Title (en)

Process and apparatus for regulating the interpolar distance to compensate the anode burning up in electrolysis cells.

Title (de)

Verfahren und Vorrichtung zur Nachregulierung des Polabstandes zum Ausgleich des Anodenabbrandes bei Elektrolysezellen.

Title (fr)

Procédé et dispositif de régulation de la distance interpolaire pour la compensation de l'usure des anodes dans les cellules d'électrolyse.

Publication

EP 0387687 B1 19940601 (DE)

Application

EP 90104391 A 19900308

Priority

DE 3908087 A 19890313

Abstract (en)

[origin: EP0387687A1] Process and apparatus for regulating the interpolar distance to compensate for anode consumption in electrolysis cells. <??>As a result of the large differences in the position of the anode beam in the upper and lower position, the current path and the power loss become too large during lowering or raising and substantial variations in the magnetic field arise. The lowering of the anode necessary to remove the anode effect results in a rise in the bath level which may bring about flooding of the carbon anodes and leakage of the melt. <??>To avoid these disadvantages, at least one further anode beam (2) is movably arranged parallel to, and at a variable distance from, the first anode beam (1), the anode rods (3) being attached either to the first or the second anode beam and the anode beams (1, 2) each being connected to a drive running in the opposite direction. This makes it possible to adjust the individual anodes precisely to the to anode consumption at a particular time. <??>Regulation of the interpolar distance in electrolysis cells, in particular those used for aluminium melt electrolysis.

IPC 1-7

C25C 3/16

IPC 8 full level

C25C 3/12 (2006.01); **C25B 9/01** (2021.01); **C25B 9/63** (2021.01); **C25B 15/04** (2006.01); **C25C 3/16** (2006.01)

CPC (source: EP US)

C25C 3/16 (2013.01 - EP US)

Cited by

CN103510116A; CN103374731A; EA011904B1; AU2006227546B2; WO2006099672A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0387687 A1 19900919; **EP 0387687 B1 19940601**; AT E106459 T1 19940615; AU 5075490 A 19900913; AU 628484 B2 19920917; BR 9000249 A 19901120; CA 2011769 A1 19900910; CS 8907592 A2 19910716; CZ 280657 B6 19960313; DD 291585 A5 19910704; DE 3908087 A1 19900920; DE 59005860 D1 19940707; ES 2057223 T3 19941016; NO 178934 B 19960325; NO 178934 C 19960703; NO 900225 D0 19900116; NO 900225 L 19900911; RU 2010891 C1 19940415; UA 8347 A1 19960329; US 5288383 A 19940222

DOCDB simple family (application)

EP 90104391 A 19900308; AT 90104391 T 19900308; AU 5075490 A 19900307; BR 9000249 A 19900123; CA 2011769 A 19900308; CS 759289 A 19891229; DD 33699190 A 19900108; DE 3908087 A 19890313; DE 59005860 T 19900308; ES 90104391 T 19900308; NO 900225 A 19900116; SU 4742923 A 19900124; UA 4742923 A 19900124; US 49147590 A 19900308