

## C01G

**COMPOUNDS CONTAINING METALS NOT COVERED BY SUBCLASSES [C01D](#) OR [C01F](#) (metal hydrides {monoborane, diborane or addition complexes thereof} [C01B 6/00](#); salts of oxyacids of halogens [C01B 11/00](#); peroxides, salts or peroxyacids [C01B 15/00](#); thiosulfates, dithionites, polythionates [C01B 17/64](#); compounds containing selenium, or tellurium [C01B 19/00](#); binary compounds of nitrogen with metals [C01B 21/06](#); azides [C01B 21/08](#); {compounds containing nitrogen, other non-metals and metal [C01B 21/082](#)}; metal amides [C01B 21/092](#); nitrites [C01B 21/50](#); {compounds of noble gases [C01B 23/0005](#)}; phosphides [C01B 25/08](#); salts of oxyacids of phosphorus [C01B 25/16](#); carbides [C01B 32/90](#); compounds containing silicon [C01B 33/00](#); compounds containing boron [C01B 35/00](#); compounds having molecular sieve properties but not having base-exchange properties [C01B 37/00](#); compounds having molecular sieve and base-exchange properties, e.g. crystalline zeolites, [C01B 39/00](#); cyanides [C01C 3/08](#); salts of cyanamide [C01C 3/16](#); thiocyanates [C01C 3/20](#))**

### Definition statement

*This place covers:*

Inorganic compounds or salts containing metals like Cu, Ag, Au, Zn, Cd, Hg, Ga, In, Tl, Ge, Sn, Pb, Ti, Zr, Hf, As, Bi, Sb, V, Nb, Ta, Cr, Mo, W, U, Mn, Re, Fe, Co, Ni, Ru, Rh, Pd, Os, Ir, Pt and the transuranic elements (Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr).

### Relationships with other classification places

#### **MULTIPLE CLASSIFICATION**

Biocidal, pest repellent, pest attractant, or plant growth regulatory activity of chemical compounds or preparations is further classified in [A01P](#).

Therapeutic activity of chemical compounds or medicinal preparations is further classified in subclass [A61P](#).

Uses of cosmetics or similar toilet preparations are further classified in subclass [A61Q](#).

### References

#### **Limiting references**

*This place does not cover:*

Metal hydrides, monoborane, diborane or addition complexes thereof	<a href="#">C01B 6/00</a>
Salts of oxyacids of halogens	<a href="#">C01B 11/00</a>
Peroxides, salts of peroxyacids	<a href="#">C01B 15/00</a>
Thiosulfates, dithionites, polythionates	<a href="#">C01B 17/64</a>
Compounds containing selenium or tellurium	<a href="#">C01B 19/00</a>
Binary compounds of nitrogen with metals	<a href="#">C01B 21/06</a>
Azides	<a href="#">C01B 21/08</a>
Compounds other than ammonia or cyanogen containing nitrogen and non-metals and optionally metals	<a href="#">C01B 21/082</a>
Metal imides or amides	<a href="#">C01B 21/092</a>

Nitrites	<a href="#">C01B 21/50</a>
Compounds of noble gases	<a href="#">C01B 23/0005</a>
Phosphides	<a href="#">C01B 25/08</a>
Salts of oxyacids of phosphorus	<a href="#">C01B 25/16</a>
Carbides	<a href="#">C01B 32/90</a>
Compounds containing silicon	<a href="#">C01B 33/00</a>
Compounds containing boron	<a href="#">C01B 35/00</a>
Compounds having molecular sieve properties but not having base-exchange properties	<a href="#">C01B 37/00</a>
Compounds having molecular sieve and base-exchange properties, e.g. crystalline zeolites	<a href="#">C01B 39/00</a>
Cyanides	<a href="#">C01C 3/08</a>
Salts of cyanamide	<a href="#">C01C 3/16</a>
Thiocyanates	<a href="#">C01C 3/20</a>

### **Informative references**

Attention is drawn to the following places, which may be of interest for search:

Sulfides or polysulfides of magnesium, calcium, strontium or barium	<a href="#">C01B 17/42</a>
Amides or imides of silicon	<a href="#">C01B 21/087</a>
Salts of cyanic acid	<a href="#">C01C 3/14</a>
Double sulfates of magnesium with sodium or potassium	<a href="#">C01D 5/12</a>
Lithium compounds	<a href="#">C01D 15/00</a>
Rubidium, caesium or francium compounds	<a href="#">C01D 17/00</a>
Treatment of specific inorganic materials other than fibrous fillers, for use as filler or pigment	<a href="#">C09C</a>
Metallurgy of iron	<a href="#">C21</a>
Metallurgy, ferrous or non-ferrous alloys	<a href="#">C22</a>
Treatment of ores	<a href="#">C22B</a>

### **Special rules of classification**

The physical properties of the specific compounds of metals are indexed according to the [C01P](#)-Indexing code scheme.

In case a group is indicated as indexed, the subgroups thereof are also indexed.

The [C01P](#)-Indexation scheme deals with structural and physical aspects of solid inorganic compounds classified in subclasses [C01B](#) - [C01G](#) and [C09C](#). These aspects include crystal-structural characteristics, particle morphology and physical properties.

Exception from the last appropriate place rule:

Dopant: A dopant, also called a doping agent, is a trace impurity element that is inserted into a substance (in very low concentrations) in order to alter the physical properties of the substance. For the purpose of classification, a dopant is considered as such when its concentration is less than 5% (wt, vol, at.) or when mentioned as such in the patent document to be classified.

In such a case, the compound is classified ignoring the dopant(s) and the last appropriate place rule does not apply in view of the dopant(s). In case of doubts, the document is given the class relating to the last appropriate place rule by taking into account the dopant(s) and in the appropriate class, without taking into account the dopant(s).

## **C01G 1/00**

**Methods of preparing compounds of metals not covered by subclasses [C01B](#), [C01C](#), [C01D](#), or [C01F](#), in general (electrolytic production of inorganic compounds [C25B 1/00](#))**

### **Definition statement**

*This place covers:*

All methods, i.e. solid state, wet (precipitation, co-precipitation) and gaseous (flame pyrolysis) methods for preparing compounds of metals not classified in the other [C01G 1/02](#) - [C01G 1/14](#) groups (last appropriate place rule has to be applied).

### **References**

#### **Limiting references**

*This place does not cover:*

Electrolytic production of inorganic compounds	<a href="#">C25B 1/00</a>
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### **Special rules of classification**

Specific examples are classified also according to the last appropriate rule in the suitable [C01G](#) subclass. Physical properties of the specific compounds of metals are indexed according to the [C01P](#)-Indexing code scheme.

The [C01P](#)-Indexation scheme deals with structural and physical aspects of solid inorganic compounds classified in subclasses [C01B](#) - [C01G](#) and [C09C](#). These aspects include crystal-structural characteristics, particle morphology and physical properties.

## **C01G 1/02**

### **Oxides**

#### **Definition statement**

*This place covers:*

Only general methods of preparing metal oxides or multi metal oxides.

### **References**

#### **Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Other relevant classes see	<a href="#">C01G 3/00</a> - <a href="#">C01G 99/00</a>
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### **Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

A document is classified in this class, as soon as it is describing a method which is used for preparing several metal oxides. Example : a method for preparing chromium, copper or nickel oxides. In this example the following classes are additionally given : [C01G 37/02](#), [C01G 3/02](#) and [C01G 53/04](#)

## **C01G 1/04**

### **Carbonyls**

#### **Definition statement**

*This place covers:*

General methods for preparing metal carbonyls or metal carbonyl mixed metal salts

#### **References**

##### **Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Mn carbonyl	<a href="#">C01G 45/04</a>
Fe carbonyl	<a href="#">C01G 49/16</a>
Co carbonyl	<a href="#">C01G 51/02</a>
Ni carbonyl	<a href="#">C01G 53/02</a>
Ru,Rh,Pd,Os,Ir,Pt carbonyl	<a href="#">C01G 55/008</a>

#### **Special rules of classification**

Specific examples shall be classified in the appropriate [C01G 3/00-C01G 99/00](#) classes. The [C01P](#)-Indexation scheme shall be applied.

