Symbol	Typ	Titel
C	**Sektion**	**SECTION C — CHEMISTRY; METALLURGY**
C23	**Klasse**	**COATING METALLIC MATERIAL; COATING MATERIAL WITH METALLIC MATERIAL (by metallising textiles D06M 11/83; decorating textiles by locally metallising D06Q 1/04); CHEMICAL SURFACE TREATMENT; DIFFUSION TREATMENT OF METALLIC MATERIAL; COATING BY VACUUM EVAPORATION, BY SPUTTERING, BY ION IMPLANTATION OR BY CHEMICAL VAPOUR DEPOSITION, IN GENERAL (for specific applications, see the relevant places, e.g. for manufacturing resistors H01C 17/06); INHIBITING CORROSION OF METALLIC MATERIAL OR INCRUSTATION IN GENERAL (treating metal surfaces or coating of metals by electrolysis or electrophoresis C25D, C25F) [2]**
C23F	**Unterklasse**	**NON-MECHANICAL REMOVAL OF METALLIC MATERIAL FROM SURFACES (working of metal by electro-erosion B23H; desurfacing by applying flames B23K 7/00; working metal by laser beam B23K 26/00; producing decorative effects by removing surface-material, e.g. by engraving, by etching, B44C 1/22; electrolytic etching or polishing C25F); INHIBITING CORROSION OF METALLIC MATERIAL; INHIBITING INCRUSTATION IN GENERAL; MULTI-STEP PROCESSES FOR SURFACE TREATMENT OF METALLIC MATERIAL INVOLVING AT LEAST ONE PROCESS PROVIDED FOR IN CLASS C23 AND AT LEAST ONE PROCESS COVERED BY SUBCLASS C21D OR C22F OR CLASS C25 (inhibition or prevention of corrosion or incrustation during processing of hydrocarbons C10G 7/10, C10G 9/16, C10G 75/00) [4]**
C23F 1/00	**Hauptgruppe**	**Etching metallic material by chemical means (manufacture of printing surfaces B41C; manufacture of printed circuits H05K) [2]**
C23F 1/02	1-Punkt Untergruppe	. Local etching
C23F 1/04	2-Punkt Untergruppe	. . Chemical milling
C23F 1/06	1-Punkt Untergruppe	. Sharpening files
C23F 1/08	1-Punkt Untergruppe	. Apparatus, e.g. for photomechanical printing surfaces (photomechanical reproduction G03F)
C23F 1/10	1-Punkt Untergruppe	. Etching compositions (C23F 1/44 takes precedence) [4]
C23F 1/12	2-Punkt Untergruppe	. . Gaseous compositions [4]
C23F 1/14	2-Punkt Untergruppe	. . Aqueous compositions [4]
C23F 1/16	3-Punkt Untergruppe	. . . Acidic compositions (C23F 1/42 takes precedence) [4]
C23F 1/18	4-Punkt Untergruppe	. . . . for etching copper or alloys thereof [4]
C23F 1/20	4-Punkt Untergruppe	. . . . for etching aluminium or alloys thereof [4]
C23F 1/22	4-Punkt Untergruppe	. . . . for etching magnesium or alloys thereof [4]
C23F 1/24	4-Punkt Untergruppe	. . . . for etching silicon or germanium [4]
C23F 1/26	4-Punkt Untergruppe	. . . . for etching refractory metals [4]
C23F 1/28	4-Punkt Untergruppe	. . . . for etching iron group metals [4]
C23F 1/30	4-Punkt Untergruppe	. . . . for etching other metallic material [4]
C23F 1/32	3-Punkt Untergruppe	. . . Alkaline compositions (C23F 1/42 takes precedence) [4]
C23F 1/34	4-Punkt Untergruppe	. . . . for etching copper or alloys thereof [4]

Symbol	Typ	Titel
C23F 1/36	4-Punkt Untergruppe	. . . . for etching aluminium or alloys thereof [4]
C23F 1/38	4-Punkt Untergruppe	. . . . for etching refractory metals [4]
C23F 1/40	4-Punkt Untergruppe	. . . . for etching other metallic material [4]
C23F 1/42	3-Punkt Untergruppe	. . . containing a dispersed water-immiscible liquid [4]
C23F 1/44	1-Punkt Untergruppe	. Compositions for etching metallic material from a metallic material substrate of different composition [4]
C23F 1/46	1-Punkt Untergruppe	. Regeneration of etching compositions [4]
