being part of a ring other than a six-membered aromatic ring
251/46 . . . . Quinone oximes
251/48 . . . with the carbon atom of at least one of the oxyimino groups bound to a carbon atom of a six-membered aromatic ring
251/50 . . having oxygen atoms of oxyimino groups bound to carbon atoms of substituted hydrocarbon radicals

251/52 . . . of hydrocarbon radicals substituted by halogen atoms or by nitro or nitroso groups
251/54 . . . of hydrocarbon radicals substituted by singly-bound oxygen atoms
251/56 . . . of hydrocarbon radicals substituted by doubly-bound oxygen atoms
251/58 . . . of hydrocarbon radicals substituted by nitrogen atoms not being part of nitro or nitroso groups
251/60 . . . of hydrocarbon radicals substituted by carboxyl groups
251/62 . . having oxygen atoms of oxyimino groups esterified
251/64 . . . by carboxylic acids
251/66 . . . . with the esterifying carboxyl groups bound to hydrogen atoms, to acyclic carbon atoms or to carbon atoms of rings other than six-membered aromatic rings
251/68 . . . . with at least one of the esterifying carboxyl groups bound to a carbon atom of a six-membered aromatic ring
251/70 . . Metal complexes of oximes
251/72 . Hydrazones
251/74 . . having doubly-bound carbon atoms of hydrazone groups bound to hydrogen atoms or to acyclic carbon atoms
251/76 . . . to carbon atoms of a saturated carbon skeleton
251/78 . . . to carbon atoms of an unsaturated carbon skeleton
251/80 . . . . the carbon skeleton containing rings
251/82 . . having doubly-bound carbon atoms of hydrazone groups bound to carbon atoms of rings other than six-membered aromatic rings
251/84 . . having doubly-bound carbon atoms of hydrazone groups being part of rings other than six-membered aromatic rings
251/86 . . having doubly-bound carbon atoms of hydrazone groups bound to carbon atoms of six-membered aromatic rings
251/88 . . having also the other nitrogen atom doubly-bound to a carbon atom, e.g. azines

253/00 **Preparation of carboxylic acid nitriles** (of cyanogen or compounds thereof C01C 3/00)
253/02 . by reaction of nitrogen oxide with organic compounds
253/04 . by reaction of cyanogen halides, e.g. ClCN, with organic compounds
253/06 . from N-formylated amino compounds
253/08 . by addition of hydrogen cyanide or salts thereof to unsaturated compounds
253/10 . . to compounds containing carbon-to-carbon double bonds
253/12 . . to compounds containing carbon-to-carbon triple bonds
253/14 . by reaction of cyanides with halogen-containing compounds with replacement of halogen atoms by cyano groups
253/16 . by reaction of cyanides with lactones or compounds containing hydroxy groups or etherified or esterified hydroxy groups
253/18 . by reaction of ammonia or amines with compounds containing carbon-to-carbon multiple bonds other than in six-membered aromatic rings
253/20 . by dehydration of carboxylic acid amides
253/22 . by reaction of ammonia with carboxylic acids with replacement of carboxyl groups by cyano groups
253/24 . by ammoxidation of hydrocarbons or substituted hydrocarbons
253/26 . . containing carbon-to-carbon multiple bonds, e.g. unsaturated aldehydes
253/28 . . containing six-membered aromatic rings, e.g. styrene
253/30 . by reactions not involving the formation of cyano groups
253/32 . Separation; Purification; Stabilisation; Use of additives
253/34 . . Separation; Purification

255/00 **Carboxylic acid nitriles** (cyanogen or compounds thereof C01C 3/00)
255/01 . having cyano groups bound to acyclic carbon atoms
255/02 . . of an acyclic and saturated carbon skeleton
255/03 . . . Mononitriles
255/04 . . . containing two cyano groups bound to the carbon skeleton
255/05 . . . containing at least three cyano groups bound to the carbon skeleton
255/06 . . of an acyclic and unsaturated carbon skeleton
255/07 . . . Mononitriles
255/08 . . . . Acrylonitrile; Methacrylonitrile
255/09 . . . containing at least two cyano groups bound to the carbon skeleton
255/10 . . containing cyano groups and halogen atoms, or nitro or nitroso groups, bound to the same acyclic carbon skeleton
255/11 . . containing cyano groups and singly-bound oxygen atoms bound to the same saturated acyclic carbon skeleton
255/12 . . . containing cyano groups and hydroxy groups bound to the carbon skeleton
255/13 . . . containing cyano groups and etherified hydroxy groups bound to the carbon skeleton
255/14 . . . containing cyano groups and esterified hydroxy groups bound to the carbon skeleton
255/15 . . containing cyano groups and singly-bound oxygen atoms bound to the same unsaturated acyclic carbon skeleton
255/16 . . containing cyano groups and singly-bound oxygen atoms bound to the same carbon atom of an acyclic carbon skeleton
255/17 . . containing cyano groups and doubly-bound oxygen atoms bound to the same acyclic carbon skeleton
255/18 . . containing cyano groups bound to carbon atoms of carboxyl groups
255/19 . . containing cyano groups and carboxyl groups, other than cyano groups, bound to the same saturated acyclic carbon skeleton
255/20 . . . the carbon skeleton being further substituted by singly-bound oxygen atoms
255/21 . . . the carbon skeleton being further substituted by doubly-bound oxygen atoms
255/22 . . . containing cyano groups and at least two carboxyl groups bound to the carbon skeleton
255/23 . . containing cyano groups and carboxyl groups, other than cyano groups, bound to the same unsaturated acyclic carbon skeleton

255/24 . . containing cyano groups and singly-bound nitrogen atoms, not being further bound to other hetero atoms, bound to the same saturated acyclic carbon skeleton
255/25 . . . Aminoacetonitriles
255/26 . . . containing cyano groups, amino groups and singly-bound oxygen atoms bound to the carbon skeleton
255/27 . . . containing cyano groups, amino groups and doubly-bound oxygen atoms bound to the carbon skeleton
255/28 . . . containing cyano groups, amino groups and carboxyl groups, other than cyano groups, bound to the carbon skeleton
255/29 . . . containing cyano groups and acylated amino groups bound to the carbon skeleton
255/30 . . containing cyano groups and singly-bound nitrogen atoms, not being further bound to other hetero atoms, bound to the same unsaturated acyclic carbon skeleton
255/31 . . having cyano groups bound to acyclic carbon atoms of a carbon skeleton containing rings other than six-membered aromatic rings
255/32 . . having cyano groups bound to acyclic carbon atoms of a carbon skeleton containing at least one six-membered aromatic ring
255/33 . . . with cyano groups linked to the six-membered aromatic ring, or to the condensed ring system containing that ring, by saturated carbon chains
255/34 . . . with cyano groups linked to the six-membered aromatic ring, or to the condensed ring system containing that ring, by unsaturated carbon chains
255/35 . . . the carbon skeleton being further substituted by halogen atoms, or by nitro or nitroso groups
255/36 . . . the carbon skeleton being further substituted by hydroxy groups
255/37 . . . the carbon skeleton being further substituted by etherified hydroxy groups
255/38 . . . the carbon skeleton being further substituted by esterified hydroxy groups
255/39 . . . . with hydroxy groups esterified by derivatives of 2,2-dimethylcyclopropane carboxylic acids, e.g. of chrysanthemumic acids
255/40 . . . the carbon skeleton being further substituted by doubly-bound oxygen atoms
255/41 . . . the carbon skeleton being further substituted by carboxyl groups, other than cyano groups
255/42 . . . the carbon skeleton being further substituted by singly-bound nitrogen atoms, not being further bound to other hetero atoms
255/43 . . . . the carbon skeleton being further substituted by singly-bound oxygen atoms
255/44 . . . . at least one of the singly-bound nitrogen atoms being acylated
255/45 . having cyano groups bound to carbon atoms of rings other than six-membered aromatic rings
255/46 . . to carbon atoms of non-condensed rings
255/47 . . to carbon atoms of rings being part of condensed ring systems
255/48 . . to carbon atoms of 2,2-dimethylcyclopropane rings, e.g. nitrile of chrysanthemumic acids
255/49 . having cyano groups bound to carbon atoms of six-membered aromatic rings of a carbon skeleton
255/50 . . to carbon atoms of non-condensed six-membered aromatic rings
255/51 . . . containing at least two cyano groups bound to the carbon skeleton
255/52 . . to carbon atoms of six-membered aromatic rings being part of condensed ring systems
255/53 . . containing cyano groups and hydroxy groups bound to the carbon skeleton
255/54 . . containing cyano groups and etherified hydroxy groups bound to the carbon skeleton
255/55 . . containing cyano groups and esterified hydroxy groups bound to the carbon skeleton
255/56 . . containing cyano groups and doubly-bound oxygen atoms bound to the carbon skeleton
255/57 . . containing cyano groups and carboxyl groups, other than cyano groups, bound to the carbon skeleton
255/58 . . containing cyano groups and singly-bound nitrogen atoms, not being further bound to other hetero atoms, bound to the carbon skeleton
255/59 . . . the carbon skeleton being further substituted by singly-bound oxygen atoms
255/60 . . . at least one of the singly-bound nitrogen atoms being acylated
255/61 . containing cyano groups and nitrogen atoms being part of imino groups bound to the same carbon skeleton
255/62 . containing cyano groups and oxygen atoms being part of oxyimino groups bound to the same carbon skeleton
255/63 . containing cyano groups and nitrogen atoms further bound to other hetero atoms, other than oxygen atoms of nitro or nitroso groups, bound to the same carbon skeleton
255/64 . . with the nitrogen atoms further bound to oxygen atoms
255/65 . . with the nitrogen atoms further bound to nitrogen atoms
255/66 . . . having cyano groups and nitrogen atoms being part of hydrazine or hydrazone groups bound to the same carbon skeleton
255/67 . . . having cyano groups and azido groups bound to the same carbon skeleton

257/00 Compounds containing carboxyl groups, the doubly-bound oxygen atom of a carboxyl group being replaced by a doubly-bound nitrogen atom, this nitrogen atom not being further bound to an oxygen atom, e.g. imino-ethers, amidines

257/02 . with replacement of the other oxygen atom of the carboxyl group by halogen atoms, e.g. imino-halides
257/04 . without replacement of the other oxygen atom of the carboxyl group, e.g. imino-ethers
257/06 . . having carbon atoms of imino-carboxyl groups bound to hydrogen atoms, to acyclic carbon atoms, or to carbon atoms of rings other than six-membered aromatic rings
257/08 . . having carbon atoms of imino-carboxyl groups bound to carbon atoms of six-membered aromatic rings
257/10 . with replacement of the other oxygen atom of the carboxyl group by nitrogen atoms, e.g. amidines
257/12 . . having carbon atoms of amidino groups bound to hydrogen atoms

257/14 . . having carbon atoms of amidino groups bound to acyclic carbon atoms
257/16 . . having carbon atoms of amidino groups bound to carbon atoms of rings other than six-membered aromatic rings
257/18 . . having carbon atoms of amidino groups bound to carbon atoms of six-membered aromatic rings
257/20 . . having nitrogen atoms of amidino groups acylated
257/22 . . having nitrogen atoms of amidino groups further bound to nitrogen atoms, e.g. hydrazidines

259/00 Compounds containing carboxyl groups, an oxygen atom of a carboxyl group being replaced by a nitrogen atom, this nitrogen atom being further bound to an oxygen atom and not being part of nitro or nitroso groups

