

Title (en)

METHOD AND APPARATUS FOR PRODUCING METAL BY ELECTROLYSIS OF MOLTEN SALT

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON METALL DURCH ELEKTROLYSE VON SCHMELZFLÜSSIGEM SALZ

Title (fr)

PROCÉDÉ ET APPAREIL DE PRODUCTION DE MÉTAL PAR ÉLECTROLYSE DE SEL FONDU

Publication

EP 1785509 A4 20080625 (EN)

Application

EP 05765165 A 20050627

Priority

- JP 2005011747 W 20050627
- JP 2004192905 A 20040630

Abstract (en)

[origin: EP1785509A1] A process for production of a metal includes a step of filling a metal chloride in an electrolysis vessel having positive and negative electrodes, a step of heating and fusing the metal chloride to make an electrolytic bath, and a step of electrolyzing the electrolytic bath to deposit metal on the negative electrode in a solid state. In addition, in an apparatus for production of a metal in which a metal chloride is filled in an electrolysis vessel having positive and negative electrodes, the metal chloride is heated and molten to make an electrolytic bath and the electrolytic bath is electrolyzed to deposit the metal on the negative electrode in a solid state, the electrolytic bath is divided into an electrolysis chamber and a dissolution chamber by a dividing wall, the positive electrode is arranged in the electrolysis chamber, the negative electrode is arranged to enable orbital movement in a circle through the electrolysis chamber and dissolution chamber, and the metal deposited on the negative electrode in the electrolysis chamber is separated and recovered in the dissolution chamber.

IPC 8 full level

C25C 3/02 (2006.01); **C25C 7/02** (2006.01); **C25C 7/06** (2006.01)

CPC (source: EP US)

C25C 3/00 (2013.01 - EP US); **C25C 7/007** (2013.01 - EP US); **C25C 7/08** (2013.01 - EP US)

Citation (search report)

- [X] US 3226311 A 19651228 - DIEST JACQUES VAN
- [XY] US 3043756 A 19620710 - COBEL GEORGE B, et al
- [Y] US 2960397 A 19601115 - COBEL GEORGE B
- See references of WO 2006003864A1

Cited by

CN107385474A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1785509 A1 20070516; **EP 1785509 A4 20080625**; AU 2005258596 A1 20060112; JP 4658053 B2 20110323; JP WO2006003864 A1 20080417; US 2009211916 A1 20090827; WO 2006003864 A1 20060112

DOCDB simple family (application)

EP 05765165 A 20050627; AU 2005258596 A 20050627; JP 2005011747 W 20050627; JP 2006528672 A 20050627; US 63136405 A 20050627