

# CPC COOPERATIVE PATENT CLASSIFICATION

## C CHEMISTRY; METALLURGY

(NOTES omitted)

### METALLURGY

#### C25 ELECTROLYTIC OR ELECTROPHORETIC PROCESSES; APPARATUS THEREFOR

(electrodialysis, electro-osmosis, separation of liquids by electricity [B01D](#); {separation of isotopes by electrochemical methods [B01D 59/38](#)}; working of metal by the action of a high concentration of electric current [B23H](#); treatment of water, waste water or sewage by electrochemical methods [C02F 1/46](#); surface treatment of metallic material or coating involving at least one process provided for in class [C23](#) and at least one process covered by this class [C23C 28/00](#), [C23F 17/00](#); anodic or cathodic protection [C23F](#); single-crystal growth [C30B](#); metallising textiles [D06M 11/83](#); decorating textiles by locally metallising [D06Q 1/04](#); electrochemical methods of analysis [G01N](#); electrochemical measuring, indicating or recording devices [G01R](#); electrolytic circuit elements, e.g. capacitors, [H01G](#); electrochemical current or voltage generators [H01M](#))

(NOTES omitted)

#### C25C PROCESSES FOR THE ELECTROLYTIC PRODUCTION, RECOVERY OR REFINING OF METALS; APPARATUS THEREFOR

- |             |   |             |   |
|-------------|---|-------------|---|
| <b>1/00</b> | <b>Electrolytic production, recovery or refining of metals by electrolysis of solutions</b> ( <a href="#">C25C 5/00</a> takes precedence) | 3/20        | . . Automatic control or regulation of cells ( <a href="#">controlling or regulating in general G05</a> )   |
| 1/02        | . of light metals   | 3/22        | . . Collecting emitted gases  |
| 1/04        | . . in mercury cathode cells  | 3/24        | . . Refining  |
| 1/06        | . or iron group metals, refractory metals or manganese  | 3/26        | . of titanium, zirconium, hafnium, tantalum or vanadium   |
| 1/08        | . . of nickel or cobalt   | 3/28        | . . of titanium   |
| 1/10        | . . of chromium or manganese  | 3/30        | . of manganese  |
| 1/12        | . of copper   | 3/32        | . of chromium   |
| 1/14        | . of tin  | 3/34        | . of metals not provided for in groups <a href="#">C25C 3/02</a> - <a href="#">C25C 3/32</a>  |
| 1/16        | . of zinc, cadmium or mercury   | 3/36        | . Alloys obtained by cathodic reduction of all their ions   |
| 1/18        | . of lead   |             |   |
| 1/20        | . of noble metals   | <b>5/00</b> | <b>Electrolytic production, recovery or refining of metal powders or porous metal masses</b>  |
| 1/22        | . of metals not provided for in groups <a href="#">C25C 1/02</a> - <a href="#">C25C 1/20</a>  | 5/02        | . from solutions  |
| 1/24        | . Alloys obtained by cathodic reduction of all their ions   | 5/04        | . from melts  |
| <b>3/00</b> | <b>Electrolytic production, recovery or refining of metals by electrolysis of melts</b> ( <a href="#">C25C 5/00</a> takes precedence)     | <b>7/00</b> | <b>Constructional parts, or assemblies thereof, of cells; Servicing or operating of cells (for the production of aluminium <a href="#">C25C 3/06</a> - <a href="#">C25C 3/22</a>)</b> |
| 3/02        | . of alkali or alkaline earth metals  | 7/002       | . {of cells comprising at least an electrode made of particles ( <a href="#">C25C 7/005</a> , <a href="#">C25C 7/02</a> - <a href="#">C25C 7/06</a> take precedence)}                 |
| 3/04        | . of magnesium  | 7/005       | . {of cells for the electrolysis of melts ( <a href="#">C25C 7/02</a> - <a href="#">C25C 7/06</a> take precedence)}   |
| 3/06        | . of aluminium  | 7/007       | . {of cells comprising at least a movable electrode ( <a href="#">C25C 7/002</a> , <a href="#">C25C 7/02</a> - <a href="#">C25C 7/06</a> take precedence)}                            |
| 3/08        | . . Cell construction, e.g. bottoms, walls, cathodes  | 7/02        | . Electrodes ( <a href="#">consumable anodes for the refining the metals <a href="#">C25C 1/00</a> - <a href="#">C25C 5/00</a></a> ); Connections thereof                             |
| 3/085       | . . . {characterised by its non electrically conducting heat insulating parts}  | 7/025       | . . {used in cells for the electrolysis of melts}   |
| 3/10        | . . . External supporting frames or structures  | 7/04        | . Diaphragms; Spacing elements  |
| 3/12        | . . . Anodes  |             |   |
| 3/125       | . . . . {based on carbon}   |             |   |
| 3/14        | . . Devices for feeding or crust breaking   |             |   |
| 3/16        | . . Electric current supply devices, e.g. bus bars  |             |   |
| 3/18        | . . Electrolytes  |             |   |

## C25C

- 7/06 . Operating or servicing
- 7/08 . . Separating of deposited metals from the cathode