259/02 . with replacement of the other oxygen atom of the carboxyl group by halogen atoms
259/04 . without replacement of the other oxygen atom of the carboxyl group, e.g. hydroxamic acids
259/06 . . having carbon atoms of hydroxamic groups bound to hydrogen atoms or to acyclic carbon atoms
259/08 . . having carbon atoms of hydroxamic groups bound to carbon atoms of rings other than six-membered aromatic rings
259/10 . . having carbon atoms of hydroxamic groups bound to carbon atoms of six-membered aromatic rings
259/12 . with replacement of the other oxygen atom of the carboxyl group by nitrogen atoms, e.g. N-hydroxyamidines
259/14 . . having carbon atoms of hydroxamidine groups bound to hydrogen atoms or to acyclic carbon atoms
259/16 . . having carbon atoms of hydroxamidine groups bound to carbon atoms of rings other than six-membered aromatic rings
259/18 . . having carbon atoms of hydroxamidine groups bound to carbon atoms of six-membered aromatic rings
259/20 . . with at least one nitrogen atom of hydroxamidine groups bound to another nitrogen atom

261/00 Derivatives of cyanic acid

261/02 . Cyanates
261/04 . Cyanamides (unsubstituted cyanamide C01C 3/16)

263/00 Preparation of derivatives of isocyanic acid

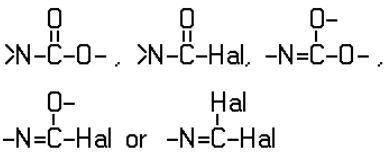
263/02 . by reaction of halides with isocyanic acid or its derivatives
263/04 . from or via carbamates or carbamoyl halides
263/06 . from or via ureas
263/08 . from or via heterocyclic compounds, e.g. pyrolysis of furoxans
263/10 . by reaction of amines with carbonyl halides, e.g. with phosgene
263/12 . from or via nitrogen analogues of carboxylic acids, e.g. from hydroxamic acids, involving a Hofmann, Curtius or Lossen-type rearrangement (C07C 209/56 takes precedence)
263/14 . by catalytic reaction of nitro compounds with carbon monoxide
263/16 . by reactions not involving the formation of isocyanate groups
263/18 . Separation; Purification; Stabilisation; Use of additives
263/20 . . Separation; Purification

265/00 Derivatives of isocyanic acid

265/02 . having isocyanate groups bound to acyclic carbon atoms
265/04 . . of a saturated carbon skeleton
265/06 . . of an unsaturated carbon skeleton
265/08 . . . the carbon skeleton containing rings
265/10 . having isocyanate groups bound to carbon atoms of rings other than six-membered aromatic rings
265/12 . having isocyanate groups bound to carbon atoms of six-membered aromatic rings
265/14 . containing at least two isocyanate groups bound to the same carbon skeleton
265/16 . having isocyanate groups acylated

267/00 Carbodiimides

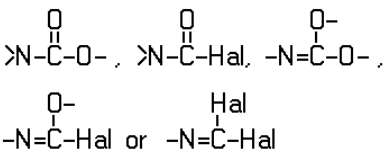
269/00 Preparation of derivatives of carbamic acid, i.e. compounds containing any of the groups



, the nitrogen atom not being part of nitro or nitroso groups

269/02 . from isocyanates with formation of carbamate groups
269/04 . from amines with formation of carbamate groups
269/06 . by reactions not involving the formation of carbamate groups
269/08 . Separation; Purification; Stabilisation; Use of additives

271/00 Derivatives of carbamic acids, i.e. compounds containing any of the groups



, the nitrogen atom not being part of nitro or nitroso groups

271/02 . Carbamic acids; Salts of carbamic acids (unsubstituted carbamic acid or salts thereof C01B 21/12)
271/04 . Carbamic acid halides
271/06 . Esters of carbamic acids
271/08 . . having oxygen atoms of carbamate groups bound to acyclic carbon atoms
271/10 . . . with the nitrogen atoms of the carbamate groups bound to hydrogen atoms or to acyclic carbon atoms
271/12 . . . . to hydrogen atoms or to carbon atoms of unsubstituted hydrocarbon radicals
271/14 . . . . to carbon atoms of hydrocarbon radicals substituted by halogen atoms or by nitro or nitroso groups
271/16 . . . . to carbon atoms of hydrocarbon radicals substituted by singly-bound oxygen atoms
271/18 . . . . to carbon atoms of hydrocarbon radicals substituted by doubly-bound oxygen atoms

271/20 . . . . to carbon atoms of hydrocarbon radicals substituted by nitrogen atoms not being part of nitro or nitroso groups

271/22 . . . . to carbon atoms of hydrocarbon radicals substituted by carboxyl groups

271/24 . . . with the nitrogen atom of at least one of the carbamate groups bound to a carbon atom of a ring other than a six-membered aromatic ring

271/26 . . . with the nitrogen atom of at least one of the carbamate groups bound to a carbon atom of a six-membered aromatic ring

271/28 . . . . to a carbon atom of a non-condensed six-membered aromatic ring

271/30 . . . . to a carbon atom of a six-membered aromatic ring being part of a condensed ring system

271/32 . . having oxygen atoms of carbamate groups bound to carbon atoms of rings other than six-membered aromatic rings

271/34 . . . with the nitrogen atoms of the carbamate groups bound to hydrogen atoms or to acyclic carbon atoms

271/36 . . . with the nitrogen atom of at least one of the carbamate groups bound to a carbon atom of a ring other than a six-membered aromatic ring

271/38 . . . with the nitrogen atom of at least one of the carbamate groups bound to a carbon atom of a six-membered aromatic ring

271/40 . . having oxygen atoms of carbamate groups bound to carbon atoms of six-membered aromatic rings

271/42 . . . with the nitrogen atoms of the carbamate groups bound to hydrogen atoms or to acyclic carbon atoms

271/44 . . . . to hydrogen atoms or to carbon atoms of unsubstituted hydrocarbon radicals

271/46 . . . . to carbon atoms of hydrocarbon radicals substituted by halogen atoms or by nitro or nitroso groups

271/48 . . . . to carbon atoms of hydrocarbon radicals substituted by singly-bound oxygen atoms

271/50 . . . . to carbon atoms of hydrocarbon radicals substituted by doubly-bound oxygen atoms

271/52 . . . . to carbon atoms of hydrocarbon radicals substituted by nitrogen atoms not being part of nitro or nitroso groups

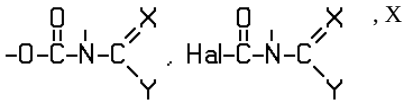
271/54 . . . . to carbon atoms of hydrocarbon radicals substituted by carboxyl groups

271/56 . . . with the nitrogen atom of at least one of the carbamate groups bound to a carbon atom of a ring other than a six-membered aromatic ring

271/58 . . . with the nitrogen atom of at least one of the carbamate groups bound to a carbon atom of a six-membered aromatic ring

271/60 . having oxygen atoms of carbamate groups bound to nitrogen atoms

271/62 . Compounds containing any of the groups

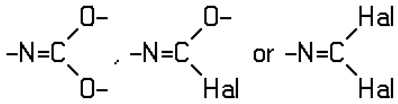


being a hetero atom, Y being any atom, e.g. N-acylcarbamates

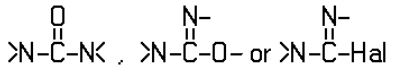
271/64 . . Y being a hydrogen or a carbon atom, e.g. benzoylcarbamates

271/66 . . Y being a hetero atom

271/68 . Compounds containing any of the groups



273/00 Preparation of urea or its derivatives, i.e. compounds containing any of the groups



nitrogen atoms not being part of nitro or nitroso groups

273/02 . of urea, its salts, complexes or addition compounds

273/025 . . {of solutions of urea and formaldehyde}

273/04 . . from carbon dioxide and ammonia

273/06 . . from cyanamide or calcium cyanamide

273/08 . . from ammoniacal liquor

273/10 . . combined with the synthesis of ammonia

273/12 . . combined with the synthesis of melamine

273/14 . . Separation; Purification; Stabilisation; Use of additives

273/16 . . . Separation; Purification

273/18 . of substituted ureas

273/1809 . . {with formation of the N-C(O)-N moiety}

273/1818 . . . {from -N=C=O and XNR'R"}

273/1827 . . . . {X being H}

273/1836 . . . {from derivatives of carbamic acid}

273/1845 . . . . {comprising the -N-C(O)-Hal moiety}

273/1854 . . {by reactions not involving the formation of the N-C(O)-N- moiety}

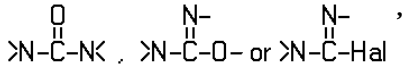
273/1863 . . . {from urea}

273/1872 . . {Preparation of compounds comprising a -N-C(O)-N-C(O)-N- moiety}

273/1881 . . . {from urea}

273/189 . . {Purification, separation, stabilisation, use of additives}

275/00 Derivatives of urea, i.e. compounds containing any of the groups



nitrogen atoms not being part of nitro or nitroso groups

275/02 . Salts; Complexes; Addition compounds

275/04 . having nitrogen atoms of urea groups bound to acyclic carbon atoms

275/06 . . of an acyclic and saturated carbon skeleton

275/08 . . . being further substituted by halogen atoms, or by nitro or nitroso groups

275/10 . . . being further substituted by singly-bound oxygen atoms

275/12 . . . being further substituted by doubly-bound oxygen atoms

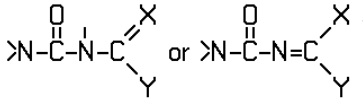
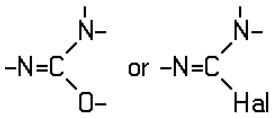
275/14 . . . being further substituted by nitrogen atoms not being part of nitro or nitroso groups

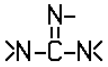
275/16 . . . being further substituted by carboxyl groups

275/18 . . of a saturated carbon skeleton containing rings

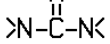
275/20 . . of an unsaturated carbon skeleton

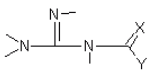
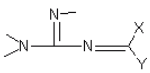
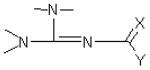
275/22 . . . containing rings other than six-membered aromatic rings

275/24 . . . containing six-membered aromatic rings
275/26 . having nitrogen atoms of urea groups bound to carbon atoms of rings other than six-membered aromatic rings
275/28 . having nitrogen atoms of urea groups bound to carbon atoms of six-membered aromatic rings of a carbon skeleton
275/30 . . being further substituted by halogen atoms, or by nitro or nitroso groups
275/32 . . being further substituted by singly-bound oxygen atoms
275/34 . . . having nitrogen atoms of urea groups and singly-bound oxygen atoms bound to carbon atoms of the same non-condensed six-membered aromatic ring
275/36 . . . . with at least one of the oxygen atoms further bound to a carbon atom of a six-membered aromatic ring, e.g. N-aryloxyphenylureas
275/38 . . being further substituted by doubly-bound oxygen atoms
275/40 . . being further substituted by nitrogen atoms not being part of nitro or nitroso groups
275/42 . . being further substituted by carboxyl groups
275/44 . having nitrogen atoms of urea groups doubly-bound to carbon atoms
275/46 . containing any of the groups  , X being a hetero atom, Y being any atom, e.g. acylureas
275/48 . . Y being a hydrogen or a carbon atom
275/50 . . . Y being a hydrogen or an acyclic carbon atom
275/52 . . . Y being a carbon atom of a ring other than a six-membered aromatic ring
275/54 . . . Y being a carbon atom of a six-membered aromatic ring, e.g. benzoylureas
275/56 . . . X being a nitrogen atom
275/58 . . Y being a hetero atom
275/60 . . . Y being an oxygen atom, e.g. allophanic acids
275/62 . . . Y being a nitrogen atom, e.g. biuret
275/64 . having nitrogen atoms of urea groups singly-bound to oxygen atoms
275/66 . having nitrogen atoms of urea groups bound to halogen atoms or to nitro or nitroso groups
275/68 . . N-nitroso ureas
275/70 . Compounds containing any of the groups  , e.g. isoureas

