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) [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, 2006.01, 2021.01]

1/01 • Products **[2021.01]**
1/02 • • Hydrogen or oxygen **[2, 2006.01]**
1/04 • • • by electrolysis of water **[2, 2006.01, 2021.01]**
1/042 • • • • by electrolysis of steam **[2021.01]**
1/044 • • • • producing mixed hydrogen and oxygen gas, e.g. Brown's gas [HHO] **[2021.01]**
1/13 • • Ozone **[7, 2006.01]**
1/135 • • Carbon **[2021.01]**
1/14 • • Alkali metal compounds **[2, 2006.01]**
1/16 • • • Hydroxides (by simultaneous production of alkali metal hydroxides and chlorine, oxyacids or salts of chlorine C25B 1/34) **[2, 2006.01]**
1/18 • • Alkaline earth metal compounds or magnesium compounds **[2, 2006.01]**
1/20 • • • Hydroxides **[2, 2006.01]**
1/21 • • Manganese oxides **[7, 2006.01]**
1/22 • • Inorganic acids **[2, 2006.01]**
1/23 • • Carbon monoxide or syngas **[2021.01]**
1/24 • • Halogens or compounds thereof **[2, 2006.01, 2021.01]**
1/245 • • • Fluorine; Compounds thereof **[2021.01]**
1/26 • • • Chlorine; Compounds thereof (by simultaneous production of alkali metal hydroxides and chlorine, oxyacids or salts of chlorine C25B 1/34) **[2, 2006.01]**
1/27 • • Ammonia **[2021.01]**
1/28 • • Per-compounds **[2, 2006.01, 2021.01]**
1/29 • • • Persulfates **[2021.01]**
1/30 • • • Peroxides **[2, 2006.01]**
1/32 • • • Perborates **[2, 2006.01]**
1/33 • • Silicon **[2021.01]**
1/34 • • Simultaneous production of alkali metal hydroxides and chlorine, oxyacids or salts of chlorine, e.g. by chlor-alkali electrolysis **[2, 2006.01]**
1/36 • • • in mercury cathode cells **[2, 2006.01, 2021.01]**
1/42 • • • • Decomposition of amalgams **[2, 2006.01]**
1/44 • • • • • with the aid of catalysts **[2, 2006.01]**
1/46 • • • in diaphragm cells **[2, 2006.01]**
1/50 • Processes **[2021.01]**
1/55 • • Photoelectrolysis **[2021.01]**

3/00 Electrolytic production of organic compounds [2, 2006.01, 2021.01]

3/01 • Products **[2021.01]**
3/03 • • Acyclic or carbocyclic hydrocarbons **[2021.01]**
3/05 • • Heterocyclic compounds **[2021.01]**
3/07 • • Oxygen containing compounds **[2021.01]**
3/09 • • Nitrogen containing compounds **[2021.01]**
3/11 • • Halogen containing compounds **[2021.01]**
3/13 • • Organo-metallic compounds **[2021.01]**
3/20 • Processes **[2021.01]**
3/21 • • Photoelectrolysis **[2021.01]**
3/23 • • Oxidation (halogenation C25B 3/27) **[2021.01]**
3/25 • • Reduction **[2021.01]**
3/26 • • • of carbon dioxide **[2021.01]**
3/27 • • Halogenation **[2021.01]**
3/28 • • • Fluorination **[2021.01]**
3/29 • • Coupling reactions **[2021.01]**

5/00 Electrogenerative processes, i.e. processes for producing compounds in which electricity is generated simultaneously [2, 2006.01]

7/00 Electrophoretic production of compounds or non-metals (separation or purification of peptides, e.g. of proteins, by electrophoresis C07K 1/26) **[2, 2006.01]**

9/00 Cells or assemblies of cells; Constructional parts of cells; Assemblies of constructional parts, e.g. electrode-diaphragm assemblies; Process-related cell features [2, 7, 2006.01, 2021.01]

9/01 • Electrolytic cells characterised by shape or form **[2021.01]**
9/015 • • Cylindrical cells **[2021.01]**
9/05 • Pressure cells **[2021.01]**
9/07 • Common duct cells **[2021.01]**
9/09 • Fused bath cells **[2021.01]**
9/13 • Single electrolytic cells with circulation of an electrolyte **[2021.01]**
9/15 • • Flow-through cells **[2021.01]**
9/17 • Cells comprising dimensionally-stable non-movable electrodes; Assemblies of constructional parts thereof **[2021.01]**
9/19 • • with diaphragms **[2021.01]**
9/21 • • • two or more diaphragms **[2021.01]**
9/23 • • • comprising ion-exchange membranes in or on which electrode material is embedded **[2021.01]**
9/30 • Cells comprising movable electrodes, e.g. rotary electrodes; Assemblies of constructional parts thereof **[2021.01]**