## **C01G 1/06**

### **Halides**

#### **Definition statement**

*This place covers:*

General methods for making metal halides or multi metal halides

#### **References**

##### **Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Other relevant classes see	<a href="#">C01G 3/00- C01G 99/00</a>
Cu halides	<a href="#">C01G 3/04- C01G 3/06</a>
Ag halides	<a href="#">C01G 5/02</a>
Zn halides	<a href="#">C01G 9/04</a>
Hg halides	<a href="#">C01G 13/04</a>
Ge halides	<a href="#">C01G 17/04</a>
Sn halides	<a href="#">C01G 19/04</a>
Pb halides	<a href="#">C01G 21/16</a>
Ti halides	<a href="#">C01G 23/02</a>

Zr halides	<a href="#">C01G 25/00</a>
Hf halides	<a href="#">C01G 27/04</a>
As halides	<a href="#">C01G 28/007</a>
Sb halides	<a href="#">C01G 30/006</a>
V halides	<a href="#">C01G 31/04</a>
Ta halides	<a href="#">C01G 35/02</a>
Cr halides	<a href="#">C01G 37/04</a>
Mo halides	<a href="#">C01G 39/04</a>
W halides	<a href="#">C01G 41/04</a>
U halides	<a href="#">C01G 43/04</a> - <a href="#">C01G 43/12</a>
Mn halides	<a href="#">C01G 45/06</a>
Fe halides	<a href="#">C01G 49/10</a>
Co halides	<a href="#">C01G 51/08</a>
Ni halides	<a href="#">C01G 53/08</a>
Ru, Rh,Pd,Os,Ir,Rh halides	<a href="#">C01G 55/005</a>
Transuranic compounds halides	<a href="#">C01G 56/00</a>
Pu	<a href="#">C01G 56/006</a>

### Special rules of classification

Specific examples shall be classified in the appropriate [C01G 3/00-C01G 99/00](#) classes.

The [C01P](#)-Indexation scheme shall be applied.

## C01G 1/08

### Nitrates

#### Definition statement

*This place covers:*

General methods of making metal or multi metal halides

#### References

##### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Other relevant classes see	<a href="#">C01G 3/00- C01G 99/00</a>
Cu nitrates	<a href="#">C01G 3/08</a>
Pb nitrates	<a href="#">C01G 21/18</a>
Mn nitrates	<a href="#">C01G 45/08</a>

### Special rules of classification

Specific examples shall be classified in the appropriate [C01G 3/00-C01G 99/00](#) classes.

The [C01P](#)-Indexation scheme shall be applied.

## C01G 1/10

### Sulfates

#### Definition statement

*This place covers:*

General methods of making metal sulfates or multi metal sulfates.

#### References

##### Informative references

Attention is drawn to the following places, which may be of interest for search:

Other relevant classes	<a href="#">C01G 3/00</a> - <a href="#">C01G 99/00</a>
Cu sulfates	<a href="#">C01G 3/10</a>
Zn sulfates	<a href="#">C01G 9/06</a>
Pb sulfates	<a href="#">C01G 21/20</a>
Ti sulfates	<a href="#">C01G 23/008</a>
Zr sulfates	<a href="#">C01G 25/06</a>
Hf sulfates	<a href="#">C01G 27/06</a>
Cr sulfates	<a href="#">C01G 37/08</a>
Mn sulfates	<a href="#">C01G 45/10</a>
Fe sulfates	<a href="#">C01G 49/14</a>
Co sulfates	<a href="#">C01G 51/10</a>
Ni sulfates	<a href="#">C01G 53/10</a>

#### Special rules of classification

Specific examples shall be classified in the appropriate [C01G 3/00-C01G 99/00](#) classes. The [C01P](#)-Indexation scheme shall be applied.

## C01G 1/12

### Sulfides

#### Definition statement

*This place covers:*

General methods for preparing metal or multi metal sulfides, i.e. compounds comprising an anion like  $S^{2-}$  (sulfide), or  $[S_n]^{2-}$  (polysulfide).

#### References

##### Informative references

Attention is drawn to the following places, which may be of interest for search:

Other relevant classes	<a href="#">C01G 3/00</a> - <a href="#">C01G 99/00</a>
Cu Sulfides	<a href="#">C01G 3/12</a>

Zn Sulfides	<a href="#">C01G 9/08</a>
Cd Sulfides	<a href="#">C01G 11/02</a> ,
Pb Sulfides	<a href="#">C01G 21/21</a>
Ti Sulfides	<a href="#">C01G 23/007</a>
As Sulfides	<a href="#">C01G 28/008</a>
Sb Sulfides	<a href="#">C01G 30/008</a>
Mo Sulfides	<a href="#">C01G 39/06</a>
Fe	<a href="#">C01G 49/12</a>
Ni sulfides	<a href="#">C01G 53/11</a>

### Special rules of classification

Specific examples shall be classified in the appropriate [C01G 3/00-C01G 99/00](#) classes. The [C01P](#)-Indexation scheme shall be applied.

## C01G 1/14

### Sulfites

#### Definition statement

*This place covers:*

General methods for preparing metal or multi metal sulfites, i.e. compounds comprising an anion like  $\text{SO}_3^{2-}$  (Sulfite),  $\text{S}_2\text{O}_5^{2-}$  (disulfite).

#### References

##### Informative references

Attention is drawn to the following places, which may be of interest for search:

Other relevant classes	<a href="#">C01G 3/00- C01G 99/00</a>
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### Special rules of classification

Specific examples shall be classified in the appropriate [C01G 3/00-C01G 99/00](#) classes. The [C01P](#)-Indexation scheme shall be applied.

### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Sulfite, secondary sulfite	compound comprises the anion $\text{SO}_3^{2-}$
Hydrogen sulfite, Bisulfite, primary sulfite, acidic sulfite	compound comprises the anion $\text{HSO}_3^{1-}$
Disulfite	compound comprises the anion $\text{S}_2\text{O}_5^{2-}$

## C01G 3/00

### Compounds of copper

#### Definition statement

*This place covers:*

Inorganic compounds of copper.

#### References

##### *Informative references*

*Attention is drawn to the following places, which may be of interest for search:*

Metallic copper fillers or pigments	<a href="#">C09C 1/627</a>
Copper alloys	<a href="#">C09C 1/66</a>
Metallurgy of iron	<a href="#">C21</a>
Metallurgy, ferrous or non-ferrous alloys	<a href="#">C22</a>

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 3/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

#### Definition statement

*This place covers:*

Use of ion exchange techniques or extraction techniques.

#### References

##### *Limiting references*

*This place does not cover:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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##### *Informative references*

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 3/006

{Compounds containing copper, with or without oxygen or hydrogen, and containing two or more other elements}

### Definition statement

*This place covers:*

This group has been completely indexed according to the [C01P](#)-indexation scheme.

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Supraconductors	<a href="#">H10N 60/00</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 3/02

### Oxides; Hydroxides

### Definition statement

*This place covers:*

Oxides, hydroxides, hyrous oxides, oxide-hydroxides of Copper

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme; The [C01P](#)-Indexation scheme shall be applied.

## C01G 3/04

### Halides

### Definition statement

*This place covers:*

Halides of copper

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Chlorides	<a href="#">C01G 3/05</a>
Oxychlorides	<a href="#">C01G 3/06</a>

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

**C01G 3/05****Chlorides****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 3/06****Oxychlorides****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 3/08****Nitrates****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 3/10****Sulfates****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**Glossary of terms**

*In this place, the following terms or expressions are used with the meaning indicated:*

Copper(II) sulfate	Blue vitriol, bluestone, Salzburg vitriol
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**C01G 3/12****Sulfides****Definition statement**

*This place covers:*

Compounds comprising an anion like  $S^{2-}$  (sulfide), or  $[S_n]^{2-}$  (polysulfide).

