

Title (en)
ELECTROLYTIC CELL WITH IMPROVED ALUMINA SUPPLY

Title (de)
ELEKTROLYTISCHE ZELLE MIT VERBESSERTER TONERDE-ZUFUHR

Title (fr)
CELLULE D'ELECTROLYSE A ALIMENTATION EN ALUMINE AMELIOREE

Publication
EP 1147245 B1 20030917 (EN)

Application
EP 00900037 A 20000110

Priority

- IB 0000029 W 20000110
- IB 9900017 W 19990108

Abstract (en)
[origin: WO0040781A1] An electrolytic cell for the electrowinning of aluminium comprises an electrochemically active foraminate metallic anode structure (15) for the evolution of oxygen and the escape of evolved oxygen therethrough which is spaced by an inter-electrode gap above a facing cathode (20). The cell further comprises means for promoting dissolution of powder alumina (32) fed to the surface of the electrolyte (30) and for supplying alumina-rich electrolyte to the inter-electrode gap by inducing an electrolyte circulation up from and down to the inter-electrode gap driven by the escape of anodically evolved oxygen through the foraminate anode structure. These means comprise electrolyte guide members (5) such as baffles or funnels having at least one inclined surface (6) immersed in the molten electrolyte (30) above the foraminate structure (15).

IPC 1-7
C25C 3/08

IPC 8 full level
C25C 3/08 (2006.01); **C25C 3/12** (2006.01)

CPC (source: EP)
C25C 3/08 (2013.01); **C25C 3/12** (2013.01)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0040781 A1 20000713; AT E250154 T1 20031015; CA 2358103 A1 20000713; CA 2358103 C 20051115; DE 60005301 D1 20031023; DE 60005301 T2 20040617; EP 1147245 A1 20011024; EP 1147245 B1 20030917; ES 2206175 T3 20040516; NO 20013377 D0 20010706; NO 20013377 L 20010907

DOCDB simple family (application)
IB 0000029 W 20000110; AT 00900037 T 20000110; CA 2358103 A 20000110; DE 60005301 T 20000110; EP 00900037 A 20000110; ES 00900037 T 20000110; NO 20013377 A 20010706