C23F 3/00	**Hauptgruppe**	**Brightening metals by chemical means [2]**
C23F 3/02	1-Punkt Untergruppe	. Light metals
C23F 3/03	2-Punkt Untergruppe	. . with acidic solutions [4]
C23F 3/04	1-Punkt Untergruppe	. Heavy metals
C23F 3/06	2-Punkt Untergruppe	. . with acidic solutions [4]
C23F 4/00	**Hauptgruppe**	**Processes for removing metallic material from surfaces, not provided for in group C23F 1/00 or C23F 3/00 [4]**
C23F 4/02	1-Punkt Untergruppe	. by evaporation [4]
C23F 4/04	1-Punkt Untergruppe	. by physical dissolution [4]
C23F 11/00	**Hauptgruppe**	**Inhibiting corrosion of metallic material by applying inhibitors to the surface in danger of corrosion or adding them to the corrosive agent (compositions for <u>in situ</u> inhibition of corrosion in boreholes or wells C09K 8/54; adding inhibitors to mineral oils, fuels or lubricants C10; adding inhibitors to pickling solutions C23G)**
C23F 11/02	1-Punkt Untergruppe	. in air or gases by adding vapour phase inhibitors
C23F 11/04	1-Punkt Untergruppe	. in markedly acid liquids
C23F 11/06	1-Punkt Untergruppe	. in markedly alkaline liquids
C23F 11/08	1-Punkt Untergruppe	. in other liquids
C23F 11/10	2-Punkt Untergruppe	. . using organic inhibitors
C23F 11/12	3-Punkt Untergruppe	. . . Oxygen-containing compounds
C23F 11/14	3-Punkt Untergruppe	. . . Nitrogen-containing compounds
C23F 11/16	3-Punkt Untergruppe	. . . Sulfur-containing compounds
C23F 11/167	3-Punkt Untergruppe	. . . Phosphorus-containing compounds [4]
C23F 11/173	3-Punkt Untergruppe	. . . Macromolecular compounds [4]
C23F 11/18	2-Punkt Untergruppe	. . using inorganic inhibitors
C23F 13/00	**Hauptgruppe**	**Inhibiting corrosion of metals by anodic or cathodic protection**
C23F 13/02	1-Punkt Untergruppe	. cathodic; Selection of conditions, parameters or procedures for cathodic protection, e.g. of electrical conditions [5]
C23F 13/04	2-Punkt Untergruppe	. . Controlling or regulating desired parameters [5]
C23F 13/06	2-Punkt Untergruppe	. . Constructional parts, or assemblies of cathodic-protection apparatus [5]

Symbol	Typ	Titel
C23F 13/08	3-Punkt Untergruppe	. . . Electrodes specially adapted for inhibiting corrosion by cathodic protection; Manufacture thereof; Conducting electric current thereto [5]
C23F 13/10	4-Punkt Untergruppe	. . . . Electrodes characterised by the structure (C23F 13/16 takes precedence) [5]
C23F 13/12	4-Punkt Untergruppe	. . . . Electrodes characterised by the material (C23F 13/16 takes precedence) [5]
C23F 13/14	5-Punkt Untergruppe	. . . . . Material for sacrificial anodes [5]
C23F 13/16	4-Punkt Untergruppe	. . . . Electrodes characterised by the combination of the structure and the material [5]
C23F 13/18	4-Punkt Untergruppe	. . . . Means for supporting electrodes [5]
C23F 13/20	4-Punkt Untergruppe	. . . . Conducting electric current to electrodes [5]
C23F 13/22	4-Punkt Untergruppe	. . . . Monitoring arrangements therefor [5]
C23F 14/00	**Hauptgruppe**	**Inhibiting incrustation in apparatus for heating liquids for physical or chemical purposes (adding scale preventives or removers to water C02F 5/00) [2]**
C23F 14/02	1-Punkt Untergruppe	. by chemical means
C23F 15/00	**Hauptgruppe**	**Other methods of preventing corrosion or incrustation**
C23F 17/00	**Hauptgruppe**	**Multi-step processes for surface treatment of metallic material involving at least one process provided for in class C23 and at least one process covered by subclass C21D or C22F or class C25 (C23C 28/00 takes precedence) [4]**