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 3/14****Complexes with ammonia****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## C01G 5/00

### Compounds of silver

#### References

##### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Metallic silver or silver alloys fillers or pigments	<a href="#">C09C</a> , <a href="#">C09D</a>
Metallurgy of iron	<a href="#">C21</a>
Metallurgy, ferrous or non-ferrous alloys	<a href="#">C22</a>

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 5/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

#### References

##### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 5/006

{Compounds containing silver, with or without oxygen or hydrogen, and containing two or more other elements}

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 5/02

### Halides

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

**C01G 7/00****Compounds of gold****References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Metallurgy of iron	<a href="#">C21</a>
Ferrous or non-ferrous alloys	<a href="#">C22</a>

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 7/003**

**{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}**

**References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 7/006**

**{Compounds containing gold, with or without oxygen or hydrogen, and containing two or more other elements}**

**References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Metallurgy of iron	<a href="#">C21</a>
Ferrous or non-ferrous alloys	<a href="#">C22</a>

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 9/00****Compounds of zinc****References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Treatment of Zn-compounds for use as a pigment or filler	<a href="#">C09C 1/00</a>
Luminescent materials	<a href="#">C09K 11/00</a>
Metallurgy of iron	<a href="#">C21</a>
Ferrous or non-ferrous alloys	<a href="#">C22</a>
Semiconductor devices sensitive to infrared radiation, light, electromagnetic radiation of shorter wavelength or corpuscular radiation and specially adapted either for the conversion of the energy of such radiation into electrical energy or for the control of electrical energy by such radiation	<a href="#">H10F</a>

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 9/003**

**{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}**

**References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 9/006**

**{Compounds containing zinc, with or without oxygen or hydrogen, and containing two or more other elements}**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## C01G 9/02

### Oxides; Hydroxides

#### References

##### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Treatment of ZnO, use as pigment or filler	<a href="#">C09C 1/043</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 9/03

### Processes of production using dry methods, e.g. vapour phase processes

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 9/04

### Halides

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 9/06

### Sulfates

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 9/08

### Sulfides

#### Definition statement

*This place covers:*

Compounds comprising an anion like  $S^{2-}$  (sulfide), or  $[S_n]^{2-}$  (polysulfide).

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

ZnS	zinc blende or sphalerite (stable cubic form), Wurtzite (hexagonal form)
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## C01G 11/00

### Compounds of cadmium

#### References

##### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Metallurgy of iron	<a href="#">C21</a>
Ferrous or non-ferrous alloys	<a href="#">C22</a>

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

copper(II) sulfate	blue vitriol, bluestone, Salzburg vitriol
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## C01G 11/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

#### References

##### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 11/006

{Compounds containing cadmium, with or without oxygen or hydrogen, and containing two or more other elements}

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 11/02

### Sulfides

#### Definition statement

This place covers:

Compounds comprising an anion like  $S^{2-}$  (sulfide), or  $[S_n]^{2-}$  (polysulfide).

## References

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Treatment of CdS for use as filler or pigment	<a href="#">C09C 1/10</a>
Luminescent materials	<a href="#">C09K 11/00</a>

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

### Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

CdS	Greenockite, Hawleyite
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## C01G 13/00

### Compounds of mercury

## References

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Treatment of compounds of mercury	<a href="#">C09C 1/38</a>
Metallurgy of iron	<a href="#">C21</a>
Ferrous or non-ferrous alloys	<a href="#">C22</a>

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

### Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

HgS	cinnabar, vermillion
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## C01G 13/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

## References

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 13/006**

**{Compounds containing mercury, with or without oxygen or hydrogen, and containing two or more other elements}**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 13/02****Oxides****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**Glossary of terms**

*In this place, the following terms or expressions are used with the meaning indicated:*

Mercury oxide HgO	Mercuric oxide, Montroydite
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**C01G 13/04****Halides****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**Glossary of terms**

*In this place, the following terms or expressions are used with the meaning indicated:*

Mercury(II) chloride (HgCl <sub>2</sub> )	Mercury dichloride, Mercuric chloride, Corrosive sublimate, Mercurous chloride
Dimercury dichloride (Hg <sub>2</sub> Cl <sub>2</sub> , HgCl):	Calomel

**C01G 15/00****Compounds of gallium, indium or thallium****References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Coatings	<a href="#">C09D 5/00</a> , <a href="#">C09D 7/00</a>
Luminescent Materials	<a href="#">C09K 11/00</a>

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**Synonyms and Keywords**

*In patent documents, the following abbreviations are often used:*

ITO	Indium Tin oxide (tin-doped indium oxide)
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**C01G 15/003**

**{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}**

**References*****Informative references***

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 15/006**

**{Compounds containing gallium, indium or thallium, with or without oxygen or hydrogen, and containing two or more other elements}**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 17/00**

**Compounds of germanium**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 17/003**

**{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}**

**References*****Informative references***

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 17/006**

{Compounds containing germanium, with or without oxygen or hydrogen, and containing two or more other elements}

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 17/02**

**Germanium dioxide**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 17/04**

**Halides of germanium**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 19/00**

**Compounds of tin**

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Metallurgy of iron	<a href="#">C21</a>
Ferrous or non-ferrous alloys	<a href="#">C22</a>

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 19/003**

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
--	---------------------------

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 19/006**

**{Compounds containing tin, with or without oxygen or hydrogen, and containing two or more other elements}**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 19/02****Oxides****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**Synonyms and Keywords**

*In patent documents, the following words/expressions are often used as synonyms:*

- "Tin dioxide", "Cassiterite", "stannic acid", "flowers of tin" and "tin(IV) oxide"

**C01G 19/04****Halides****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 19/06****Stannous chloride****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 19/08****Stannic chloride****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## C01G 21/00

### Compounds of lead

#### References

##### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Metallurgy of iron	<a href="#">C21</a>
Ferrous or non-ferrous alloys	<a href="#">C22</a>

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 21/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

#### References

##### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 21/006

{Compounds containing lead, with or without oxygen or hydrogen, and containing two or more other elements}

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 21/02

### Oxides

#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme.

## C01G 21/04

### Lead suboxide [Pb<sub>2</sub>O]

#### Definition statement

*This place covers:*

This group has been completely indexed according to the [C01P](#)-indexation scheme.

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 21/06

### Lead monoxide [PbO]

#### References

##### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Glasses	<a href="#">C03C 3/00</a>
Ceramic glazes	<a href="#">C03C 8/00</a>
Pigments and fillers	<a href="#">C09C 1/14</a>

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

lead monoxide, lead(II) oxide	litharge, massicot, plumbous oxide
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## C01G 21/08

### Lead dioxide [PbO<sub>2</sub>]

#### References

##### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Elektrode materials	<a href="#">H01M 4/00</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Lead dioxide, Lead(IV)oxide	Plumbic oxide, Plattnerite
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## C01G 21/10

### Red lead [Pb<sub>3</sub>O<sub>4</sub>]

#### References

##### Informative references

Attention is drawn to the following places, which may be of interest for search:

Glasses compositions	<a href="#">C03C 3/00</a>
Pigment or Filler	<a href="#">C09C 1/18</a>

#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme.

#### Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "Lead(II,IV) oxide (Pb<sub>3</sub>O<sub>4</sub>, or 2PbO·PbO<sub>2</sub>)", "Lead tetroxide", "minium", "red lead or triplumbic tetroxide", "Mennige" and "Minium"

## C01G 21/12

### Hydroxides

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 21/14

### Carbonates

#### References

##### Informative references

Attention is drawn to the following places, which may be of interest for search:

Filler or Pigment	<a href="#">C09C 1/16</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "Lead carbonate basic lead carbonate (2PbCO<sub>3</sub>·Pb(OH)<sub>2</sub>)" and "Cerussite white lead"

## C01G 21/16

### Halides

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 21/18

### Nitrates

#### References

##### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Rodenticides	<a href="#">A01N 25/00</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "Lead(II) nitrate", "Lead nitrate", "Plumbous nitrate", "Lead dinitrate", and "Plumb dulcis"

## C01G 21/20

### Sulfates

#### References

##### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Electrode materials	<a href="#">H01M 4/00</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "Lead(II) sulfate" and "Anglesite"

## C01G 21/21

### Sulfides

#### Definition statement

This place covers:

Compounds comprising an anion like  $S^{2-}$  (sulfide), or  $[S_n]^{2-}$  (polysulfide).

