

Title (en)

ANODE FOR ELECTROWINNING AND ELECTROWINNING METHOD USING SAME

Title (de)

ANODE FÜR ELEKTROEXTRAKTION UND ELEKTROEXTRAKTIONSVERFAHREN DAMIT

Title (fr)

ANODE D'EXTRACTION ÉLECTROLYTIQUE ET PROCÉDÉ D'EXTRACTION ÉLECTROLYTIQUE L'UTILISANT

Publication

EP 2690200 A4 20140319 (EN)

Application

EP 12763572 A 20120323

Priority

- JP 2011067365 A 20110325
- JP 2012057426 W 20120323

Abstract (en)

[origin: EP2690200A1] Provided is an anode for electrowinning in a sulfuric acid based electrolytic solution. The anode produces oxygen at a lower potential than a lead electrode, lead alloy electrode, and coated titanium electrode, thereby enabling electrowinning to be performed at a reduced electrolytic voltage and the electric power consumption rate of a desired metal to be reduced. The anode is also available as an anode for electrowinning various types of metals in volume with efficiency. The anode is employed for electrowinning in a sulfuric acid based electrolytic solution and adopted such that a catalyst layer containing amorphous ruthenium oxide and amorphous tantalum oxide is formed on a conductive substrate.

IPC 8 full level

C25C 7/02 (2006.01)

CPC (source: EP US)

C25C 1/08 (2013.01 - US); **C25C 1/12** (2013.01 - US); **C25C 1/16** (2013.01 - US); **C25C 7/02** (2013.01 - EP US)

Citation (search report)

- [Y] EP 2287364 A1 20110223 - DOSHISHA [JP]
- [Y] EP 0090381 A1 19831005 - ORONZIO DE NORA IMPIANTI [IT]
- [Y] DATABASE WPI Derwent World Patents Index; AN 2007-629251, XP002719604
- See references of WO 2012133136A1

Cited by

EP2757181A4; CN105980845A; EP3106866A4; EP3312601A1; US9556534B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2690200 A1 20140129; EP 2690200 A4 20140319; EP 2690200 B1 20151007; AU 2012234150 A1 20131114; AU 2012234150 B2 20150702; CA 2831273 A1 20121004; CA 2831273 C 20160223; CL 2013002745 A1 20140425; CN 103476970 A 20131225; CN 103476970 B 20160706; ES 2557194 T3 20160122; JP 2012201925 A 20121022; JP 4916040 B1 20120411; KR 101577664 B1 20151215; KR 20140002749 A 20140108; RU 2013147642 A 20150427; RU 2568546 C2 20151120; US 2014054180 A1 20140227; WO 2012133136 A1 20121004

DOCDB simple family (application)

EP 12763572 A 20120323; AU 2012234150 A 20120323; CA 2831273 A 20120323; CL 2013002745 A 20130925; CN 201280016122 A 20120323; ES 12763572 T 20120323; JP 2011067365 A 20110325; JP 2012057426 W 20120323; KR 20137024065 A 20120323; RU 2013147642 A 20120323; US 201214007488 A 20120323