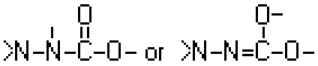
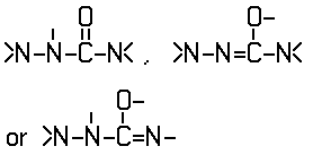
277/00 Preparation of guanidine or its derivatives, i.e. compounds containing the group  , the singly-bound nitrogen atoms not being part of nitro or nitroso groups

277/02 . of guanidine from cyanamide, calcium cyanamide or dicyandiamides
277/04 . of guanidine from ammonium thiocyanate
277/06 . Purification or separation of guanidine
277/08 . of substituted guanidines

279/00 Derivatives of guanidine, i.e. compounds containing the group  , the singly-bound nitrogen atoms not being part of nitro or nitroso groups

279/02 . Guanidine; Salts, complexes or addition compounds thereof
279/04 . having nitrogen atoms of guanidine groups bound to acyclic carbon atoms of a carbon skeleton
279/06 . . being further substituted by halogen atoms, or by nitro or nitroso groups
279/08 . . being further substituted by singly-bound oxygen atoms
279/10 . . being further substituted by doubly-bound oxygen atoms
279/12 . . being further substituted by nitrogen atoms not being part of nitro or nitroso groups
279/14 . . being further substituted by carboxyl groups
279/16 . having nitrogen atoms of guanidine groups bound to carbon atoms of rings other than six-membered aromatic rings
279/18 . having nitrogen atoms of guanidine groups bound to carbon atoms of six-membered aromatic rings
279/20 . containing any of the groups  , X being a   hetero atom, Y being any atom, e.g. acylguanidines
279/22 . . Y being a hydrogen or a carbon atom, e.g. benzoylguanidines
279/24 . . Y being a hetero atom
279/26 . . . X and Y being nitrogen atoms, i.e. biguanides
279/265 . . . . {containing two or more biguanide groups}
279/28 . having nitrogen atoms of guanidine groups bound to cyano groups, e.g. cyanoguanidines, dicyandiamides
279/30 . having nitrogen atoms of guanidine groups bound to nitro or nitroso groups
279/32 . . N-nitroguanidines
279/34 . . . N-nitroguanidine
279/36 . . . Substituted N-nitroguanidines

281/00 Derivatives of carbonic acid containing functional groups covered by groups C07C 269/00 - C07C 279/00 in which at least one nitrogen atom of these functional groups is further bound to another nitrogen atom not being part of a nitro or nitroso group

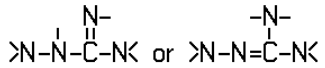
281/02 . Compounds containing any of the groups  , e.g. carbazates
281/04 . . the other nitrogen atom being further doubly-bound to a carbon atom
281/06 . Compounds containing any of the groups  , e.g. semicarbazides

281/08 . . the other nitrogen atom being further doubly-bound to a carbon atom, e.g. semicarbazones

281/10 . . . the carbon atom being further bound to an acyclic carbon atom or to a carbon atom of a ring other than a six-membered aromatic ring

281/12 . . . the carbon atom being part of a ring other than a six-membered aromatic ring

281/14 . . . the carbon atom being further bound to a carbon atom of a six-membered aromatic ring

281/16 . Compounds containing any of the groups  , e.g. aminoguanidine

281/18 . . the other nitrogen atom being further doubly-bound to a carbon atom, e.g. guanylhydrazones

281/20 . the two nitrogen atoms of the functional groups being doubly-bound to each other, e.g. azoformamide

291/00 Compounds containing carbon and nitrogen and having functional groups not covered by groups C07C 201/00 - C07C 281/00

291/02 . containing nitrogen-oxide bonds

291/04 . . containing amino-oxide bonds

291/06 . . Nitrile oxides

291/08 . . Azoxy compounds

291/10 . Isocyanides

291/12 . Fulminates

291/14 . containing at least one carbon atom bound to a nitro or nitroso group and doubly-bound to a hetero atom

Compounds containing carbon together with sulfur, selenium, or tellurium, with or without hydrogen, halogens, oxygen, or nitrogen (irradiation products of cholesterol or its derivatives C07C 401/00; vitamin D derivatives, 9-10-seco cyclopenta[a]phenanthrene or analogues obtained by chemical preparation without irradiation C07C 401/00; derivatives of cyclohexane or of a cyclohexene {or of cyclohexadiene}, having a side-chain containing an acyclic unsaturated part of at least four carbon atoms, this part being directly attached to the cyclohexane or cyclohexene {or cyclohexadiene} rings C07C 403/00; protaglandins or derivatives thereof C07C 405/00; peroxy compounds C07C 407/00, C07C 409/00)

301/00 Esters of sulfurous acid (cyclic esters C07D)

301/02 . having sulfite groups bound to carbon atoms of six-membered aromatic rings

303/00 Preparation of esters or amides of sulfuric acids; Preparation of sulfonic acids or of their esters, halides, anhydrides or amides

303/02 . of sulfonic acids or halides thereof

303/04 . . by substitution of hydrogen atoms by sulfo or halosulfonyl groups

303/06 . . . by reaction with sulfuric acid or sulfur trioxide

303/08 . . . by reaction with halogenosulfonic acids

303/10 . . . by reaction with sulfur dioxide and halogen or by reaction with sulfuryl halides

303/12 . . . by reaction with thionylhalides

303/14 . . by sulfoxidation, i.e. by reaction with sulfur dioxide and oxygen with formation of sulfo or halosulfonyl groups

303/16 . . by oxidation of thiols, sulfides, hydropolysulfides, or polysulfides with formation of sulfo or halosulfonyl groups

303/18 . . by reaction of sulfides with compounds having functional groups with formation of sulfo or halosulfonyl groups

303/20 . . by addition of sulfurous acid or salts thereof to compounds having carbon-to-carbon multiple bonds

303/22 . . from sulfonic acids, by reactions not involving the formation of sulfo or halosulfonyl groups; {from sulfonic halides by reactions not involving the formation of halosulfonyl groups}

303/24 . of esters of sulfuric acids

303/26 . of esters of sulfonic acids

303/28 . . by reaction of hydroxy compounds with sulfonic acids or derivatives thereof

303/30 . . by reactions not involving the formation of esterified sulfo groups

303/32 . of salts of sulfonic acids

303/34 . of amides of sulfuric acids

303/36 . of amides of sulfonic acids

303/38 . . by reaction of ammonia or amines with sulfonic acids, or with esters, anhydrides, or halides thereof

303/40 . . by reactions not involving the formation of sulfonamide groups

303/42 . Separation; Purification; Stabilisation; Use of additives

303/44 . . Separation; Purification

303/46 . . . from by-products of refining mineral oils with sulfuric acid

305/00 Esters of sulfuric acids (cyclic esters C07D)

305/02 . having oxygen atoms of sulfate groups bound to acyclic carbon atoms of a carbon skeleton

305/04 . . being acyclic and saturated

305/06 . . . Hydrogenosulfates

305/08 . . . Dialkylsulfates; Substituted dialkylsulfates

305/10 . . . being further substituted by singly-bound oxygen atoms

305/12 . . being saturated and containing rings

305/14 . . being acyclic and unsaturated

305/16 . . being unsaturated and containing rings

305/18 . . . containing six-membered aromatic rings

305/20 . having oxygen atoms of sulfate groups bound to carbon atoms of rings other than six-membered aromatic rings

305/22 . having oxygen atoms of sulfate groups bound to carbon atoms of six-membered aromatic rings

305/24 . . of non-condensed six-membered aromatic rings

305/26 . Halogenosulfates, i.e. monoesters of halogenosulfuric acids

307/00 Amides of sulfuric acids, i.e. compounds having singly-bound oxygen atoms of sulfate groups replaced by nitrogen atoms, not being part of nitro or nitroso groups

307/02 . Monoamides of sulfuric acids or esters thereof, e.g. sulfamic acids

307/04 . Diamides of sulfuric acids

307/06 . . having nitrogen atoms of the sulfamide groups bound to acyclic carbon atoms

307/08 . . having nitrogen atoms of the sulfamide groups bound to carbon atoms of rings other than six-membered aromatic rings

307/10 . . having nitrogen atoms of the sulfamide groups bound to carbon atoms of six-membered aromatic rings

309/00 Sulfonic acids; Halides, esters, or anhydrides thereof

309/01 . Sulfonic acids

309/02 . . having sulfo groups bound to acyclic carbon atoms

309/03 . . . of an acyclic saturated carbon skeleton

309/04 . . . . containing only one sulfo group

309/05 . . . . containing at least two sulfo groups bound to the carbon skeleton

309/06 . . . . containing halogen atoms, or nitro or nitroso groups bound to the carbon skeleton

309/07 . . . . containing oxygen atoms bound to the carbon skeleton

309/08 . . . . . containing hydroxy groups bound to the carbon skeleton

309/09 . . . . . containing etherified hydroxy groups bound to the carbon skeleton

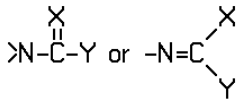
309/10 . . . . . with the oxygen atom of at least one of the etherified hydroxy groups further bound to an acyclic carbon atom

309/11 . . . . . with the oxygen atom of at least one of the etherified hydroxy groups further bound to a carbon atom of a six-membered aromatic ring

309/12 . . . . . containing esterified hydroxy groups bound to the carbon skeleton

309/13 . . . . containing nitrogen atoms, not being part of nitro or nitroso groups, bound to the carbon skeleton

309/14 . . . . . containing amino groups bound to the carbon skeleton

309/15 . . . . . the nitrogen atom of at least one of the amino groups being part of any of the groups  , X being a hetero atom, Y being any atom

309/16 . . . . . containing doubly-bound nitrogen atoms bound to the carbon skeleton

309/17 . . . . containing carboxyl groups bound to the carbon skeleton

309/18 . . . . . containing amino groups bound to the same carbon skeleton

309/19 . . . of a saturated carbon skeleton containing rings

309/20 . . . of an acyclic unsaturated carbon skeleton

309/21 . . . . containing nitrogen atoms, not being part of nitro or nitroso groups, bound to the carbon skeleton

309/22 . . . . containing carboxyl groups bound to the carbon skeleton

309/23 . . . of an unsaturated carbon skeleton containing rings other than six-membered aromatic rings

309/24 . . . of a carbon skeleton containing six-membered aromatic rings

309/25 . . having sulfo groups bound to carbon atoms of rings other than six-membered aromatic rings of a carbon skeleton

309/26 . . . containing nitrogen atoms, not being part of nitro or nitroso groups, bound to the carbon skeleton

309/27 . . . containing carboxyl groups bound to the carbon skeleton

309/28 . . having sulfo groups bound to carbon atoms of six-membered aromatic rings of a carbon skeleton

309/29 . . . of non-condensed six-membered aromatic rings

309/30 . . . . of six-membered aromatic rings substituted by alkyl groups

309/31 . . . . . by alkyl groups containing at least three carbon atoms

309/32 . . . . containing at least two non-condensed six-membered aromatic rings in the carbon skeleton

309/33 . . . of six-membered aromatic rings being part of condensed ring systems

309/34 . . . . formed by two rings

309/35 . . . . . Naphthalene sulfonic acids

309/36 . . . . . substituted by alkyl groups

309/37 . . . . . by alkyl groups containing at least three carbon atoms

309/38 . . . . formed by at least three rings

309/39 . . . containing halogen atoms bound to the carbon skeleton

309/40 . . . containing nitro or nitroso groups bound to the carbon skeleton

309/41 . . . containing singly-bound oxygen atoms bound to the carbon skeleton

309/42 . . . . having the sulfo groups bound to carbon atoms of non-condensed six-membered aromatic rings

309/43 . . . . having at least one of the sulfo groups bound to a carbon atom of a six-membered aromatic ring being part of a condensed ring system