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "Lead(II) sulfide", "Plumbous sulfide" and , "Galena"
- "Lead(IV) sulfide" and "Lead disulfide"

## C01G 21/22

### Plumbates; Plumbites

#### Definition statement

*This place covers:*

A plumbate is a salt having one of the several lead-containing oxyanions. Although the term plumbate can refer either to plumbate(II) or plumbate(IV), it traditionally refers specifically to plumbate(IV), whereas plumbate(II) is referred to as plumbite.

#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 23/00

### Compounds of titanium {(preparation of Ti-compounds from ores or scraps [C22B 34/12](#))}

#### References

##### Limiting references

*This place does not cover:*

Preparation of Ti-compounds from ores or scraps	<a href="#">C22B 34/12</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 23/001

### {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

#### References

##### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 23/002

{Compounds containing titanium, with or without oxygen or hydrogen, and containing two or more other elements ([C01G 23/001](#), [C01G 23/003](#) take precedence)}

### References

#### Limiting references

*This place does not cover:*

Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange	<a href="#">C01G 23/001</a>
Titanates	<a href="#">C01G 23/003</a>

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 23/003

{Titanates ([C01G 23/001](#) takes precedence)}

### Definition statement

*This place covers:*

Titanates of one or more metals other than titanium.

In particular the following compounds are covered:

- orthotitanates, having the formula  $M_2TiO_4$  (M = divalent metal);
- metatitanates, having the formula  $MTiO_3$  (M = divalent metal);
- complex titanates, e.g.
- bismuth titanate  $Bi_4Ti_3O_{12}$ ; or
- lead zirconate titanate (PZT)  $Pb[Zr_xTi_{1-x}]O_3$ ,  $0 \leq x \leq 1$ . Note that PZT is only classified in this group, insofar as Zr is considered as a dopant.

### References

#### Limiting references

*This place does not cover:*

Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange	<a href="#">C01G 23/001</a>
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#### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Ceramic material	<a href="#">C04B 35/00</a>
Treatment of, pigments, fillers	<a href="#">C09C 1/36</a>

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**Synonyms and Keywords**

*In patent documents, the following abbreviations are often used:*

PZT	Lead zirconate titanate ( $\text{Pb}[\text{Zr}_x\text{Ti}_{1-x}]\text{O}_3$ $0 \leq x \leq 1$ )
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**C01G 23/005****{Alkali titanates}****Definition statement**

*This place covers:*

M=Alkali metal (M=Li, Na, K, Rb, Cs etc.)

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Ceramic material	<a href="#">C04B 35/00</a>
Treatment of, pigments, fillers	<a href="#">C09C 1/36</a>

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 23/006****{Alkaline earth titanates}****Definition statement**

*This place covers:*

M=Alkaline Earth metal (M=Mg, Ca, Sr, Ba)

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Ceramic material	<a href="#">C04B 35/00</a>
Treatment of, pigments, fillers	<a href="#">C09C 1/36</a>

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 23/007

{Titanium sulfides ([C01G 23/001](#) takes precedence)}

### Definition statement

*This place covers:*

Compounds comprising an anion like S<sup>2-</sup>(sulfide), or [S<sub>n</sub>]<sup>2-</sup> (polysulfide).

### References

#### Limiting references

*This place does not cover:*

Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange	<a href="#">C01G 23/001</a>
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#### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Electrode materials	<a href="#">H01M 4/00</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

### Synonyms and Keywords

*In patent documents, the following words/expressions are often used as synonyms:*

- "Titanium(II) Sulfide", "titanium monosulfide" or "Wassonite"

## C01G 23/008

{Titanium- and titanyl sulfate ([C01G 23/001](#) takes precedence)}

### References

#### Limiting references

*This place does not cover:*

Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange	<a href="#">C01G 23/001</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 23/02

### Halides of titanium

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

**C01G 23/022****{Titanium tetrachloride}****Special rules of classification**The [C01P](#)-Indexation scheme shall be applied.**Synonyms and Keywords***In patent documents, the following words/expressions are often used as synonyms:*

- "Titanium(IV) chloride", "Titanium tetrachloride" and "Tetrachlorotitanium"

**C01G 23/024****{Purification of tetrachloride}****Definition statement***This place covers:*

Aftertreatment of titanium tetrachloride

**Special rules of classification**The [C01P](#)-Indexation scheme shall be applied.**C01G 23/026****{Titanium trichloride}****Definition statement***This place covers:*The [C01P](#)-Indexation scheme shall be applied.**Synonyms and Keywords***In patent documents, the following words/expressions are often used as synonyms:*

- "Titanium(III) Chloride" and "titanium trichloride" and, "titanous chloride"

**C01G 23/028****{Titanium fluoride}****Special rules of classification**The [C01P](#)-Indexation scheme shall be applied.**C01G 23/04****Oxides; Hydroxides****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Catalysis	<a href="#">B01J 35/00</a> , <a href="#">B01J 21/00</a>
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Ceramic Materials	<a href="#">C04B 35/00</a>
Use as filler in Polymers, Coatings etc.	<a href="#">C08K 9/00</a> , <a href="#">C09D 5/00</a> , <a href="#">C09D 7/00</a>
Treatment of, for use as pigment and filler	<a href="#">C09C 1/36</a>

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 23/043

{Titanium sub-oxides}

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Catalysis	<a href="#">B01J 35/00</a> , <a href="#">B01J 21/00</a>
Ceramic Materials	<a href="#">C04B 35/00</a>
Use as filler in Polymers, Coatings etc.	<a href="#">C08K 9/00</a> , <a href="#">C09D 5/00</a> , <a href="#">C09D 7/00</a>
Treatment of, for use as pigment and filler	<a href="#">C09C 1/36</a>

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

### Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "Titanium(II) oxide" and "Titanium monoxide"
- "Titanium(III) oxide" and "Titanium sesquioxide "

## C01G 23/047

Titanium dioxide

### Definition statement

This place covers:

This group has been completely indexed according to the [C01P](#)-indexation scheme.

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Catalysis	<a href="#">B01J 35/00</a> , <a href="#">B01J 21/00</a>
Coatings on glass	<a href="#">C03C 17/00</a>
Filler in Polymers	<a href="#">C08K 9/00</a>
Treatment of, Pigment and filler	<a href="#">C09C 1/36</a>

Dye sensitized solar cells	<a href="#">H01G 9/20</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

### Synonyms and Keywords

*In patent documents, the following words/expressions are often used as synonyms:*

- "Titanium(IV) oxide", "Titanium dioxide", "Titania", "Rutile (tetragonal)", "Anatase (tetragonal)" and "Brookite (orthorhombic)"

## C01G 23/0475

{Purification}

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 23/053

Producing by wet processes, e.g. hydrolysing titanium salts

### Definition statement

*This place covers:*

Hydrolysis of titanium compounds other than chlorides and sulfates, e.g.. hydrolysis of organo-titanium salts.

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 23/0532

{by hydrolysing sulfate-containing salts}

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 23/0534

{in the presence of seeds}

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 23/0536****{by hydrolysing chloride-containing salts}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 23/0538****{in the presence of seeds}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 23/07****Producing by vapour phase processes, e.g. halide oxidation****Definition statement**

*This place covers:*

Flame pyrolysis, halide oxidation

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 23/075****{Evacuation and cooling of the gaseous suspension containing the oxide;  
Desacidification and elimination of gases occluded in the separated oxide}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 23/08****Drying; Calcining {; After treatment of titanium oxide}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 25/00****Compounds of zirconium****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

PZT (when Zr is not considered as dopant)	Lead zirconate titanate ( $\text{Pb}[\text{Zr}_x\text{Ti}_{1-x}]\text{O}_3$ $0 \leq x \leq 1$ )
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## C01G 25/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 25/006

{Compounds containing zirconium, with or without oxygen or hydrogen, and containing two or more other elements}

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 25/02

### Oxides

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

YSZ	Yttria-stabilized zirconia
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## Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "Zirconium dioxide ( $\text{ZrO}_2$ )", "Zirconia" and, "Baddeleyite"

**C01G 25/04****Halides****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 25/06****Sulfates****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 27/00****Compounds of hafnium****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 27/003**

