

Title (en)

SLURRY FOR COATING NON-CARBON METAL-BASED ANODES FOR ALUMINIUM PRODUCTION CELLS

Title (de)

AUFSCHLÄMMUNG ZUM BESCHICHTEN VON KOHLENSTOFFFREIEN ANODEN AUF METALLBASIS FÜR ZELLEN ZUR ALUMINIUMHERSTELLUNG

Title (fr)

COULIS DE REVETEMENT D'ANODES METALLIQUES EXEMPTES DE CARBONE POUR CELLULES DE PRODUCTION D'ALUMINIUM

Publication

**EP 1049817 A1 20001108 (EN)**

Application

**EP 99900109 A 19990119**

Priority

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- IB 9800081 W 19980120
- US 12635998 A 19980730

Abstract (en)

[origin: WO9936593A1] A method of coating an electronically conductive and heat resistant substrate of an anode of a cell for the electrowinning of metals, in particular a cell for the electrowinning of aluminium, to protect and make the surface of the anode active for the oxidation of the oxygen ions present in the electrolyte. The method comprises applying onto the substrate a slurry comprising at least one oxide or oxide precursor as a non-dispersed but suspended particulate in a colloidal and/or inorganic polymeric carrier. The applied-slurry is then solidified and made adherent to the substrate upon heat treatment to form an adherent, protective, predominantly oxide-containing coating. The colloidal and/or inorganic polymeric carrier may comprise at least one of alumina, ceria, lithia, magnesia, silica, thoria, yttria, zirconia, tin oxide and zinc oxide. The oxide of the coating may be a chromite or a ferrite, such as a ferrite selected from cobalt, copper, manganese, nickel and zinc.

IPC 1-7

**C25C 3/12**; **C25C 7/02**

IPC 8 full level

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CPC (source: EP)

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