309/44 . . . containing doubly-bound oxygen atoms bound to the carbon skeleton

309/45 . . . containing nitrogen atoms, not being part of nitro or nitroso groups, bound to the carbon skeleton

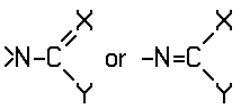
309/46 . . . . having the sulfo groups bound to carbon atoms of non-condensed six-membered aromatic rings

309/47 . . . . having at least one of the sulfo groups bound to a carbon atom of a six-membered aromatic ring being part of a condensed ring system

309/48 . . . . the carbon skeleton being further substituted by halogen atoms

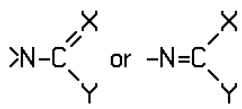
309/49 . . . . the carbon skeleton being further substituted by singly-bound oxygen atoms

309/50 . . . . . having at least one of the sulfo groups bound to a carbon atom of a six-membered aromatic ring being part of a condensed ring system

309/51 . . . . at least one of the nitrogen atoms being part of any of the groups  , X being a hetero atom, Y being any atom

309/52 . . . . the carbon skeleton being further substituted by doubly-bound oxygen atoms

309/53 . . . . . the carbon skeleton containing carbon atoms of quinone rings

309/54 . . . . . at least one of the nitrogen atoms being part of any of the groups  , X being a hetero atom, Y being any atom

309/55 . . . . Y being a hydrogen or a carbon atom

309/56 . . . . Y being a hetero atom

309/57 . . . containing carboxyl groups bound to the carbon skeleton

309/58 . . . . Carboxylic acid groups or esters thereof

309/59 . . . . Nitrogen analogues of carboxyl groups

309/60 . . . . the carbon skeleton being further substituted by singly-bound oxygen atoms

309/61 . . . . the carbon skeleton being further substituted by nitrogen atoms, not being part of nitro or nitroso groups

309/62 . . Sulfonated fats, oils or waxes of undetermined constitution {(bituminosulfonic acid C07G 9/00; chemical modification of petroleum waxes C10G 73/38)}

309/63 . Esters of sulfonic acids

309/64 . . having sulfur atoms of esterified sulfo groups bound to acyclic carbon atoms

309/65 . . . of a saturated carbon skeleton

309/66 . . . . Methanesulfonates

309/67 . . . of an unsaturated carbon skeleton

309/68 . . . of a carbon skeleton substituted by singly-bound oxygen atoms

309/69 . . . of a carbon skeleton substituted by nitrogen atoms, not being part of nitro or nitroso groups

309/70 . . . of a carbon skeleton substituted by carboxyl groups

309/71 . . having sulfur atoms of esterified sulfo groups bound to carbon atoms of rings other than six-membered aromatic rings

309/72 . . having sulfur atoms of esterified sulfo groups bound to carbon atoms of six-membered aromatic rings of a carbon skeleton

309/73 . . . to carbon atoms of non-condensed six-membered aromatic rings

309/74 . . . to carbon atoms of six-membered aromatic rings being part of condensed ring systems

309/75 . . . containing singly-bound oxygen atoms bound to the carbon skeleton

309/76 . . . containing nitrogen atoms, not being part of nitro or nitroso groups, bound to the carbon skeleton

309/77 . . . containing carboxyl groups bound to the carbon skeleton

309/78 . Halides of sulfonic acids

309/79 . . having halosulfonyl groups bound to acyclic carbon atoms

309/80 . . . of a saturated carbon skeleton

309/81 . . . of an unsaturated carbon skeleton

309/82 . . . of a carbon skeleton substituted by singly-bound oxygen atoms

309/83 . . . of a carbon skeleton substituted by nitrogen atoms, not being part of nitro or nitroso groups

309/84 . . . of a carbon skeleton substituted by carboxyl groups

309/85 . . having halosulfonyl groups bound to carbon atoms of rings other than six-membered aromatic rings

309/86 . . having halosulfonyl groups bound to carbon atoms of six-membered aromatic rings of a carbon skeleton

309/87 . . . containing singly-bound oxygen atoms bound to the carbon skeleton

309/88 . . . containing nitrogen atoms, not being part of nitro or nitroso groups, bound to the carbon skeleton

309/89 . . . containing carboxyl groups bound to the carbon skeleton

311/00 Amides of sulfonic acids, i.e. compounds having singly-bound oxygen atoms of sulfo groups replaced by nitrogen atoms, not being part of nitro or nitroso groups

311/01 . Sulfonamides having sulfur atoms of sulfonamide groups bound to acyclic carbon atoms

311/02 . . of an acyclic saturated carbon skeleton

311/03 . . . having the nitrogen atoms of the sulfonamide groups bound to hydrogen atoms or to acyclic carbon atoms

311/04 . . . . to acyclic carbon atoms of hydrocarbon radicals substituted by singly-bound oxygen atoms

311/05 . . . . to acyclic carbon atoms of hydrocarbon radicals substituted by nitrogen atoms, not being part of nitro or nitroso groups

311/06 . . . . to acyclic carbon atoms of hydrocarbon radicals substituted by carboxyl groups

311/07 . . . having the nitrogen atom of at least one of the sulfonamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring

311/08 . . . having the nitrogen atom of at least one of the sulfonamide groups bound to a carbon atom of a six-membered aromatic ring

311/09 . . . the carbon skeleton being further substituted by at least two halogen atoms

311/10 . . of a saturated carbon skeleton containing rings

311/11 . . of an acyclic unsaturated carbon skeleton

311/12 . . of an unsaturated carbon skeleton containing rings

311/13 . . . the carbon skeleton containing six-membered aromatic rings

311/14 . Sulfonamides having sulfur atoms of sulfonamide groups bound to carbon atoms of rings other than six-membered aromatic rings

311/15 . Sulfonamides having sulfur atoms of sulfonamide groups bound to carbon atoms of six-membered aromatic rings

311/16 . . having the nitrogen atom of at least one of the sulfonamide groups bound to hydrogen atoms or to an acyclic carbon atom

311/17 . . . to an acyclic carbon atom of a hydrocarbon radical substituted by singly-bound oxygen atoms

311/18 . . . to an acyclic carbon atom of a hydrocarbon radical substituted by nitrogen atoms, not being part of nitro or nitroso groups

311/19 . . . to an acyclic carbon atom of a hydrocarbon radical substituted by carboxyl groups

311/20 . . having the nitrogen atom of at least one of the sulfonamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring

311/21 . . having the nitrogen atom of at least one of the sulfonamide groups bound to a carbon atom of a six-membered aromatic ring

311/22 . Sulfonamides, the carbon skeleton of the acid part being further substituted by singly-bound oxygen atoms

311/23 . . having the sulfur atoms of the sulfonamide groups bound to acyclic carbon atoms

311/24 . . . of an acyclic saturated carbon skeleton

311/25 . . . of a saturated carbon skeleton containing rings

311/26 . . . of an acyclic unsaturated carbon skeleton

311/27 . . . of an unsaturated carbon skeleton containing rings

311/28 . . having the sulfur atom of at least one of the sulfonamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring

311/29 . . having the sulfur atom of at least one of the sulfonamide groups bound to a carbon atom of a six-membered aromatic ring

311/30 . Sulfonamides, the carbon skeleton of the acid part being further substituted by singly-bound nitrogen atoms, not being part of nitro or nitroso groups

311/31 . . having the sulfur atoms of the sulfonamide groups bound to acyclic carbon atoms

311/32 . . . of an acyclic saturated carbon skeleton

311/33 . . . of a saturated carbon skeleton containing rings

311/34 . . . of an acyclic unsaturated carbon skeleton

311/35 . . . of an unsaturated carbon skeleton containing rings

311/36 . . having the sulfur atom of at least one of the sulfonamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring

311/37 . . having the sulfur atom of at least one of the sulfonamide groups bound to a carbon atom of a six-membered aromatic ring

311/38 . . . having sulfur atoms of sulfonamide groups and amino groups bound to carbon atoms of six-membered rings of the same carbon skeleton

311/39 . . . . having the nitrogen atom of at least one of the sulfonamide groups bound to hydrogen atoms or to an acyclic carbon atom

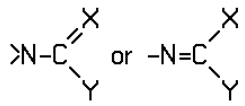
311/40 . . . . . to an acyclic carbon atom of a hydrocarbon radical substituted by singly-bound oxygen atoms

311/41 . . . . . to an acyclic carbon atom of a hydrocarbon radical substituted by nitrogen atoms, not being part of nitro or nitroso groups

311/42 . . . . . to an acyclic carbon atom of a hydrocarbon radical substituted by carboxyl groups

311/43 . . . . having the nitrogen atom of at least one of the sulfonamide groups bound to a carbon atom of a ring other than a six-membered aromatic ring

311/44 . . . . having the nitrogen atom of at least one of the sulfonamide groups bound to a carbon atom of a six-membered aromatic ring

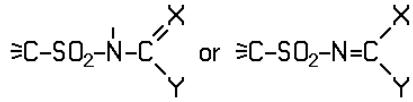
311/45 . . at least one of the singly-bound nitrogen atoms being part of any of the groups  , X being a hetero atom, Y being any atom, e.g. N-acylaminosulfonamides

311/46 . . . Y being a hydrogen or a carbon atom

311/47 . . . Y being a hetero atom

311/48 . having nitrogen atoms of sulfonamide groups further bound to another hetero atom

311/49 . . to nitrogen atoms

311/50 . Compounds containing any of the groups  , X being a hetero atom, Y being any atom

311/51 . . Y being a hydrogen or a carbon atom

311/52 . . Y being a hetero atom

311/53 . . . X and Y not being nitrogen atoms, e.g. N-sulfonylcarbamic acid

311/54 . . . either X or Y, but not both, being nitrogen atoms, e.g. N-sulfonylurea

311/55 . . . . having sulfur atoms of the sulfonylurea groups bound to acyclic carbon atoms

311/56 . . . . having sulfur atoms of the sulfonylurea groups bound to carbon atoms of rings other than six-membered aromatic rings

311/57 . . . . having sulfur atoms of the sulfonylurea groups bound to carbon atoms of six-membered aromatic rings

311/58 . . . . . having nitrogen atoms of the sulfonylurea groups bound to hydrogen atoms or to acyclic carbon atoms

311/59 . . . . . having nitrogen atoms of the sulfonylurea groups bound to carbon atoms of rings other than six-membered aromatic rings

311/60 . . . . . having nitrogen atoms of the sulfonylurea groups bound to carbon atoms of six-membered aromatic rings

311/61 . . . . . having nitrogen atoms of the sulfonylurea groups further bound to another hetero atom

311/62 . . . . . having nitrogen atoms of the sulfonylurea groups further acylated

311/63 . . . . N-sulfonylisoureas

311/64 . . . X and Y being nitrogen atoms, e.g. N-sulfonylguanidine

311/65 . N-sulfonylisocyanates

313/00 Sulfinic acids; Sulfenic acids; Halides, esters or anhydrides thereof; Amides of sulfinic or sulfenic acids, i.e. compounds having singly-bound oxygen atoms of sulfinic or sulfenic groups replaced by nitrogen atoms, not being part of nitro or nitroso groups

313/02 . Sulfinic acids; Derivatives thereof

313/04 . . Sulfinic acids; Esters thereof

313/06 . . Sulfinamides

313/08 . Sulfenic acids; Derivatives thereof

313/10 . . Sulfenic acids; Esters thereof

313/12 . . . having sulfur atoms of sulfenic groups bound to acyclic carbon atoms

313/14 . . . having sulfur atoms of sulfenic groups bound to carbon atoms of rings other than six-membered aromatic rings

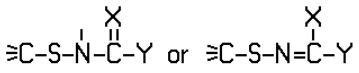
313/16 . . . having sulfur atoms of sulfenic groups bound to carbon atoms of six-membered aromatic rings