**{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}**

**References*****Informative references***

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
--	---------------------------

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 27/006**

**{Compounds containing hafnium, with or without oxygen or hydrogen, and containing two or more other elements}**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 27/02****Oxides****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 27/04****Halides****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 27/06****Sulfates****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 28/00****Compounds of arsenic****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 28/001**

**{Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange}**

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 28/002**

**{Compounds containing arsenic, with or without oxygen or hydrogen, and containing two or more other elements ([C01G 28/001](#) takes precedence)}**

**References****Limiting references**

*This place does not cover:*

Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange	<a href="#">C01G 28/001</a>
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**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 28/004**

{containing halogen}

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 28/005**

{Oxides; Hydroxides; Oxyacids ([C01G 28/001](#) takes precedence)}

**References****Limiting references**

*This place does not cover:*

Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange	<a href="#">C01G 28/001</a>
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**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 28/007**

{Halides ([C01G 28/001](#) takes precedence)}

**References****Limiting references**

*This place does not cover:*

Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange	<a href="#">C01G 28/001</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 28/008**

{Sulfides ([C01G 28/001](#) takes precedence)}

**Definition statement**

*This place covers:*

Compounds comprising an anion like  $S^{2-}$  (sulfide), or  $[S_n]^{2-}$  (polysulfide).

## References

### Limiting references

This place does not cover:

Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange	<a href="#">C01G 28/001</a>
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## Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 28/02

**Arsenates; Arsenites** {([C01G 28/001](#) takes precedence)}

## References

### Limiting references

This place does not cover:

Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange	<a href="#">C01G 28/001</a>
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## Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

arsenite	chemical compound containing an arsenic oxoanion where arsenic has oxidation state +3. The different forms of the anion are ortho-arsenite $[\text{AsO}_3]^{3-}$ and meta-arsenite $[\text{AsO}_2]$ . Examples of arsenites include sodium arsenite which contains a polymeric linear anion, $[\text{AsO}_3]_n$ , and silver arsenite, $\text{Ag}_3\text{AsO}_3$ , which contains the trigonal, $\text{AsO}_3$ anion.
arsenate $[\text{AsO}_4]^{3-}$	arsenate (compound) is any compound that contains this ion. Arsenates are salts or esters of arsenic acid. The arsenic atom in arsenate has a valency of 5 and is also known as pentavalent arsenic or As[V].

## C01G 28/023

**{of ammonium, alkali or alkaline-earth metals or magnesium}**

## Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 28/026****{containing at least two metals}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 29/00****Compounds of bismuth****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 29/003****{Preparations involving a liquid-liquid extraction, an adsorption or an ion-exchange}****References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 29/006****{Compounds containing bismuth, with or without oxygen or hydrogen, and containing two or more other elements}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/00****Compounds of antimony****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/001**

{Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange}

**References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/002**

{Compounds containing antimony, with or without oxygen or hydrogen, and containing two or more other elements ([C01G 30/001](#) takes precedence)}

**References****Limiting references**

This place does not cover:

Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange	<a href="#">C01G 30/001</a>
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**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/003**

{containing halogen}

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/004**

{Oxides; Hydroxides; Oxyacids ([C01G 30/001](#) takes precedence)}

**References****Limiting references**

This place does not cover:

Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange	<a href="#">C01G 30/001</a>
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**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/005****{Oxides}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/006****{Halides ([C01G 30/001](#) takes precedence)}****References****Limiting references**

*This place does not cover:*

Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange	<a href="#">C01G 30/001</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/007**

**{of binary type  $SbX_3$  or  $SbX_5$  with X representing a halogen, or mixed of the type  $SbX_3X'_2$  with X,X' representing different halogens}**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/008****{Sulfides ([C01G 30/001](#) takes precedence)}****Definition statement**

*This place covers:*

Compounds comprising an anion like  $S^{2-}$  (sulfide), or  $[S_n]^{2-}$  (polysulfide).

**References****Limiting references**

*This place does not cover:*

Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange	<a href="#">C01G 30/001</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/02**

**Antimonates; Antimonites** {([C01G 30/001](#) takes precedence)}

**References****Limiting references**

*This place does not cover:*

Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange	<a href="#">C01G 30/001</a>
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**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**Glossary of terms**

*In this place, the following terms or expressions are used with the meaning indicated:*

antimonate, antimonite ions	antimonate ion is $[\text{Sb}(\text{OH})_6]^-$ where antimony is present in its +5 oxidation state; antimonite refers to salts of antimony(III), such as $\text{NaSb}(\text{OH})_4$ and $\text{NaSbO}_2$ (metaantimonite). These are formally salts of antimonous acid (antimonious acid), " $\text{Sb}(\text{OH})_3$ ".
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**C01G 30/023**

**{of ammonium, alkali or alkaline-earth metals or magnesium}**

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 30/026**

**{containing at least two metals}**

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 31/00**

**Compounds of vanadium**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## C01G 31/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 31/006

{Compounds containing vanadium, with or without oxygen or hydrogen, and containing two or more other elements}

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 31/02

### Oxides

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 31/04

### Halides

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 33/00

### Compounds of niobium

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 33/003**

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

**References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 33/006**

{Compounds containing niobium, with or without oxygen or hydrogen, and containing two or more other elements}

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 35/00**

**Compounds of tantalum**

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 35/003**

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

**References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 35/006**

**{Compounds containing tantalum, with or without oxygen or hydrogen, and containing two or more other elements}**

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 35/02****Halides****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 37/00****Compounds of chromium****References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Aftertreatment of compounds of chromium to enhance their pigmenting and filling properties	<a href="#">C09C 1/34</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 37/003**

**{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}**

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 37/006**

**{Compounds containing chromium, with or without oxygen or hydrogen, and containing two or more other elements}**

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 37/02**

**Oxides or hydrates thereof**

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 37/027**

**Chromium dioxide**

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 37/033**

**Chromium trioxide; Chromic acid**

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 37/04**

**Chromium halides**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 37/06**

**Chromylhalides**

**Definition statement**

*This place covers:*

A Chromylhalide is a chemical compound with the formula  $\text{CrO}_2(\text{X})_2$ , with X=halogene

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## C01G 37/08

### Chromium sulfates

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 37/10

### Chrome alum

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Chrome alum or Chromium(III) potassium sulfate	the potassium double sulfate of chromium. Its chemical formula is $\text{KCr}(\text{SO}_4)_2$ and it is commonly found in its dodecahydrate form as $\text{KCr}(\text{SO}_4)_2 \cdot 12(\text{H}_2\text{O})$ .
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## C01G 37/14

### Chromates; Bichromates

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Chromate	salts contain the chromate anion, $\text{CrO}_4^{2-}$
Dichromate	salts contain the dichromate anion, $\text{Cr}_2\text{O}_7^{2-}$ . They are oxyanions of chromium in the oxidation state +6.

## C01G 39/00

### Compounds of molybdenum

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 39/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 39/006

{Compounds containing molybdenum, with or without oxygen or hydrogen, and containing two or more other elements}

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 39/02

**Oxides; Hydroxides**

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 39/04

**Halides**

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 39/06

**Sulfides**

### Definition statement

*This place covers:*

Compounds comprising an anion like  $S^{2-}$  (sulfide), or  $[S_n]^{2-}$  (polysulfide).

