

Title (en)

INERT ANODE FOR PRODUCING ALUMINIUM BY IGNEOUS ELECTROLYSE AND METHOD FOR PRODUCING SAID ANODE

Title (de)

INERTE ANODE ZUR HERSTELLUNG VON ALUMINIUM DURCH SCHMELZFLUSSELEKTROLYSE UND VERFAHREN ZUR HERSTELLUNG DER ANODE

Title (fr)

ANODE INERTE DESTINEE A LA PRODUCTION D ALUMINIUM PAR ELECTROLYSE IGNEE ET PROCEDE D OBTENTION DE CETTE ANODE

Publication

EP 1689900 A2 20060816 (FR)

Application

EP 04817152 A 20041005

Priority

- FR 2004002509 W 20041005
- FR 0311700 A 20031007
- FR 0407538 A 20040707

Abstract (en)

[origin: WO2005035813A2] The invention relates to a method for producing a solid part for forming an entire anode or the part thereof for producing aluminium by igneous electrolyse and comprising a cermet made of at least one type of metal oxide such as a spinel mixed oxide containing a R metal in the form of cations in the chemical structure thereof. Said R metal is entirely or partly reducible by a reducing operation during a production process in such a way that the entire metallic phase or the part thereof is formed. The inventive method makes it possible to obtain a cermet whose metallic phase comprises a homogenous distribution of fine metallic particles.

IPC 8 full level

B22F 3/00 (2006.01); **C04B 35/26** (2006.01); **C22C 29/12** (2006.01); **C25C 3/12** (2006.01)

CPC (source: EP US)

C04B 35/2666 (2013.01 - EP US); **C04B 35/6267** (2013.01 - EP US); **C04B 35/74** (2013.01 - EP US); **C22C 29/12** (2013.01 - EP US); **C25C 3/12** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US); **C04B 2235/3272** (2013.01 - EP US); **C04B 2235/3279** (2013.01 - EP US); **C04B 2235/3281** (2013.01 - EP US); **C04B 2235/407** (2013.01 - EP US); **C04B 2235/449** (2013.01 - EP US); **C04B 2235/652** (2013.01 - EP US); **C04B 2235/658** (2013.01 - EP US); **C04B 2235/6582** (2013.01 - EP US); **C04B 2235/77** (2013.01 - EP US); **C04B 2235/786** (2013.01 - EP US); **C04B 2235/80** (2013.01 - EP US); **C04B 2235/83** (2013.01 - EP US); **C04B 2235/96** (2013.01 - EP US)

Citation (search report)

See references of WO 2005035813A2

Citation (examination)

- US 3380920 A 19680430 - COCHARDT ALEXANDER W
- US 4073647 A 19780214 - MORGAN CHESTER S
- EP 0226438 A2 19870624 - MINNESOTA MINING & MFG [US]
- EP 0708066 A1 19960424 - SANTOKU METAL IND [JP]
- OLSEN E ET AL: "The Behaviour of Nickel Ferrite Cermet Materials as Inert Anodes", LIGHT METALS, MINERALS, METALS AND MATERIALS SOCIETY / ALUMINIUM COMMITTEE, US, 1 January 1996 (1996-01-01), pages 249 - 257, XP008134713, ISSN: 0147-0809

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2860521 A1 20050408; **FR 2860521 B1 20071214**; AR 045803 A1 20051116; AU 2004279963 A1 20050421; AU 2004279963 B2 20091112; CA 2542117 A1 20050421; CA 2542117 C 20120313; EP 1689900 A2 20060816; IS 8437 A 20060503; NO 20061995 L 20060707; NZ 546066 A 20100129; RU 2006115600 A 20071120; RU 2352690 C2 20090420; US 2007056848 A1 20070315; US 7425284 B2 20080916; WO 2005035813 A2 20050421; WO 2005035813 A3 20050811

DOCDB simple family (application)

FR 0407538 A 20040707; AR P040103419 A 20040922; AU 2004279963 A 20041005; CA 2542117 A 20041005; EP 04817152 A 20041005; FR 2004002509 W 20041005; IS 8437 A 20060503; NO 20061995 A 20060504; NZ 54606604 A 20041005; RU 2006115600 A 20041005; US 57509104 A 20041005