

## SECTION C — CHEMISTRY; METALLURGY

### C25 ELECTROLYTIC OR ELECTROPHORETIC PROCESSES; APPARATUS THEREFOR

#### C25B ELECTROLYTIC OR ELECTROPHORETIC PROCESSES FOR THE PRODUCTION OF COMPOUNDS OR NON-METALS; APPARATUS THEREFOR (anodic or cathodic protection C23F 13/00; single-crystal growth C30B) [2]

##### Note(s)

1. In this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.
2. Compounds of particular interest are also classified in the relevant classes, e.g. in C01, C07.

#### **1/00 Electrolytic production of inorganic compounds or non-metals [2]**

- 1/02 • of hydrogen or oxygen [2]
- 1/04 • • by electrolysis of water [2]
- 1/06 • • • in cells with flat or plate-like electrodes [2]
- 1/08 • • • • of the filter-press type [2]
- 1/10 • • • in diaphragm cells [2]
- 1/12 • • • in pressure cells [2]
- 1/13 • of ozone [7]
- 1/14 • of alkali metal compounds [2]
- 1/16 • • Hydroxides [2]
- 1/18 • of alkaline earth metal compounds or magnesium compounds [2]
- 1/20 • • Hydroxides [2]
- 1/21 • of manganese oxides [7]
- 1/22 • of inorganic acids [2]
- 1/24 • of halogens or compounds thereof [2]
- 1/26 • • Chlorine; Compounds thereof [2]
- 1/28 • of per-compounds [2]
- 1/30 • • Peroxides [2]
- 1/32 • • Perborates [2]
- 1/34 • Simultaneous production of alkali metal hydroxides and chlorine, its oxyacids or salts [2]
- 1/36 • • in mercury cathode cells [2]
- 1/38 • • • with vertical mercury cathode [2]
- 1/40 • • • with horizontal mercury cathode [2]
- 1/42 • • • Decomposition of amalgams [2]
- 1/44 • • • • with the aid of catalysts [2]
- 1/46 • • in diaphragm cells [2]

#### **3/00 Electrolytic production of organic compounds [2]**

- 3/02 • by oxidation [2]
- 3/04 • by reduction [2]
- 3/06 • by halogenation [2]
- 3/08 • • by fluorination [2]
- 3/10 • by coupling reactions, e.g. dimerisation [2]
- 3/12 • of organo-metallic compounds [2]

#### **5/00 Electrogenenerative processes, i.e. processes for producing compounds in which simultaneously electricity is generated [2]**

#### **7/00 Electrophoretic production of compounds or non-metals (separation or purification of peptides, e.g. of proteins, by electrophoresis C07K 1/26) [2]**

#### **9/00 Cells or assemblies of cells; Constructional parts of cells; Assemblies of constructional parts, e.g. electrode-diaphragm assemblies [2, 7]**

- 9/02 • Holders for electrodes [2]
- 9/04 • Devices for current supply; Electrode connections; Electric inter-cell connections [2]
- 9/06 • Cells comprising dimensionally-stable non-movable electrodes; Assemblies of constructional parts thereof [7]
- 9/08 • • with diaphragms [7]
- 9/10 • • • including an ion-exchange membrane in or on which electrode material is embedded [7]
- 9/12 • Cells or assemblies of cells comprising at least one movable electrode, e.g. rotary electrodes; Assemblies of constructional parts thereof [7]
- 9/14 • • Liquid electrodes, e.g. mercury electrodes [7]
- 9/16 • Cells or assemblies of cells comprising at least one electrode made of particles; Assemblies of constructional parts thereof [7]
- 9/18 • Assemblies comprising a plurality of cells (assemblies of cells with movable electrodes C25B 9/12; assemblies of cells with electrodes made of particles C25B 9/16) [7]
- 9/20 • • of the filter-press type [7]

#### **11/00 Electrodes; Manufacture thereof not otherwise provided for [2]**

- 11/02 • characterised by shape or form [2]
- 11/03 • • perforated or foraminous [2]
- 11/04 • characterised by the material [2]
- 11/06 • • by the catalytic materials used [2]
- 11/08 • • • Noble metals [2]
- 11/10 • • Electrodes based on barrier-type metals, e.g. titanium [2]
- 11/12 • • Electrodes based on carbon [2]
- 11/14 • • • Impregnation of carbon electrodes (C25B 11/06 takes precedence) [2]
- 11/16 • • Electrodes based on manganese dioxide or lead dioxide [2]
- 11/18 • • Mercury or amalgam electrodes [2]

#### **13/00 Diaphragms; Spacing elements [4]**

- 13/02 • characterised by form or shape [2]
- 13/04 • characterised by the material [2]
- 13/06 • • based on asbestos [2]
- 13/08 • • based on organic materials [2]

15/00	<b>Operating or servicing of cells [2]</b>	15/06	• Detection or inhibition of short circuits in the cell [2]
15/02	• Process control or regulation [2]	15/08	• Supplying or removing reactants or electrolytes;
15/04	• Regulation of the inter-electrode distance [2]		Regeneration of electrolytes [2]