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 41/00

### Compounds of tungsten

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 41/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

#### References

##### *Informative references*

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 41/006

{Compounds containing tungsten, with or without oxygen or hydrogen, and containing two or more other elements}

#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 41/02

### Oxides; Hydroxides

#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 41/04

### Halides

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 43/00

### Compounds of uranium

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 43/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

#### References

##### *Informative references*

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 43/006

{Compounds containing uranium, with or without oxygen or hydrogen, and containing two or more other elements}

#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 43/01

### Oxides; Hydroxides

#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 43/025

### Uranium dioxide

#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## **C01G 43/04**

### **Halides of uranium**

#### **Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## **C01G 43/06**

### **Fluorides**

#### **Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## **C01G 43/08**

### **Chlorides**

#### **Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## **C01G 43/10**

### **Bromides**

#### **Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## **C01G 43/12**

### **Iodides**

#### **Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## **C01G 45/00**

### **Compounds of manganese**

#### **Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## C01G 45/01

Preparation or separation involving a liquid-liquid extraction, an adsorption or an ion-exchange

### References

#### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 45/02

### Oxides

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 45/04

### Carbonyls

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 45/06

### Halides; Oxyhalides

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 45/08

### Nitrates

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 45/10

### Sulfates

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 45/12

Complex oxides containing manganese and at least one other metal element

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Electrode materials comprising the manganates, manganites	<a href="#">H01M 4/505</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

### Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

manganate	any negatively charged molecular entity with manganese as the central atom: permanganates ( $[\text{MnO}_4]^-$ ) or manganates ( $[\text{MnO}_4]^{2-}$ ). However, for the purpose of classification "manganites", which do not contain discrete oxoanions, but are mixed oxides with perovskite ( $\text{LaMn}^{\text{III}}\text{O}_3$ , $\text{CaMn}^{\text{IV}}\text{O}_3$ ), spinel ( $\text{LiMn}^{\text{III,IV}}_2\text{O}_4$ ) or sodium chloride ( $\text{LiMn}^{\text{III}}\text{O}_2$ , $\text{NaMn}^{\text{III}}\text{O}_2$ ) structures are considered as manganates and shall be classified in the specific subgroup of <a href="#">C01G 45/12</a> .
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## C01G 45/1207

Permanganates ( $[\text{MnO}_4]^-$ ) or manganates ( $[\text{MnO}_4]^{2-}$ )

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 45/1214

containing alkali metals

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 45/1221

Manganates or manganites with trivalent manganese, tetravalent manganese or mixtures thereof

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/1228**

of the type  $(\text{MnO}_2)^-$ , e.g.  $\text{LiMnO}_2$  or  $\text{Li}(\text{M}_x\text{Mn}_{1-x})\text{O}_2$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/1235**

of the type  $(\text{Mn}_2\text{O}_4)^{2-}$ , e.g.  $\text{Li}_2\text{Mn}_2\text{O}_4$  or  $\text{Li}_2(\text{M}_x\text{Mn}_{2-x})\text{O}_4$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/1242**

of the type  $(\text{Mn}_2\text{O}_4)^-$ , e.g.  $\text{LiMn}_2\text{O}_4$  or  $\text{Li}(\text{M}_x\text{Mn}_{2-x})\text{O}_4$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/125**

of the type  $(\text{MnO}_3)^{n-}$ , e.g.  $\text{CaMnO}_3$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/1257**

containing lithium, e.g.  $\text{Li}_2\text{MnO}_3$  or  $\text{Li}_2(\text{M}_x\text{Mn}_{1-x})\text{O}_3$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/1264**

containing rare earths, e.g.  $(\text{La}_{1-x}\text{Ca}_x)\text{MnO}_3$  or  $\text{LaMnO}_3$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/1271**

{of the type  $(\text{Mn}_2\text{O}_8)^{n-}$ , e.g.  $(\text{LaSr}_3)\text{Mn}_2\text{O}_8$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/1278**

{of the type  $(\text{Mn}_2\text{O}_7)^{n-}$ , e.g.  $(\text{Sr}_{2-x}\text{Nd}_x)\text{Mn}_2\text{O}_7$  or  $\text{Tl}_2\text{Mn}_2\text{O}_7$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/1285**

{of the type  $(\text{Mn}_2\text{O}_5)^{n-}$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/1292**

{of the type  $(\text{Mn}_5\text{O}_{12})^{n-}$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 45/22**

**Compounds containing manganese, with or without oxygen or hydrogen, and containing two or more other elements**

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Complex oxides containing manganese and at least one other metal element	<a href="#">C01G 45/12</a>
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**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-Indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 47/00**

**Compounds of rhenium**

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 47/003

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

### References

#### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 47/006

{Compounds containing rhenium, with or without oxygen or hydrogen, and containing two or more other elements}

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 49/00

### Compounds of iron

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 49/0009

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

### References

#### *Informative references*

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

**C01G 49/0018****{Mixed oxides or hydroxides, (C01G 49/0009 takes precedence)}****Definition statement***This place covers:*

e.g. ferrites

**References****Limiting references***This place does not cover:*

Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange	<a href="#">C01G 49/0009</a>
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**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Ceramics	<a href="#">C04B</a>
Magnets	<a href="#">H01F</a>

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

**Glossary of terms***In this place, the following terms or expressions are used with the meaning indicated:*

Ferrites	chemical compounds consisting of ceramic materials with iron(III) oxide ( $\text{Fe}_2\text{O}_3$ ) as their principal component. Many ferrites are spinels with the formula $\text{AB}_2\text{O}_4$ , where A and B represent various metal cations, usually including iron. Spinel ferrites usually adopt a crystal motif consisting of cubic close-packed (fcc) oxides ( $\text{O}^{2-}$ ) with A cations occupying one eighth of the tetrahedral holes and B cations occupying half of the octahedral holes—that is, the inverse spinel structure. Some ferrites have hexagonal crystal structure, e.g. barium ferrite $\text{BaO} \cdot 6\text{Fe}_2\text{O}_3$ or $\text{BaFe}_{12}\text{O}_{19}$ .
Soft ferrites	Ferrites that contain nickel, zinc, and/or manganese compounds. They have a low coercivity and are called soft ferrites, e.g. Manganese-zinc ferrite ( $\text{Mn}_a\text{Zn}_{(1-a)}\text{Fe}_2\text{O}_4$ ).

**C01G 49/0027****{containing one alkali metal}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

**C01G 49/0036****{containing one alkaline earth metal, magnesium or lead}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

**C01G 49/0045****{containing aluminium}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

**C01G 49/0054****{containing one rare earth metal, yttrium or scandium}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

**C01G 49/0063****{containing zinc}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

**C01G 49/0072****{containing manganese}****Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

**C01G 49/0081****{containing iron in unusual valence state [IV, V, VI]}****Definition statement**

*This place covers:*

e.g. ferrates

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

## Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Ferrate(VI)	refers either to the anion $[\text{FeO}_4]^{2-}$ , in which iron is in the +6 oxidation state, or to a salt containing this anion. The term ferrate is often used to mean ferrate(VI), although according to IUPAC naming conventions, it may also refer to other iron-containing oxyanions, such as ferrate(V) and ferrate(IV)
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## C01G 49/009

**{Compounds containing iron, with or without oxygen or hydrogen, and containing two or more other elements}**

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

## C01G 49/02

**Oxides; Hydroxides {(C01G 49/0018 takes precedence)}**

### References

#### Limiting references

This place does not cover:

Mixed oxides or hydroxides	<a href="#">C01G 49/0018</a>
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### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

## C01G 49/04

**Ferrous oxide [FeO]**

### Definition statement

This place covers:

E.g. Wüstite (FeO)

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme The [C01P](#)-Indexation scheme shall be applied.

## C01G 49/06

### Ferric oxide [Fe<sub>2</sub>O<sub>3</sub>]

#### Definition statement

*This place covers:*

E.g. iron(III) oxide (Fe<sub>2</sub>O<sub>3</sub>), alpha phase, hematite (α-Fe<sub>2</sub>O<sub>3</sub>, red), beta phase, (β-Fe<sub>2</sub>O<sub>3</sub>), gamma phase, maghemite (γ-Fe<sub>2</sub>O<sub>3</sub>), epsilon phase, (ε-Fe<sub>2</sub>O<sub>3</sub>), goethite (α-FeOOH, yellow), akaganéite (β-FeOOH), lepidocrocite (γ-FeOOH), feroxyhyte (δ-FeOOH),

#### References

##### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Treatment of iron oxides to enhance their pigmenting and filling properties	<a href="#">C09C 1/22</a> , <a href="#">C09C 1/24</a>
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#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 49/08

### Ferroso-ferric oxide [Fe<sub>3</sub>O<sub>4</sub>]

#### Definition statement

*This place covers:*

E.g. iron(II,III) oxide, magnetite (Fe<sub>3</sub>O<sub>4</sub>, black)

#### References

##### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Treatment of iron oxides to enhance their pigmenting and filling properties	<a href="#">C09C 1/22</a> , <a href="#">C09C 1/24</a>
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#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 49/10

### Halides {([C01G 49/0018](#) takes precedence)}

#### Definition statement

*This place covers:*

Ferrous halogenides, e.g. FeCl<sub>2</sub>; ferric halogenides, e.g. FeCl<sub>3</sub>.