9/40 • Cells or assemblies of cells comprising electrodes made of particles; Assemblies of constructional parts thereof **[2021.01]**
9/50 • Cells or assemblies of cells comprising photoelectrodes; Assemblies of constructional parts thereof **[2021.01]**
9/60 • Constructional parts of cells **[2021.01]**
9/63 • • Holders for electrodes; Positioning of the electrodes **[2021.01]**
9/65 • • Means for supplying current; Electrode connections; Electric inter-cell connections **[2021.01]**
9/67 • • Heating or cooling means **[2021.01]**
9/70 • Assemblies comprising two or more cells **[2021.01]**
9/73 • • of the filter-press type **[2021.01]**
9/75 • • • having bipolar electrodes **[2021.01]**
9/77 • • • having diaphragms **[2021.01]**

11/00 Electrodes; Manufacture thereof not otherwise provided for [2, 2006.01, 2021.01]
11/02 • characterised by shape or form **[2, 2006.01, 2021.01]**
11/03 • • perforated or foraminous **[2, 2006.01, 2021.01]**
11/031 • • • Porous electrodes **[2021.01]**
11/032 • • • • Gas diffusion electrodes **[2021.01]**
11/033 • • Liquid electrodes **[2021.01]**
11/034 • • Rotary electrodes **[2021.01]**
11/036 • • Bipolar electrodes **[2021.01]**
11/037 • • Electrodes made of particles **[2021.01]**
11/04 • characterised by the material **[2, 2006.01, 2021.01]**
11/042 • • Electrodes formed of a single material **[2021.01]**
11/043 • • • Carbon, e.g. diamond or graphene **[2021.01]**
11/044 • • • • Impregnation of carbon **[2021.01]**
11/045 • • • Mercury or amalgam **[2021.01]**
11/046 • • • Alloys **[2021.01]**
11/047 • • • Ceramics **[2021.01]**
11/048 • • • Organic compounds **[2021.01]**
11/049 • • • Photocatalysts **[2021.01]**
11/051 • • Electrodes formed of electrocatalysts on a substrate or carrier **[2021.01]**
11/052 • • • Electrodes comprising one or more electrocatalytic coatings on a substrate **[2021.01]**
11/053 • • • • characterised by multilayer electrocatalytic coatings **[2021.01]**
11/054 • • • Electrodes comprising electrocatalysts supported on a carrier **[2021.01]**
11/055 • • • characterised by the substrate or carrier material **[2021.01]**
11/056 • • • • consisting of textile or non-woven fabric **[2021.01]**
11/057 • • • • consisting of a single element or compound **[2021.01]**
11/059 • • • • • Silicon **[2021.01]**
11/061 • • • • • Metal or alloy **[2021.01]**
11/063 • • • • • • Valve metal, e.g. titanium **[2021.01]**
11/065 • • • • • Carbon **[2021.01]**
11/067 • • • • • Inorganic compound e.g. ITO, silica or titania **[2021.01]**
11/069 • • • • consisting of at least one single element and at least one compound; consisting of two or more compounds **[2021.01]**
11/071 • • • • • comprising metal or alloy powder and non-metallic binders **[2021.01]**
11/073 • • • characterised by the electrocatalysts material **[2021.01]**
11/075 • • • • consisting of a single catalytic element or catalytic compound **[2021.01]**
11/077 • • • • • the compound being a non-noble metal oxide **[2021.01]**
11/079 • • • • • • Manganese dioxide; Lead dioxide **[2021.01]**
11/081 • • • • • the element being a noble metal **[2021.01]**
11/083 • • • • • Diamond **[2021.01]**
11/085 • • • • • Organic compound **[2021.01]**
11/087 • • • • • Photocatalytic compound **[2021.01]**
11/089 • • • • • Alloys **[2021.01]**
11/091 • • • • consisting of at least one catalytic element and at least one catalytic compound; consisting of two or more catalytic elements or catalytic compounds **[2021.01]**
11/093 • • • • • at least one noble metal or noble metal oxide and at least one non-noble metal oxide **[2021.01]**
11/095 • • • • • at least one of the compounds being organic **[2021.01]**
11/097 • • • • • comprising two or more noble metals or noble metal alloys **[2021.01]**

13/00 Diaphragms; Spacing elements [4, 2006.01]
13/02 • characterised by shape or form **[2, 2006.01]**
13/04 • characterised by the material **[2, 2006.01, 2021.01]**
13/05 • • based on inorganic materials **[2021.01]**
13/06 • • • based on asbestos **[2, 2006.01]**
13/07 • • • based on ceramics **[2021.01]**
13/08 • • based on organic materials **[2, 2006.01]**

15/00 Operating or servicing cells [2, 2006.01]
15/02 • Process control or regulation **[2, 2006.01, 2021.01]**
15/021 • • of heating or cooling **[2021.01]**
15/023 • • Measuring, analysing or testing during electrolytic production **[2021.01]**
15/025 • • • of electrolyte parameters **[2021.01]**
15/027 • • • • Temperature **[2021.01]**
15/029 • • • • Concentration **[2021.01]**
15/031 • • • • • pH **[2021.01]**
15/033 • • • • Conductivity **[2021.01]**
15/04 • Regulation of the inter-electrode distance **[2, 2006.01]**
15/06 • Detection or inhibition of short circuits in the cell **[2, 2006.01]**
15/08 • Supplying or removing reactants or electrolytes; Regeneration of electrolytes **[2, 2006.01]**