

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

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- 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).

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IPC 8 full level  
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