313/18 . . Sulfenamides

313/20 . . . having sulfur atoms of sulfenamide groups bound to acyclic carbon atoms

313/22 . . . having sulfur atoms of sulfenamide groups bound to carbon atoms of rings other than six-membered aromatic rings

313/24 . . . having sulfur atoms of sulfenamide groups bound to carbon atoms of six-membered aromatic rings

313/26 . . . Compounds containing any of the groups  , X being a hetero atom, Y being any atom

313/28 . . . . Y being a hydrogen or a carbon atom

313/30 . . . . Y being a hetero atom

313/32 . . . . . X and Y not being nitrogen atoms, e.g. N-sulfenylcarbamic acid

313/34 . . . . . either X or Y, but not both, being nitrogen atoms, e.g. N-sulfenylureas

313/36 . . . having nitrogen atoms of sulfenamide groups further bound to other hetero atoms

313/38 . . . N-sulfenylisocyanates

315/00 Preparation of sulfones; Preparation of sulfoxides

315/02 . by formation of sulfone or sulfoxide groups by oxidation of sulfides, or by formation of sulfone groups by oxidation of sulfoxides

315/04 . by reactions not involving the formation of sulfone or sulfoxide groups

315/06 . Separation; Purification; Stabilisation; Use of additives

317/00 Sulfones; Sulfoxides

317/02 . having sulfone or sulfoxide groups bound to acyclic carbon atoms

317/04 . . of an acyclic saturated carbon skeleton

317/06 . . of a saturated carbon skeleton containing rings

317/08 . . of an acyclic unsaturated carbon skeleton

317/10 . . of an unsaturated carbon skeleton containing rings

317/12 . having sulfone or sulfoxide groups bound to carbon atoms of rings other than six-membered aromatic rings

317/14 . having sulfone or sulfoxide groups bound to carbon atoms of six-membered aromatic rings

317/16 . having sulfone or sulfoxide groups and singly-bound oxygen atoms bound to the same carbon skeleton

317/18 . . with sulfone or sulfoxide groups bound to acyclic carbon atoms of the carbon skeleton

317/20 . . with sulfone or sulfoxide groups bound to carbon atoms of rings other than six-membered aromatic rings of the carbon skeleton

317/22 . . with sulfone or sulfoxide groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton

317/24 . having sulfone or sulfoxide groups and doubly-bound oxygen atoms bound to the same carbon skeleton

317/26 . having sulfone or sulfoxide groups and nitrogen atoms, not being part of nitro or nitroso groups, bound to the same carbon skeleton

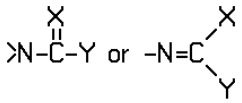
317/28 . . with sulfone or sulfoxide groups bound to acyclic carbon atoms of the carbon skeleton

317/30 . . with sulfone or sulfoxide groups bound to carbon atoms of rings other than six-membered aromatic rings of the carbon skeleton

317/32 . . with sulfone or sulfoxide groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton

317/34 . . . having sulfone or sulfoxide groups and amino groups bound to carbon atoms of six-membered aromatic rings being part of the same non-condensed ring or of a condensed ring system containing that ring

317/36 . . . . with the nitrogen atoms of the amino groups bound to hydrogen atoms or to carbon atoms

317/38 . . . . with the nitrogen atom of at least one amino group being part of any of the groups  , X being a hetero atom, Y being any atom, e.g. N-acylaminosulfones

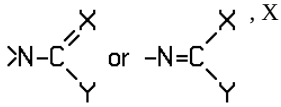
317/40 . . . . . Y being a hydrogen or a carbon atom

317/42 . . . . . Y being a hetero atom

317/44 . having sulfone or sulfoxide groups and carboxyl groups bound to the same carbon skeleton

317/46 . . the carbon skeleton being further substituted by singly-bound oxygen atoms

317/48 . . the carbon skeleton being further substituted by singly-bound nitrogen atoms, not being part of nitro or nitroso groups

317/50 . . . at least one of the nitrogen atoms being part of any of the groups  , X being a hetero atom, Y being any atom

319/00 Preparation of thiols, sulfides, hydropolysulfides or polysulfides

319/02 . of thiols

319/04 . . by addition of hydrogen sulfide or its salts to unsaturated compounds

319/06 . . from sulfides, hydropolysulfides or polysulfides

319/08 . . by replacement of hydroxy groups or etherified or esterified hydroxy groups

319/10 . . . by replacement of hydroxy groups or etherified or esterified hydroxy groups bound to carbon atoms of six-membered aromatic rings

319/12 . . by reactions not involving the formation of mercapto groups

319/14 . of sulfides

319/16 . . by addition of hydrogen sulfide or its salts to unsaturated compounds

319/18 . . by addition of thiols to unsaturated compounds

319/20 . . by reactions not involving the formation of sulfide groups

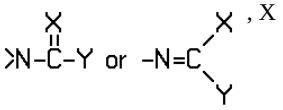
319/22 . of hydropolysulfides or polysulfides

319/24 . . by reactions involving the formation of sulfur-to-sulfur bonds

319/26 . Separation; Purification; Stabilisation; Use of additives
319/28 . . Separation; Purification
319/30 . . . from the by-products of refining mineral oils

321/00 Thiols, sulfides, hydropolysulfides or polysulfides
321/02 . Thiols having mercapto groups bound to acyclic carbon atoms
321/04 . . of an acyclic saturated carbon skeleton
321/06 . . of a saturated carbon skeleton containing rings
321/08 . . of an acyclic unsaturated carbon skeleton
321/10 . . of an unsaturated carbon skeleton containing rings
321/12 . Sulfides, hydropolysulfides, or polysulfides having thio groups bound to acyclic carbon atoms
321/14 . . of an acyclic saturated carbon skeleton
321/16 . . of a saturated carbon skeleton containing rings
321/18 . . of an acyclic unsaturated carbon skeleton
321/20 . . of an unsaturated carbon skeleton containing rings
321/22 . Thiols, sulfides, hydropolysulfides, or polysulfides having thio groups bound to carbon atoms of rings other than six-membered aromatic rings
321/24 . Thiols, sulfides, hydropolysulfides, or polysulfides having thio groups bound to carbon atoms of six-membered aromatic rings
321/26 . . Thiols
321/28 . . Sulfides, hydropolysulfides, or polysulfides having thio groups bound to carbon atoms of six-membered aromatic rings
321/30 . . . Sulfides having the sulfur atom of at least one thio group bound to two carbon atoms of six-membered aromatic rings

323/00 Thiols, sulfides, hydropolysulfides or polysulfides substituted by halogen, oxygen or nitrogen atoms, or by sulfur atoms not being part of thio groups
323/01 . containing thio groups and halogen atoms, or nitro or nitroso groups bound to the same carbon skeleton
323/02 . . having sulfur atoms of thio groups bound to acyclic carbon atoms of the carbon skeleton
323/03 . . . the carbon skeleton being acyclic and saturated
323/04 . . . the carbon skeleton being saturated and containing rings
323/05 . . . the carbon skeleton being acyclic and unsaturated
323/06 . . . the carbon skeleton being unsaturated and containing rings other than six-membered aromatic rings
323/07 . . . the carbon skeleton containing six-membered aromatic rings
323/08 . . having sulfur atoms of thio groups bound to carbon atoms of rings other than six-membered aromatic rings of the carbon skeleton
323/09 . . having sulfur atoms of thio groups bound to carbon atoms of six-membered aromatic rings of the carbon skeleton
323/10 . containing thio groups and singly-bound oxygen atoms bound to the same carbon skeleton
323/11 . . having the sulfur atoms of the thio groups bound to acyclic carbon atoms of the carbon skeleton
323/12 . . . the carbon skeleton being acyclic and saturated
323/13 . . . the carbon skeleton being saturated and containing rings
323/14 . . . the carbon skeleton being acyclic and unsaturated
323/15 . . . the carbon skeleton being unsaturated and containing rings other than six-membered aromatic rings
323/16 . . . the carbon skeleton containing six-membered aromatic rings
323/17 . . having the sulfur atom of at least one of the thio groups bound to a carbon atom of a ring other than a six-membered aromatic ring of the carbon skeleton
323/18 . . having the sulfur atom of at least one of the thio groups bound to a carbon atom of a six-membered aromatic ring of the carbon skeleton
323/19 . . . with singly-bound oxygen atoms bound to acyclic carbon atoms of the carbon skeleton
323/20 . . . with singly-bound oxygen atoms bound to carbon atoms of the same non-condensed six-membered aromatic ring
323/21 . . . with the sulfur atom of the thio group bound to a carbon atom of a six-membered aromatic ring being part of a condensed ring system
323/22 . containing thio groups and doubly-bound oxygen atoms bound to the same carbon skeleton
323/23 . containing thio groups and nitrogen atoms, not being part of nitro or nitroso groups, bound to the same carbon skeleton
323/24 . . having the sulfur atoms of the thio groups bound to acyclic carbon atoms of the carbon skeleton
323/25 . . . the carbon skeleton being acyclic and saturated
323/26 . . . the carbon skeleton being saturated and containing rings
323/27 . . . the carbon skeleton being acyclic and unsaturated
323/28 . . . the carbon skeleton being unsaturated and containing rings other than six-membered aromatic rings
323/29 . . . the carbon skeleton containing six-membered aromatic rings
323/30 . . having the sulfur atom of at least one of the thio groups bound to a carbon atom of a ring other than a six-membered aromatic ring of the carbon skeleton
323/31 . . having the sulfur atom of at least one of the thio groups bound to a carbon atom of a six-membered aromatic ring of the carbon skeleton
323/32 . . . having at least one of the nitrogen atoms bound to an acyclic carbon atom of the carbon skeleton
323/33 . . . having at least one of the nitrogen atoms bound to a carbon atom of the same non-condensed six-membered aromatic ring
323/34 . . . . the thio group being a mercapto group
323/35 . . . . the thio group being a sulfide group
323/36 . . . . . the sulfur atom of the sulfide group being further bound to an acyclic carbon atom
323/37 . . . . . the sulfur atom of the sulfide group being further bound to a carbon atom of a six-membered aromatic ring
323/38 . . . with the sulfur atom of the thio group bound to a carbon atom of a six-membered aromatic ring being part of a condensed ring system

323/39 . . at least one of the nitrogen atoms being part of any of the groups  , X being a hetero atom, Y being any atom

323/40 . . . Y being a hydrogen or a carbon atom

323/41 . . . . Y being a hydrogen or an acyclic carbon atom

323/42 . . . . Y being a carbon atom of a six-membered aromatic ring

323/43 . . . Y being a hetero atom

323/44 . . . . X or Y being nitrogen atoms

323/45 . . having at least one of the nitrogen atoms doubly-bound to the carbon skeleton

323/46 . . having at least one of the nitrogen atoms, not being part of nitro or nitroso groups, further bound to other hetero atoms

323/47 . . . to oxygen atoms

323/48 . . . to nitrogen atoms

323/49 . . . to sulfur atoms

323/50 . containing thio groups and carboxyl groups bound to the same carbon skeleton

323/51 . . having the sulfur atoms of the thio groups bound to acyclic carbon atoms of the carbon skeleton

323/52 . . . the carbon skeleton being acyclic and saturated

323/53 . . . the carbon skeleton being saturated and containing rings

323/54 . . . the carbon skeleton being acyclic and unsaturated

323/55 . . . the carbon skeleton being unsaturated and containing rings other than six-membered aromatic rings

323/56 . . . the carbon skeleton containing six-membered aromatic rings

323/57 . . . the carbon skeleton being further substituted by nitrogen atoms, not being part of nitro or nitroso groups

323/58 . . . . with amino groups bound to the carbon skeleton

323/59 . . . . . with acylated amino groups bound to the carbon skeleton

323/60 . . . with the carbon atom of at least one of the carboxyl groups bound to nitrogen atoms

