

CPC COOPERATIVE PATENT CLASSIFICATION

C CHEMISTRY; METALLURGY

(NOTES omitted)

METALLURGY

C23 COATING METALLIC MATERIAL; COATING MATERIAL WITH METALLIC MATERIAL; CHEMICAL SURFACE TREATMENT; DIFFUSION TREATMENT OF METALLIC MATERIAL; COATING BY VACUUM EVAPORATION, BY SPUTTERING, BY ION IMPLANTATION OR BY CHEMICAL VAPOUR DEPOSITION, IN GENERAL; INHIBITING CORROSION OF METALLIC MATERIAL OR INCRUSTATION IN GENERAL

(NOTES omitted)

C23G CLEANING OR DEGREASING OF METALLIC MATERIAL BY CHEMICAL METHODS OTHER THAN ELECTROLYSIS ([polishing compositions C09G](#); [detergents in general C11D](#))

WARNING

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

- 1/00** Cleaning or pickling metallic material with solutions or molten salts ([with organic solvents C23G 5/02](#))
- 1/02 . with acid solutions
- 1/025 . . {acidic pickling pastes}
- 1/04 . . using inhibitors
- 1/06 . . . organic inhibitors

NOTE

In groups [C23G 1/061](#) - [C23G 1/068](#) an invention is classified in the last appropriate place

- 1/061 {nitrogen-containing compounds}
- 1/063 {heterocyclic compounds}
- 1/065 {sulfur-containing compounds}
- 1/066 {phosphorus-containing compounds}
- 1/068 {compounds containing a C=C bond}
- 1/08 . . Iron or steel

NOTE

In groups [C23G 1/081](#) - [C23G 1/088](#) an invention is classified in the last appropriate place

- 1/081 . . . {solutions containing H₂SO₄}
- 1/083 . . . {solutions containing H₃PO₄}
- 1/085 . . . {solutions containing HNO₃}
- 1/086 . . . {solutions containing HF}
- 1/088 . . . {solutions containing organic acids}
- 1/10 . . Other heavy metals
- 1/103 . . . {copper or alloys of copper}
- 1/106 . . . {refractory metals}
- 1/12 . . Light metals
- 1/125 . . . {aluminium}
- 1/14 . with alkaline solutions

- 1/16 . . using inhibitors
- 1/18 . . . Organic inhibitors
- 1/19 . . Iron or steel
- 1/20 . . Other heavy metals
- 1/205 . . . {refractory metals}
- 1/22 . . Light metals
- 1/24 . with neutral solutions
- 1/26 . . using inhibitors
- 1/28 . with molten salts
- 1/30 . . using inhibitors
- 1/32 . . Heavy metals
- 1/34 . . Light metals
- 1/36 . Regeneration of waste pickling liquors

3/00 Apparatus for cleaning or pickling metallic material ([with organic solvents C23G 5/04](#) ; [apparatus for continuously conveying articles into baths B65G](#))

- 3/02 . for cleaning wires, strips, filaments continuously
- 3/021 . . {by dipping}
- 3/022 . . . {the objects following a helicoidal path}
- 3/023 . . {by spraying}
- 3/024 . . {by a combination of dipping and spraying}
- 3/025 . . {Details of the apparatus, e.g. linings or sealing means}
- 3/026 . . . {for guiding the objects}
- 3/027 . . {Associated apparatus, e.g. for pretreating or after-treating}
- 3/028 . . . {for thermal or mechanical pretreatment}
- 3/029 . . . {for removing the pickling fluid from the objects}
- 3/04 . for cleaning pipes

5/00 Cleaning or de-greasing metallic material by other methods; Apparatus for cleaning or de-greasing metallic material with organic solvents

NOTE

Mixtures of organic solvents are classified according to the major component

- | | |
|---------|---|
| 5/02 | . using organic solvents |
| 5/024 | . . containing hydrocarbons |
| 5/028 | . . containing halogenated hydrocarbons |
| 5/02803 | . . . {containing fluorine} |
| 5/02806 | . . . {containing only chlorine as halogen atom} |
| 5/02809 | . . . {containing chlorine and fluorine} |
| 5/02812 | {Perhalogenated hydrocarbons} |
| 5/02816 | {Ethanes} |
| 5/02819 | {C ₂ Cl ₃ F ₃ } |
| 5/02822 | {C ₂ Cl ₄ F ₂ } |
| 5/02825 | {containing hydrogen} |
| 5/02829 | {Ethanes} |
| 5/02832 | {C ₂ H ₃ Cl ₂ F} |
| 5/02835 | {C ₂ H ₂ Cl ₂ F ₂ } |
| 5/02838 | {C ₂ HCl ₂ F ₃ } |
| 5/02841 | {Propanes} |
| 5/02845 | {C ₃ H ₃ ClF ₄ } |
| 5/02848 | {C ₂ H ₂ Cl ₂ F ₄ } |
| 5/02851 | {C ₂ HCl ₂ F ₅ } |
| 5/02854 | . . . {characterised by the stabilising or corrosion
inhibiting additives} |
| 5/02858 | {Hydrocarbons} |
| 5/02861 | {Oxygen-containing compounds} |
| 5/02864 | {Alcohols} |
| 5/02867 | {aliphatic} |
| 5/0287 | {aromatic} |
| 5/02874 | {Aldehydes or ketones} |
| 5/02877 | {Ethers} |
| 5/0288 | {Epoxy compounds} |
| 5/02883 | {Nitrogen-containing compounds} |
| 5/02887 | {Nitro-compounds} |
| 5/0289 | {N-heterocyclics} |
| 5/02893 | {Sulfur-containing compounds} |
| 5/02896 | {Phosphorus-containing compounds} |
| 5/032 | . . containing oxygen-containing compounds |
| 5/036 | . . . having also nitrogen |
| 5/04 | . . Apparatus |
| 5/06 | . using emulsions |