## References

### Limiting references

*This place does not cover:*

Mixed oxides or hydroxides	<a href="#">C01G 49/0018</a>
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## Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 49/12

**Sulfides** {([C01G 49/0018](#) takes precedence)}

### Definition statement

*This place covers:*

Compounds comprising an anion like  $S^{2-}$  (sulfide), or  $[S_n]^{2-}$  (polysulfide).

## References

### Limiting references

*This place does not cover:*

Mixed oxides or hydroxides	<a href="#">C01G 49/0018</a>
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## Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

iron sulfide, iron sulphide	a chemical compound of iron and sulfur with a wide range of stoichiometric formulae and different crystalline structures, e.g. natural minerals: iron(II) sulfide, FeS; troilite, FeS, pyrrhotite; greigite, $Fe_3S_4$ , analog to magnetite, $Fe_3O_4$ ; pyrrhotite, $Fe_{1-x}S$ (where $x = 0$ to $0.2$ ), or $Fe_7S_8$ ; mackinawite, $Fe_{1+x}S$ (where $x = 0$ to $0.1$ ); marcasite, or iron(II) disulfide, $FeS_2$ (orthorhombic); pyrite, or iron(II) disulfide, $FeS_2$ (cubic).
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## C01G 49/14

**Sulfates** {([C01G 49/0018](#) takes precedence)}

### Definition statement

*This place covers:*

E.g. ferrous sulphate, iron(II) sulfate (other names: green vitriol; iron vitriol; copperas; melanterite; szomolnokite),  $FeSO_4$ ; ferric sulphate, Iron(III) sulfate,  $Fe_2(SO_4)_3$ .

**References****Limiting references**

*This place does not cover:*

Mixed oxides or hydroxides	<a href="#">C01G 49/0018</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 49/16**

**Carbonyls** {([C01G 49/0018](#) takes precedence)}

**Definition statement**

*This place covers:*

E.g. pentacarbonyl iron, iron carbonyl.

**References****Limiting references**

*This place does not cover:*

Mixed oxides or hydroxides	<a href="#">C01G 49/0018</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/00**

**Compounds of cobalt**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/01**

**Preparation or separation involving a liquid-liquid extraction, an adsorption or an ion-exchange**

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/02

### Carbonyls

#### Definition statement

*This place covers:*

E.g., Octacarbonyldicobalt(Co—Co), Cobalt carbonyl

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/04

### Oxides

#### Definition statement

*This place covers:*

Cobalt oxides, such as cobalt(II) oxide (cobaltous oxide, cobalt monoxide), CoO, cobalt(III) oxide (cobaltic oxide), Co<sub>2</sub>O<sub>3</sub>, cobalt(II,III) oxide (cobaltosic oxide, tricobalt tetroxide) or Co<sub>3</sub>O<sub>4</sub>.

#### References

##### Informative references

Attention is drawn to the following places, which may be of interest for search:

Use as pigment in ceramics, enamels	<a href="#">C09C 1/0009</a>
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#### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/06

### Carbonates

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/08

### Halides; Oxyhalides

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/085

### {Chlorides; Oxychlorides}

#### Definition statement

*This place covers:*

E.g., Cobalt(II) chloride (Other names : Cobaltous chloride, Cobalt dichloride)

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/10

### Sulfates

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/15

### Sulfides; Oxysulfides

#### Definition statement

*This place covers:*

Compounds comprising an anion like  $S^{2-}$  (sulfide), or  $[S_n]^{2-}$  (polysulfide).

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

#### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

cobalt sulfide	chemical compounds with a formula $Co_xS_y$ . Well-characterized species include minerals with the formula $CoS_2$ (cattierite) and $Co_3S_4$ , (Linnaeite) and the synthetic material $Co_9S_8$ .
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## C01G 51/20

### Complexes with ammonia

#### Definition statement

*This place covers:*

Compounds such as hexaamminecobalt(III) chloride (other names cobalt hexamine chloride, hexaamminecobalt(III) chloride):  $[Co(NH_3)_6]Cl_3$ .

#### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/40

**Complex oxides containing cobalt and at least one other metal element**

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Making of electrodes comprising the manganites or mangantes for use in galvanic primary cells and batteries, galvanic secondary cells and batteries, fuel cells and batteries.	<a href="#">H01M</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

### Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

cobaltates	compounds comprising $\text{CoO}_n^{(x-)}$ anions
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## C01G 51/42

**containing alkali metals, e.g.  $\text{LiCoO}_2$**

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/44

**containing manganese**

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/50

**of the type  $(\text{MnO}_2)^{n-}$ , e.g.  $\text{Li}(\text{Co}_x\text{Mn}_{1-x})\text{O}_2$  or  $\text{Li}(\text{M}_y\text{Co}_x\text{Mn}_{1-x-y})\text{O}_2$**

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 51/52

**of the type  $(\text{Mn}_2\text{O}_4)^{2-}$ , e.g.  $\text{Li}_2(\text{Co}_x\text{Mn}_{2-x})\text{O}_4$  or  $\text{Li}_2(\text{M}_y\text{Co}_x\text{Mn}_{2-x-y})\text{O}_4$**

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/54**

of the type  $(\text{Mn}_2\text{O}_4)^-$ , e.g.  $\text{Li}(\text{Co}_x\text{Mn}_{2-x})\text{O}_4$  or  $\text{Li}(\text{M}_y\text{Co}_x\text{Mn}_{2-x-y})\text{O}_4$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/56**

of the type  $(\text{MnO}_3)^{2-}$ , e.g.  $\text{Li}_2(\text{Co}_x\text{Mn}_{1-x})\text{O}_3$  or  $\text{Li}_2(\text{M}_y\text{Co}_x\text{Mn}_{1-x-y})\text{O}_3$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/58**

{of the type  $(\text{Mn}_2\text{O}_8)^{n-}$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/60**

{of the type  $(\text{Mn}_2\text{O}_7)^{n-}$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/62**

{of the type  $(\text{Mn}_2\text{O}_5)^{n-}$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/64**

{of the type  $(\text{Mn}_5\text{O}_{12})^{n-}$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/66**

containing alkaline earth metals, e.g.  $\text{SrCoO}_3$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/68**

containing rare earths, e.g.  $(\text{La}_{0.3}\text{Sr}_{0.7})\text{CoO}_3$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/70**

containing rare earths, e.g.  $\text{LaCoO}_3$  ([C01G 51/68](#) takes precedence)

**References****Limiting references**

*This place does not cover:*

Containing rare earth and alkaline earth	<a href="#">C01G 51/68</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 51/82**

**Compounds containing cobalt, with or without oxygen or hydrogen, and containing two or more other elements**

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Complex oxides containing cobalt and at least one other metal element	<a href="#">C01G 51/40</a>
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**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-Indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/00**

**Compounds of nickel**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## C01G 53/01

Preparation or separation involving a liquid-liquid extraction, an adsorption or an ion-exchange

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 53/02

### Carbonyls

#### Definition statement

*This place covers:*

E.g. nickel carbonyl (IUPAC name: tetracarbonylnickel) is the organonickel compound with the formula  $\text{Ni}(\text{CO})_4$ . This pale-yellow liquid is the principal carbonyl of nickel.

### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 53/04

### Oxides

#### Definition statement

*This place covers:*

E.g. Nickel(II) oxide (Nickel monoxide, Oxonickel) is the chemical compound with the formula  $\text{NiO}$ . It is notable as being the only well characterized oxide of nickel (although nickel(III) oxide,  $\text{Ni}_2\text{O}_3$  and  $\text{NiO}_2$  have been claimed). The mineralogical form of  $\text{NiO}$ , bunsenite, is very rare.