323/61 . . having the sulfur atom of at least one of the thio groups bound to a carbon atom of a ring other than a six-membered aromatic ring of the carbon skeleton

323/62 . . having the sulfur atom of at least one of the thio groups bound to a carbon atom of a six-membered aromatic ring of the carbon skeleton

323/63 . . . the carbon skeleton being further substituted by nitrogen atoms, not being part of nitro or nitroso groups

323/64 . containing thio groups and sulfur atoms, not being part of thio groups, bound to the same carbon skeleton

323/65 . . containing sulfur atoms of sulfone or sulfoxide groups bound to the carbon skeleton

323/66 . . containing sulfur atoms of sulfo, esterified sulfo or halosulfonyl groups, bound to the carbon skeleton

323/67 . . containing sulfur atoms of sulfonamide groups, bound to the carbon skeleton

325/00 Thioaldehydes; Thioketones; Thioquinones; Oxides thereof

325/02 . Thioketones; Oxides thereof

325/04 . Thioquinones; Oxides thereof

327/00 Thiocarboxylic acids

327/02 . Monothiocarboxylic acids

327/04 . . having carbon atoms of thiocarboxyl groups bound to hydrogen atoms or to acyclic carbon atoms

327/06 . . . to hydrogen atoms or to carbon atoms of an acyclic saturated carbon skeleton

327/08 . . . to carbon atoms of a saturated carbon skeleton containing rings

327/10 . . . to carbon atoms of an acyclic unsaturated carbon skeleton

327/12 . . . to carbon atoms of an unsaturated carbon skeleton containing rings

327/14 . . having carbon atoms of thiocarboxyl groups bound to carbon atoms of rings other than six-membered aromatic rings

327/16 . . having carbon atoms of thiocarboxyl groups bound to carbon atoms of six-membered aromatic rings

327/18 . Dithiocarboxylic acids

327/20 . Esters of monothiocarboxylic acids

327/22 . . having carbon atoms of esterified thiocarboxyl groups bound to hydrogen atoms or to acyclic carbon atoms

327/24 . . having carbon atoms of esterified thiocarboxyl groups bound to carbon atoms of rings other than six-membered aromatic rings

327/26 . . having carbon atoms of esterified thiocarboxyl groups bound to carbon atoms of six-membered aromatic rings

327/28 . . having sulfur atoms of esterified thiocarboxyl groups bound to carbon atoms of hydrocarbon radicals substituted by singly-bound oxygen atoms

327/30 . . having sulfur atoms of esterified thiocarboxyl groups bound to carbon atoms of hydrocarbon radicals substituted by nitrogen atoms, not being part of nitro or nitroso groups

327/32 . . having sulfur atoms of esterified thiocarboxyl groups bound to carbon atoms of hydrocarbon radicals substituted by carboxyl groups

327/34 . . . with amino groups bound to the same hydrocarbon radicals

327/36 . Esters of dithiocarboxylic acids

327/38 . Amides of thiocarboxylic acids

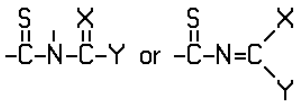
327/40 . . having carbon atoms of thiocarboxamide groups bound to hydrogen atoms or to acyclic carbon atoms

327/42 . . . to hydrogen atoms or to carbon atoms of a saturated carbon skeleton

327/44 . . . to carbon atoms of an unsaturated carbon skeleton

327/46 . . having carbon atoms of thiocarboxamide groups bound to carbon atoms of rings other than six-membered aromatic rings

327/48 . . having carbon atoms of thiocarboxamide groups bound to carbon atoms of six-membered aromatic rings

327/50 . . Compounds containing any of the groups  , X being a hetero atom, Y being any atom

327/52 . . . Y being a hydrogen or a carbon atom

327/54 . . . Y being a hetero atom

327/56 . . having nitrogen atoms of thiocarboxamide groups further bound to another hetero atom

327/58 . Derivatives of thiocarboxylic acids, the doubly-bound oxygen atoms being replaced by nitrogen atoms, e.g. imino-thio ethers

327/60 . Thiocarboxylic acids having sulfur atoms of thiocarboxyl groups further doubly-bound to oxygen atoms

329/00 Thiocarbonic acids; Halides, esters or anhydrides thereof

329/02 . Monothiocarbonic acids; Derivatives thereof

329/04 . . Esters of monothiocarbonic acids

329/06 . . . having sulfur atoms of thiocarbonic groups bound to acyclic carbon atoms

329/08 . . . having sulfur atoms of thiocarbonic groups bound to carbon atoms of rings other than six-membered aromatic rings

329/10 . . . having sulfur atoms of thiocarbonic groups bound to carbon atoms of six-membered aromatic rings

329/12 . Dithiocarbonic acids; Derivatives thereof

329/14 . . Esters of dithiocarbonic acids

329/16 . . . having sulfur atoms of dithiocarbonic groups bound to acyclic carbon atoms

329/18 . . . having sulfur atoms of dithiocarbonic groups bound to carbon atoms of rings other than six-membered aromatic rings

329/20 . . . having sulfur atoms of dithiocarbonic groups bound to carbon atoms of six-membered aromatic rings

331/00 Derivatives of thiocyanic acid or of isothiocyanic acid

331/02 . Thiocyanates

331/04 . . having sulfur atoms of thiocyanate groups bound to acyclic carbon atoms

331/06 . . having sulfur atoms of thiocyanate groups bound to carbon atoms of rings other than six-membered aromatic rings

331/08 . . having sulfur atoms of thiocyanate groups bound to carbon atoms of six-membered aromatic rings

331/10 . . having sulfur atoms of thiocyanate groups bound to carbon atoms of hydrocarbon radicals substituted by singly-bound oxygen atoms

331/12 . . having sulfur atoms of thiocyanate groups bound to carbon atoms of hydrocarbon radicals substituted by nitrogen atoms, not being part of nitro or nitroso groups

331/14 . . having sulfur atoms of thiocyanate groups bound to carbon atoms of hydrocarbon radicals substituted by carboxyl groups

331/16 . Isothiocyanates

331/18 . . having isothiocyanate groups bound to acyclic carbon atoms

331/20 . . . of a saturated carbon skeleton

331/22 . . . of an unsaturated carbon skeleton

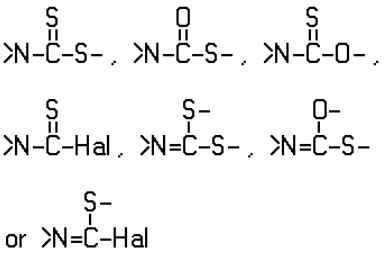
331/24 . . . . the carbon skeleton containing six-membered aromatic rings

331/26 . . having isothiocyanate groups bound to carbon atoms of rings other than six-membered aromatic rings

331/28 . . having isothiocyanate groups bound to carbon atoms of six-membered aromatic rings

331/30 . . containing at least two isothiocyanate groups bound to the same carbon skeleton

331/32 . . having isothiocyanate groups acylated

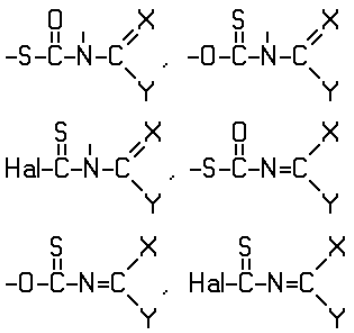
333/00 Derivatives of thiocarbamic acids, i.e. compounds containing any of the groups  **, the nitrogen atom not being part of nitro or nitroso groups**

333/02 . Monothiocarbamic acids; Derivatives thereof

333/04 . . having nitrogen atoms of thiocarbamic groups bound to hydrogen atoms or to acyclic carbon atoms

333/06 . . having nitrogen atoms of thiocarbamic groups bound to carbon atoms of rings other than six-membered aromatic rings

333/08 . . having nitrogen atoms of thiocarbamic groups bound to carbon atoms of six-membered aromatic rings

333/10 . . having nitrogen atoms of thiocarbamic groups being part of any of the groups  , X being a hetero atom, Y being any atom, e.g., N-acyl-thiocarbamates

333/12 . . having nitrogen atoms of thiocarbamic groups bound to other hetero atoms

333/14 . Dithiocarbamic acids; Derivatives thereof

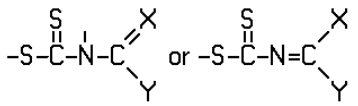
333/16 . . Salts of dithiocarbamic acids

333/18 . . Esters of dithiocarbamic acids

333/20 . . . having nitrogen atoms of dithiocarbamate groups bound to hydrogen atoms or to acyclic carbon atoms

333/22 . . . having nitrogen atoms of dithiocarbamate groups bound to carbon atoms of rings other than six-membered aromatic rings

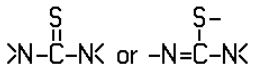
333/24 . . . having nitrogen atoms of dithiocarbamate groups bound to carbon atoms of six-membered aromatic rings

333/26 . . . containing any of the groups  , X being a hetero atom, Y being any atom, e.g. N-acyldithiocarbamates

333/28 . . . having nitrogen atoms of dithiocarbamate groups bound to other hetero atoms

333/30 . . having sulfur atoms of dithiocarbamic groups bound to other sulfur atoms

333/32 . . . Thiuramsulfides; Thiurampolysulfides

335/00 Thioureas, i.e. compounds containing any of the groups  **, the nitrogen atoms not being part of nitro or nitroso groups**

335/02 . Thiourea

335/04 . Derivatives of thiourea

335/06 . . having nitrogen atoms of thiourea groups bound to acyclic carbon atoms

335/08 . . . of a saturated carbon skeleton

335/10 . . . of an unsaturated carbon skeleton

335/12 . . . . the carbon skeleton containing six-membered aromatic rings

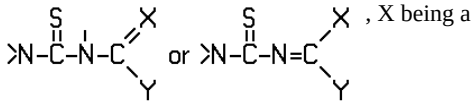
335/14 . . having nitrogen atoms of thiourea groups bound to carbon atoms of rings other than six-membered aromatic rings

335/16 . . having nitrogen atoms of thiourea groups bound to carbon atoms of six-membered aromatic rings of a carbon skeleton

335/18 . . . being further substituted by singly-bound oxygen atoms

335/20 . . . being further substituted by nitrogen atoms, not being part of nitro or nitroso groups

335/22 . . . being further substituted by carboxyl groups

335/24 . . containing any of the groups  , X being a hetero atom, Y being any atom

335/26 . . . Y being a hydrogen or a carbon atom, e.g. benzoylthioureas

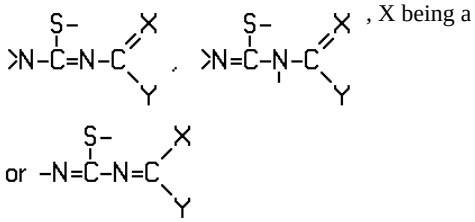
335/28 . . . Y being a hetero atom, e.g. thiobiuret

335/30 . Isothioureas

335/32 . . having sulfur atoms of isothiourea groups bound to acyclic carbon atoms

335/34 . . having sulfur atoms of isothiourea groups bound to carbon atoms of rings other than six-membered aromatic rings

335/36 . . having sulfur atoms of isothiourea groups bound to carbon atoms of six-membered aromatic rings

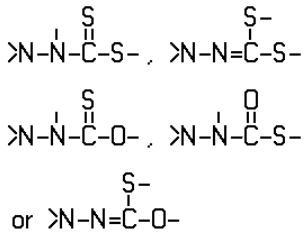
335/38 . . containing any of the groups  , X being a hetero atom, Y being any atom

335/40 . having nitrogen atoms of thiourea or isothiourea groups further bound to other hetero atoms

