

Title (en)

FLOATING CATHODIC ELEMENTS MADE OF ELECTRO CONDUCTIVE REFRactory MATERIAL FOR THE PRODUCTION OF ALUMINIUM BY ELECTROLYSIS

Publication

EP 0082096 B1 19850821 (FR)

Application

EP 82420176 A 19821209

Priority

FR 8123780 A 19811211

Abstract (en)

[origin: ES8402365A1] The invention concerns floating cathode elements which are intended for the electrolytic production of aluminum using the Hall-Heroult process in an electrolysis tank comprising a molten cryolite-base bath, between a carbon anode, and a cathodic layer of molten aluminum, said elements comprising at least one active cathode element (30) formed of electrically conductive refractory material such as titanium diboride and supported by an intermediate support (31) which is inert with respect to the liquid aluminum and the electrolyte, the mean relative density of the assembly of the active cathode element and the inert intermediate support being lower than the relative density of the liquid aluminum under the normal conditions of operation of the electrolysis tank. They may also and preferably be provided with anchoring and abutment means (32) for limiting the amplitude of movements thereof in a vertical direction, and guide means for limiting the amplitude of movements thereof in directions other than a vertical direction.

IPC 1-7

C25C 3/08

IPC 8 full level

C04B 35/58 (2006.01); **C25C 3/08** (2006.01)

CPC (source: EP US)

C25C 3/08 (2013.01 - EP US)

Cited by

EP0111543A4; EP0126555A1; US4596637A; EP0099840A1

Designated contracting state (EPC)

CH DE GB LI NL SE

DOCDB simple family (publication)

EP 0082096 A1 19830622; EP 0082096 B1 19850821; AU 552985 B2 19860626; AU 9145982 A 19830616; BR 8207190 A 19831011; CA 1195950 A 19851029; DE 3265665 D1 19850926; ES 517933 A0 19840116; ES 8402365 A1 19840116; FR 2518124 A1 19830617; FR 2518124 B1 19840217; GR 77281 B 19840911; HU 191107 B 19870128; IN 158855 B 19870207; JP S58107491 A 19830627; JP S6127474 B2 19860625; NO 157508 B 19871221; NO 157508 C 19880330; NO 824167 L 19830613; NZ 202697 A 19860221; OA 07274 A 19840430; PL 134338 B1 19850831; PL 239350 A1 19830620; SU 1205779 A3 19860115; US 4532017 A 19850730; YU 268982 A 19850320; ZA 829064 B 19830928

DOCDB simple family (application)

EP 82420176 A 19821209; AU 9145982 A 19821210; BR 8207190 A 19821210; CA 417481 A 19821210; DE 3265665 T 19821209; ES 517933 A 19821206; FR 8123780 A 19811211; GR 820169996 A 19821206; HU 395482 A 19821208; IN 1410CA1982 A 19821206; JP 21459382 A 19821207; NO 824167 A 19821210; NZ 20269782 A 19821203; OA 57868 A 19821210; PL 23935082 A 19821203; SU 3520360 A 19821209; US 44662682 A 19821203; YU 268982 A 19821206; ZA 829064 A 19821209