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 53/06

### Carbonates

#### Definition statement

*This place covers:*

E.g. Nickel(II) carbonate (nickelous carbonate) :  $\text{Ni}_4\text{CO}_3(\text{OH})_6(\text{H}_2\text{O})_4$ ,  $\text{Ni}_4\text{CO}_3(\text{OH})_6(\text{H}_2\text{O})_4$ .

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/08****Halides; Oxyhalides****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/09****Chlorides; Oxychlorides****Definition statement**

*This place covers:*

E.g. Nickel(II) chloride (nickel chloride, nickelous chloride, nickel(II) salt of hydrochloric acid), is the chemical compound  $\text{NiCl}_2$ . (hydrate :  $\text{NiCl}_2 \cdot 6\text{H}_2\text{O}$ ; mineral nickelbischofite).

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/10****Sulfates****Definition statement**

*This place covers:*

E.g. Nickel(II) sulphate (nickel sulfate, nickelous sulphate) usually refers to the formula  $\text{NiSO}_4(\text{H}_2\text{O})_6$ .

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/11****Sulfides; Oxysulfides****Definition statement**

*This place covers:*

Compounds comprising an anion like  $\text{S}^{2-}$  (sulfide), or  $[\text{S}_n]^{2-}$  (polysulfide).

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/12****Complexes with ammonia****Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/40****Complex oxides containing nickel and at least one other metal element****Definition statement**

*This place covers:*

Nickelates are compounds comprising  $\text{NiO}_n^{x-}$  anions.

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Making of electrodes comprising the manganites or manganates for use in galvanic primary cells and batteries, galvanic secondary cells and batteries, fuel cells and batteries.	<a href="#">H01M</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/42**

**containing alkali metals, e.g.  $\text{LiNiO}_2$**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/44**

**containing manganese**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/50**

**of the type  $(\text{MnO}_2)^{n-}$ , e.g.  $\text{Li}(\text{Ni}_x\text{Mn}_{1-x})\text{O}_2$  or  $\text{Li}(\text{M}_y\text{Ni}_x\text{Mn}_{1-x-y})\text{O}_2$**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/52**

**of the type  $(\text{Mn}_2\text{O}_4)^{2-}$ , e.g.  $\text{Li}_2(\text{Ni}_x\text{Mn}_{2-x})\text{O}_4$  or  $\text{Li}_2(\text{M}_y\text{Ni}_x\text{Mn}_{2-x-y})\text{O}_4$**

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/54**

of the type  $(\text{Mn}_2\text{O}_4)^-$ , e.g.  $\text{Li}(\text{Ni}_x\text{Mn}_{2-x})\text{O}_4$  or  $\text{Li}(\text{M}_y\text{Ni}_x\text{Mn}_{2-x-y})\text{O}_4$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/56**

of the type  $(\text{MnO}_3)^{2-}$ , e.g.  $\text{Li}_2(\text{Ni}_x\text{Mn}_{1-x})\text{O}_3$  or  $\text{Li}_2(\text{M}_y\text{Ni}_x\text{Mn}_{1-x-y})\text{O}_3$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/58**

{of the type  $(\text{Mn}_2\text{O}_8)^{n-}$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/60**

{of the type  $(\text{Mn}_2\text{O}_7)^{n-}$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/62**

{of the type  $(\text{Mn}_2\text{O}_5)^{n-}$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/64**

{of the type  $(\text{Mn}_5\text{O}_{12})^{n-}$ }

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/66**

containing alkaline earth metals, e.g.  $\text{SrNiO}_3$  or  $\text{SrNiO}_2$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/68**

containing rare earths, e.g.  $(\text{La}_{1.62} \text{Sr}_{0.38})\text{NiO}_4$

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/70**

containing rare earths, e.g.  $\text{LaNiO}_3$  ([C01G 53/68](#) takes precedence)

**References****Limiting references**

*This place does not cover:*

Containing rare earth and alkaline earth	<a href="#">C01G 53/68</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 53/82**

Compounds containing nickel, with or without oxygen or hydrogen, and containing two or more other elements

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Complex oxides containing nickel and at least one other metal element	<a href="#">C01G 53/40</a>
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**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-Indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 55/00**

Compounds of ruthenium, rhodium, palladium, osmium, iridium, or platinum

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Salts of organic acids	<a href="#">C07C</a>
Organometallic compounds	<a href="#">C07F</a>

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

## C01G 55/001

{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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### Special rules of classification

The [C01P](#)-Indexation scheme shall be applied.

## C01G 55/002

{Compounds containing ruthenium, rhodium, palladium, osmium, iridium or platinum, with or without oxygen or hydrogen, and containing two or more other elements ([C01G 55/007](#) takes precedence)}

### References

#### Limiting references

This place does not cover:

Compounds of ruthenium, rhodium, palladium, osmium, iridium, or platinum containing at least one carbonyl group	<a href="#">C01G 55/007</a>
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#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Acyclic or carbocyclic compounds	<a href="#">C07C</a>
Acyclic, carbocyclic or heterocyclic compounds containing elements other than carbon, hydrogen, halogen, oxygen, nitrogen, sulfur, selenium or tellurium	<a href="#">C07F</a>

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

## C01G 55/004

{Oxides; Hydroxides}

### Special rules of classification

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 55/005****{Halides}****Special rules of classification**The [C01P](#)-Indexation scheme shall be applied.**C01G 55/007****{Compounds containing at least one carbonyl group}****Special rules of classification**The [C01P](#)-Indexation scheme shall be applied.**C01G 56/00****Compounds of transuranic elements****Definition statement***This place covers:*

In chemistry, transuranium elements (also known as transuranic elements) are the chemical elements with atomic numbers greater than 92 (the atomic number of uranium) and comprise two chemical series :

Actinides : 93. neptunium, Np, 94. plutonium, Pu, 95. americium, Am, 96. curium, Cm, 97. berkelium, Bk, 98. californium, Cf, 99. einsteinium, Es, 100. fermium, Fm, 101. mendelevium, Md, 102. nobelium, No, 103. lawrencium, Lr,

Transactinide elements : 104. rutherfordium, Rf, 105. dubnium, Db, 106. seaborgium, Sg, 107. bohrium, Bh, 108. hassium, Hs, 109. meitnerium, Mt, 110. darmstadtium, Ds, 111. roentgenium, Rg, 112. copernicium, Cn, 113. Ununtrium, temporary name, (2003), 114. Ununquadium, temporary name, (1998), 115. Ununpentium, temporary name, (2004), 116. Ununhexium, temporary name, (2000), 117. Ununseptium, temporary name, (2010), 118. Ununoctium, temporary name, (2002).

**Special rules of classification**The [C01P](#)-Indexation scheme shall be applied.**C01G 56/001****{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**The [C01P](#)-Indexation scheme shall be applied.

**C01G 56/003**

{Compounds containing transuranic elements, with or without oxygen or hydrogen, and containing two or more other elements ([C01G 56/001](#) takes precedence)}

**References****Limiting references**

*This place does not cover:*

Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange	<a href="#">C01G 56/001</a>
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**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 56/004**

{Compounds of plutonium ([C01G 56/001](#) takes precedence)}

**References****Limiting references**

*This place does not cover:*

Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange	<a href="#">C01G 56/001</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 56/007**

{Compounds of transuranic elements ([C01G 56/001](#) and [C01G 56/004](#) take precedence)}

**References****Limiting references**

*This place does not cover:*

Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange	<a href="#">C01G 56/001</a>
Compounds of plutonium	<a href="#">C01G 56/004</a>

**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 99/00**

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

**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.

**C01G 99/003**

**{Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}**

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Extraction of metal compounds from ores or concentrates by wet processes	<a href="#">C22B 3/00</a>
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**Special rules of classification**

The [C01P](#)-Indexation scheme shall be applied.

**C01G 99/006**

**{Compounds containing a metal not provided for elsewhere in this subclass, with or without oxygen or hydrogen, and containing two or more other elements ([C01G 99/003](#) takes precedence)}**

**References****Limiting references**

*This place does not cover:*

Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange	<a href="#">C01G 99/003</a>
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**Special rules of classification**

This group has been completely indexed according to the [C01P](#)-indexation scheme. The [C01P](#)-Indexation scheme shall be applied.