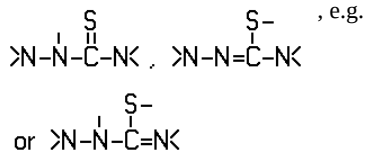
335/42 . . Sulfonylthioureas; Sulfonylisothioureas

335/44 . . Sulfenylthioureas; Sulfenylisothioureas

337/00 Derivatives of thiocarbonic acids containing functional groups covered by groups C07C 333/00 or C07C 335/00 in which at least one nitrogen atom of these functional groups is further bound to another nitrogen atom not being part of a nitro or nitroso group

337/02 . Compounds containing any of the groups  , e.g. thiocarbazates

337/04 . . the other nitrogen atom being further doubly-bound to a carbon atom

337/06 . Compounds containing any of the groups  , e.g. thiosemicarbazides

337/08 . . the other nitrogen atom being further doubly-bound to a carbon atom, e.g. thiosemicarbazones

337/10 . the two nitrogen atoms of the functional groups being doubly-bound to each other

381/00 Compounds containing carbon and sulfur and having functional groups not covered by groups C07C 301/00 - C07C 337/00

381/02 . Thiosulfates

381/04 . Thiosulfonates

381/06 . Compounds containing sulfur atoms only bound to two nitrogen atoms

381/08 . . having at least one of the nitrogen atoms acylated

381/10 . Compounds containing sulfur atoms doubly-bound to nitrogen atoms

381/12 . Sulfonium compounds

381/14 . Compounds containing a carbon atom having four bonds to hetero atoms with a double bond to one hetero atom and at least one bond to a sulfur atom further doubly-bound to oxygen atoms

391/00 Compounds containing selenium

391/02 . having selenium atoms bound to carbon atoms of six-membered aromatic rings

395/00 Compounds containing tellurium

401/00 Irradiation products of cholesterol or its derivatives; Vitamin D derivatives, 9,10-seco cyclopenta[a]phenanthrene or analogues obtained by chemical preparation without irradiation

403/00 **Derivatives of cyclohexane or of a cyclohexene {or of cyclohexadiene}, having a side-chain containing an acyclic unsaturated part of at least four carbon atoms, this part being directly attached to the cyclohexane or cyclohexene {or cyclohexadiene} rings, e.g. vitamin A, beta-carotene, beta-ionone**

403/02 . having side-chains containing only carbon and hydrogen atoms
403/04 . having side-chains substituted by halogen atoms
403/06 . having side-chains substituted by singly-bound oxygen atoms
403/08 . . by hydroxy groups
403/10 . . by etherified hydroxy groups
403/12 . . by esterified hydroxy groups
403/14 . having side-chains substituted by doubly-bound oxygen atoms
403/16 . . not being part of —CHO groups
403/18 . having side-chains substituted by nitrogen atoms
403/20 . having side-chains substituted by carboxyl groups {or halides, anhydrides, or (thio)esters thereof}
403/22 . having side-chains substituted by sulfur atoms
403/24 . having side-chains substituted by six-membered non-aromatic rings, e.g. beta-carotene

405/00 **Compounds containing a five-membered ring having two side-chains in ortho position to each other, and having oxygen atoms directly attached to the ring in ortho position to one of the side-chains, one side-chain containing, not directly attached to the ring, a carbon atom having three bonds to hetero atoms with at the most one bond to halogen, and the other side-chain having oxygen atoms attached in gamma-position to the ring, e.g. prostaglandins {; Analogues or derivatives thereof}**

405/0008 . {Analogues having the carboxyl group in the side-chains replaced by other functional groups}
405/0016 . . {containing only hydroxy, etherified or esterified hydroxy groups}
405/0025 . . {containing keto groups}
405/0033 . . {containing sulfur}
405/0041 . . {containing nitrogen}
405/005 . {Analogues or derivatives having the five membered ring replaced by other rings}
405/0058 . . {having the side-chains or their analogues or derivatives attached to a not condensed ring different from a five-membered ring}
405/0066 . . . {to a six-membered ring}
405/0075 . . {having the side-chains or their analogues or derivatives attached to a condensed ring system}
405/0083 . . . {which is only ortho or peri condensed, e.g. carbacyclins}
405/0091 . . . {which is bridged condensed}

407/00 **Preparation of peroxy compounds**

407/003 . {Separation; Purification; Stabilisation; Use of additives}
407/006 . . {Stabilisation; Use of additives}

409/00 **Peroxy compounds**

409/02 . the —O—O— group being bound between a carbon atom, not further substituted by oxygen atoms, and hydrogen, i.e. hydroperoxides
409/04 . . the carbon atom being acyclic
409/06 . . . Compounds containing rings other than six-membered aromatic rings
409/08 . . . Compounds containing six-membered aromatic rings
409/10 . . . . Cumene hydroperoxide
409/12 . . . . with two alpha,alpha-dialkylmethyl hydroperoxy groups bound to carbon atoms of the same six-membered aromatic ring
409/14 . . the carbon atom belonging to a ring other than a six-membered aromatic ring
409/16 . the —O—O— group being bound between two carbon atoms not further substituted by oxygen atoms, i.e. peroxides
409/18 . . at least one of the carbon atoms belonging to a ring other than a six-membered aromatic ring
409/20 . the —O—O— group being bound to a carbon atom further substituted by singly—bound oxygen atoms
409/22 . . having two —O—O— groups bound to the carbon atom
409/24 . the —O—O— group being bound between a >C=O group and hydrogen, i.e. peroxy acids
409/26 . . Peracetic acid
409/28 . . a >C=O group being bound to a carbon atom of a ring other than a six-membered aromatic ring
409/30 . . a >C=O group being bound to a carbon atom of a six-membered aromatic ring
409/32 . the —O—O— group being bound between two >C=O groups
409/34 . . both belonging to carboxylic acids
409/36 . . . Diacetyl peroxide
409/38 . the —O—O— group being bound between a >C=O group and a carbon atom, not further substituted by oxygen atoms, i.e. esters of peroxy acids
409/40 . containing nitrogen atoms
409/42 . containing sulfur atoms
409/44 . . with sulfur atoms directly bound to the —O—O— groups, e.g. persulfonic acids

Indexing scheme associated with groups C07C 1/00 - C07C 6/00, relating to catalysts used in the preparation of hydrocarbons

2521/00 **Catalysts comprising the elements, oxides or hydroxides of magnesium, boron, aluminium, carbon, silicon, titanium, zirconium or hafnium**

2521/02 . Boron or aluminium; Oxides or hydroxides thereof
2521/04 . . Alumina
2521/06 . Silicon, titanium, zirconium or hafnium; Oxides or hydroxides thereof
2521/08 . . Silica
2521/10 . Magnesium; Oxides or hydroxides thereof
2521/12 . Silica and alumina
2521/14 . Silica and magnesia
2521/16 . Clays or other mineral silicates
2521/18 . Carbon

2523/00 **Catalysts comprising metals or metal oxides or hydroxides, not provided for in group C07C 2521/00 (C07C 2521/16 takes precedence)**

2523/02 . of the alkali- or alkaline earth metals or beryllium
2523/04 . . Alkali metals
2523/06 . of zinc, cadmium or mercury
2523/08 . of gallium, indium or thallium
2523/10 . of rare earths
2523/12 . of actinides
2523/14 . of germanium, tin or lead

2523/16 . of arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2523/18 . . Arsenic, antimony or bismuth
2523/20 . . Vanadium, niobium or tantalum
2523/22 . . . Vanadium
2523/24 . . Chromium, molybdenum or tungsten
2523/26 . . . Chromium
2523/28 . . . Molybdenum
2523/30 . . . Tungsten
2523/31 . . . combined with bismuth
2523/32 . . Manganese, technetium or rhenium
2523/34 . . . Manganese
2523/36 . . . Rhenium
2523/38 . of noble metals
2523/40 . . of the platinum group metals
2523/42 . . . Platinum
2523/44 . . . Palladium
2523/46 . . . Ruthenium, rhodium, osmium or iridium
2523/48 . . Silver or gold
2523/50 . . . Silver
2523/52 . . . Gold
2523/54 . . combined with metals, oxides or hydroxides provided for in groups C07C 2523/02 - C07C 2523/36
2523/56 . . . Platinum group metals
2523/58 . . . . with alkali- or alkaline earth metals or beryllium
2523/60 . . . . with zinc, cadmium or mercury
2523/62 . . . . with gallium, indium, thallium, germanium, tin or lead
2523/63 . . . . with rare earths or actinides
2523/64 . . . . with arsenic, antimony, bismuth, vanadium, niobium, tatalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2523/644 . . . . . Arsenic, antimony or bismuth
2523/648 . . . . . Vanadium, niobium or tantalum
2523/652 . . . . . Chromium, molybdenum or tungsten
2523/656 . . . . . Manganese, technetium or rhenium
2523/66 . . . Silver or gold
2523/68 . . . . with arsenic, antimony, bismuth, vanadium, niobium, tatalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2523/70 . of the iron group metals or copper
2523/72 . . Copper
2523/74 . . Iron group metals
2523/745 . . . Iron
2523/75 . . . Cobalt
2523/755 . . . Nickel
2523/76 . . combined with metals, oxides or hydroxides provided for in groups C07C 2523/02 - C07C 2523/36
2523/78 . . . with alkali- or alkaline earth metals or beryllium
2523/80 . . . with zinc, cadmium or mercury
2523/825 . . . with gallium, indium or thallium
2523/83 . . . with rare earths or actinides
2523/835 . . . with germanium, tin or lead
2523/84 . . . with arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2523/843 . . . . Arsenic, antimony or bismuth
2523/847 . . . . Vanadium, niobium or tantalum
2523/85 . . . . Chromium, molybdenum or tungsten
2523/86 . . . . . Chromium
2523/88 . . . . . Molybdenum
2523/881 . . . . . and iron
2523/882 . . . . . and cobalt
2523/883 . . . . . and nickel
2523/885 . . . . . and copper
2523/887 . . . . . containing in addition other metals, oxides or hydroxides provided for in groups C07C 2523/02 - C07C 2523/36
2523/888 . . . . . Tungsten
2523/889 . . . . Manganese, technetium or rhenium
2523/89 . . combined with noble metals

2525/00 Catalysts of the Raney type
2525/02 . Raney nickel

2527/00 Catalysts comprising the elements or compounds of halogens, sulfur, selenium, tellurium, phosphorus or nitrogen; Catalysts comprising carbon compounds

NOTE

Metal catalysts or metal oxide catalysts activated or conditioned by halogens, sulfur or phosphorus, or compounds thereof are indexed in the appropriate groups for metal or metal oxide catalysts.

2527/02 . Sulfur, selenium or tellurium; Compounds thereof
2527/03 . . Acids of sulfur other than sulfhydric acid or sulfuric acid, e.g. halosulfonic acids
2527/04 . . Sulfides
2527/043 . . . with iron group metals or platinum group metals
2527/045 . . . . Platinum group metals
2527/047 . . . with chromium, molybdenum, tungsten or polonium
2527/049 . . . . with iron group metals or platinum group metals
2527/051 . . . . Molybdenum
2527/053 . . Sulfates or other compounds comprising the anion (SnO3n+1)2-
2527/054 . . . Sulfuric acid or other acids with the formula H2Sn03n+1
2527/055 . . . with alkali metals, copper, gold or silver
2527/057 . . Selenium or tellurium; Compounds thereof
2527/06 . Halogens; Compounds thereof
2527/08 . . Halides (C07C 2527/122 - C07C 2527/138 take precedence)
2527/10 . . . Chlorides
2527/11 . . . . Hydrogen chloride
2527/12 . . . Fluorides
2527/1206 . . . . Hydrogen fluoride
2527/1213 . . . . Boron fluoride
2527/122 . . Compounds comprising a halogen and copper
2527/125 . . Compounds comprising a halogen and scandium, yttrium, aluminium, gallium, indium or thallium
2527/126 . . . Aluminium chloride

2527/128 . . Compounds comprising a halogen and an iron group metal or a platinum group metal
2527/13 . . . Platinum group metals
2527/132 . . Compounds comprising a halogen and chromium, molybdenum, tungsten or polonium
2527/133 . . Compounds comprising a halogen and vanadium, niobium, tantalium, antimonium or bismuth
2527/135 . . Compounds comprising a halogen and titanum, zirconium, hafnium, germanium, tin or lead
2527/138 . . Compounds comprising a halogen and an alkaline earth metal, magnesium, beryllium, zinc, cadmium or mercury
2527/14 . Phosphorus; Compounds thereof
2527/16 . . containing oxygen
2527/167 . . . Phosphates or other compounds comprising the anion (PnO3n+1)(n+2)-
2527/173 . . . . Phosphoric acid or other acids with the formula Hn+2PnO3n+1
2527/18 . . . with metals
2527/182 . . with silicon
2527/185 . . with iron group metals or platinum group metals
2527/186 . . with arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2527/187 . . . with manganese, technetium or rhenium
2527/188 . . . with chromium, molybdenum, tungsten or polonium
2527/19 . . . . Molybdenum
2527/192 . . . . . with bismuth
2527/195 . . . with vanadium, niobium or tantalum
2527/198 . . . . Vanadium
2527/199 . . . . . with chromium, molybdenum, tungsten or polonium
2527/20 . Carbon compounds
2527/22 . . Carbides
2527/224 . . . Silicon carbide
2527/228 . . . . with phosphorus, arsenic, antimony or bismuth
2527/232 . . Carbonates
2527/236 . . . Hydroxy carbonates
2527/24 . Nitrogen compounds
2527/25 . . Nitrates
2527/26 . . Cyanides

2529/00 Catalysts comprising molecular sieves
2529/03 . not having base-exchange properties
2529/035 . . Crystalline silica polymorphs, e.g. silicalites
2529/04 . having base-exchange properties, e.g. crystalline zeolites, pillared clays
2529/05 . . Pillared clays
2529/06 . . Crystalline aluminosilicate zeolites; Isomorphous compounds thereof
2529/064 . . . containing iron group metals, noble metals or copper
2529/068 . . . . Noble metals
2529/072 . . . . Iron group metals or copper
2529/076 . . . containing arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2529/08 . . . of the faujasite type, e.g. type X or Y
2529/10 . . . . containing iron group metals, noble metals or copper
2529/12 . . . . . Noble metals
2529/14 . . . . . Iron group metals or copper
2529/16 . . . . containing arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2529/18 . . . of the mordenite type
2529/20 . . . . containing iron group metals, noble metals or copper
2529/22 . . . . . Noble metals
2529/24 . . . . . Iron group metals or copper
2529/26 . . . . containing arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2529/40 . . . of the pentasil type, e.g. types ZSM-5, ZSM-8 or ZSM-11
2529/42 . . . . containing iron group metals, noble metals or copper
2529/44 . . . . . Noble metals
2529/46 . . . . . Iron group metals or copper
2529/48 . . . . containing arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2529/50 . . . of the eroionite or offretite type, e.g. zeolite T
2529/52 . . . . containing iron group metals, noble metals or copper
2529/54 . . . . . Noble metals
2529/56 . . . . . Iron group metals or copper
2529/58 . . . . containing arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2529/60 . . . of the type L
2529/61 . . . . containing iron group metals, noble metals or copper
2529/62 . . . . . Noble metals
2529/63 . . . . . Iron group metals or copper
2529/64 . . . . containing arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2529/65 . . . of the ferrierite type, e.g. types ZSM-21, ZSM-35 or ZSM-38
2529/66 . . . . containing iron group metals, noble metals or copper
2529/67 . . . . . Noble metals
2529/68 . . . . . Iron group metals or copper
2529/69 . . . . containing arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium
2529/70 . . . of types characterised by their specific structure not provided for in groups C07C 2529/08 - C07C 2529/65
2529/72 . . . . containing iron group metals, noble metals or copper
2529/74 . . . . . Noble metals
2529/76 . . . . . Iron group metals or copper
2529/78 . . . . containing arsenic, antimony, bismuth, vanadium, niobium, tantalum, polonium, chromium, molybdenum, tungsten, manganese, technetium or rhenium

2529/80 . . . Mixtures of different zeolites
2529/82 . Phosphates
2529/83 . . Aluminophosphates (APO compounds)
2529/84 . . Aluminophosphates containing other elements, e.g. metals, boron
2529/85 . . . Silicoaluminophosphates (SAPO compounds)
2529/86 . Borosilicates; Aluminoborosilicates
2529/87 . Gallosilicates; Aluminogallosilicates; Galloborosilicates
2529/88 . Ferrosilicates; Ferroaluminosilicates
2529/89 . Silicates, aluminosilicates or borosilicates of titanium, zirconium or hafnium

2531/00 Catalysts comprising hydrides, coordination complexes or organic compounds
2531/02 . containing organic compounds or metal hydrides
2531/025 . . Sulfonic acids
2531/04 . . containing carboxylic acids or their salts
2531/06 . . containing polymers
2531/08 . . . Ion-exchange resins
2531/10 . . . . sulfonated
2531/12 . . containing organo-metallic compounds or metal hydrides
2531/14 . . . of aluminium or boron
2531/16 . containing coordination complexes
2531/18 . . containing nitrogen, phosphorus, arsenic or antimony
2531/20 . . Carbonyls
2531/22 . . Organic complexes
2531/24 . . Phosphines
2531/26 . containing in addition, inorganic metal compounds not provided for in groups C07C 2531/02 - C07C 2531/24
2531/28 . . of the platinum group metals, iron group metals or copper
2531/30 . . . Halides
2531/32 . . of manganese, technetium or rhenium
2531/34 . . of chromium, molybdenum or tungsten
2531/36 . . of vanadium, niobium or tantalum
2531/38 . . of titanium, zirconium or hafnium

Indexing scheme associated with groups C07C 1/00 - C07C 409/00, relating to carbocyclic rings or ring systems

2601/00 Systems containing only non-condensed rings
2601/02 . with a three-membered ring
2601/04 . with a four-membered ring
2601/06 . with a five-membered ring
2601/08 . . the ring being saturated
2601/10 . . the ring being unsaturated
2601/12 . with a six-membered ring
2601/14 . . The ring being saturated
2601/16 . . the ring being unsaturated
2601/18 . with a ring being at least seven-membered
2601/20 . . the ring being twelve-membered

2602/00 Systems containing two condensed rings
2602/02 . the rings having only two atoms in common
2602/04 . . One of the condensed rings being a six-membered aromatic ring
2602/06 . . . the other ring being four-membered
2602/08 . . . the other ring being five-membered, e.g. indane
2602/10 . . . the other ring being six-membered, e.g. tetraline
2602/12 . . . the other ring being at least seven-membered
2602/14 . . All rings being cycloaliphatic
2602/16 . . . the ring system containing five carbon atoms
2602/18 . . . the ring system containing six carbon atoms
2602/20 . . . the ring system containing seven carbon atoms
2602/22 . . . the ring system containing eight carbon atoms, e.g. pentalene
2602/24 . . . the ring system containing nine carbon atoms, e.g. perhydroindane
2602/26 . . . the ring system containing ten carbon atoms
2602/28 . . . . Hydrogenated naphthalenes
2602/30 . . . . Azulenes; Hydrogenated azulenes
2602/32 . . . the ring system containing at least eleven carbon atoms
2602/34 . . . . Heptalenes; Hydrogenated heptalenes
2602/36 . the rings having more than two atoms in common
2602/38 . . the bicyclo ring system containing five carbon atoms
2602/40 . . the bicyclo ring system containing six carbon atoms
2602/42 . . the bicyclo ring system containing seven carbon atoms
2602/44 . . the bicyclo ring system containing eight carbon atoms
2602/46 . . the bicyclo ring system containing nine carbon atoms
2602/48 . . the bicyclo ring system containing ten carbon atoms
2602/50 . Spiro compounds

2603/00 Systems containing at least three condensed rings
2603/02 . Ortho- or ortho- and peri-condensed systems
2603/04 . . containing three rings
2603/06 . . . containing at least one ring with less than six ring members
2603/08 . . . . containing three- or four-membered rings
2603/10 . . . . containing five-membered rings
2603/12 . . . . . only one five-membered ring
2603/14 . . . . . Benz[f]indenes; Hydrogenated benz[f]indenes
2603/16 . . . . . Benz[e]indenes; Hydrogenated benz[e]indenes
2603/18 . . . . . Fluorenes; Hydrogenated fluorenes
2603/20 . . . . . Acenaphthenes; Hydrogenated acenaphthenes
2603/22 . . . containing only six-membered rings
2603/24 . . . . Anthracenes; Hydrogenated anthracenes
2603/26 . . . . Phenanthrenes; Hydrogenated phenanthrenes
2603/28 . . . . Phenalenes; Hydrogenated phenalenes
2603/30 . . . containing seven-membered rings
2603/32 . . . . Dibenzocycloheptenes; Hydrogenated dibenzocycloheptenes
2603/34 . . . . Benzoheptalenes; Hydrogenated benzoheptalenes
2603/36 . . . containing eight-membered rings
2603/38 . . . containing rings with at least nine members
2603/40 . . containing four condensed rings
2603/42 . . . containing only six-membered rings
2603/44 . . . . Naphthacenes; Hydrogenated naphthacenes
2603/46 . . . . . 1,4,4a,5,5a,6,11,12a-Octahydronaphthacenes, e.g. tetracyclines

2603/48 . . . . Chrysenes; Hydrogenated chrysenes
2603/50 . . . . Pyrenes; Hydrogenated pyrenes
2603/52 . . containing five condensed rings
2603/54 . . containing more than five condensed rings
2603/56 . Ring systems containing bridged rings
2603/58 . . containing three rings
2603/60 . . . containing at least one ring with less than six members
2603/62 . . . . containing three- or four-membered rings
2603/64 . . . . . having a tricyclo[2.2.1.0(2,6)]heptstructure
2603/66 . . . . containing five-membered rings
2603/68 . . . . . Dicyclopentadienes; Hydrogenated dicyclopentadienes
2603/70 . . . containing only six-membered rings
2603/72 . . . . Ethanonaphthalenes; Hydrogenated ethanonaphthalenes
2603/74 . . . . Adamantanes
2603/76 . . . containing at least one ring with more than six ring members
2603/78 . . . . containing seven-membered rings
2603/80 . . . . containing eight-membered rings
2603/82 . . . . . having three condensed rings with in total fourteen carbon atoms and having a having a [5.4.3.0(1,8)] ring structure, e.g. pleuromutiline
2603/84 . . . . containing rings with more than eight members
2603/86 . . containing four rings
2603/88 . . . Ethanoanthracenes; Hydrogenated ethanoanthracenes
2603/90 . . containing more than four rings
2603/91 . . . Polycyclopentadienes; Hydrogenated polycyclopentadienes
2603/92 . with a condensed ring system consisting of at least two mutually uncondensed aromatic ring systems, linked by an annular structure formed by carbon chains on non-adjacent positions of the aromatic system, e.g. cyclophanes
2603/93 . Spiro compounds
2603/94 . . containing "free" spiro atoms
2603/95 . . containing "not free" spiro atoms
2603/96 . . . containing at least one ring with less than six members
2603/97 . . . . containing five-membered rings
2603/98 . . . containing at least one ring with more than six ring members
2603/99 . . . . containing eight-membered rings

2604/00 Fullerenes, e.g. C_{60} buckminsterfullerene or C_{70}