

Title (en)  
ALUMINIUM SMELTER COMPRISING A COMPENSATING ELECTRIC CIRCUIT

Title (de)  
ALUMINIUMSCHMELZEREI MIT ELEKTRISCHER AUSGLEICHSSCHALTUNG

Title (fr)  
ALUMINERIE COMPRENANT UN CIRCUIT ÉLECTRIQUE DE COMPENSATION

Publication  
**EP 3030695 A4 20170329 (FR)**

Application  
**EP 14834860 A 20140730**

Priority  
• FR 1301910 A 20130809  
• CA 2014050722 W 20140730

Abstract (en)  
[origin: WO2015017924A1] This aluminium smelter comprises a line of cells (50) arranged transversely with respect to the length of the line, one of the cells (50) comprising an anode (52), riser and connecting electrical conductors (54) extending upwards along two opposite longitudinal edges of the cell (50) in order to conduct the electrolysis current to the anode (52), and a cathode (56) passed through by cathode conductors (55) connected to cathode leads connected to routing conductors for routing the electrolysis current to riser and connecting electrical conductors of the following cell (50). Furthermore, the aluminium smelter comprises a compensating electric circuit, different from the electric circuit travelled through by the electrolysis current, extending underneath the cells (50) and possibly being travelled through by a compensating current circulating under the cells (50) in the reverse direction to the overall circulation direction of the electrolysis current.

IPC 8 full level  
**C25C 3/16** (2006.01); **C25C 3/20** (2006.01)

CPC (source: EP US)  
**C25C 3/16** (2013.01 - EP US); **C25C 3/20** (2013.01 - EP US); **C25C 3/24** (2013.01 - EP US); **C25C 7/005** (2013.01 - EP US)

Citation (search report)  
• [XYI] US 3063919 A 19621113 - JOUGUET MARC F G, et al  
• [Y] US 2008041718 A1 20080221 - PINGIN VITALIY V [RU], et al  
• [A] DE 1010744 B 19570619 - VAW VER ALUMINIUM WERKE AG  
• [A] WO 2013007892 A2 20130117 - RIO TINTO ALCAN INT LTD [CA], et al  
• See references of WO 2015017924A1

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

Designated extension state (EPC)  
BA

DOCDB simple family (publication)  
**WO 2015017924 A1 20150212**; AR 097246 A1 20160302; AR 097247 A1 20160302; AR 097248 A1 20160302; AU 2014305613 A1 20160211; AU 2014305613 B2 20170831; BR 112016001961 A2 20170801; CA 2919050 A1 20150212; CA 2919050 C 20210330; CN 105452536 A 20160330; CN 105452536 B 20170919; DK 179170 B1 20180102; DK 201670126 A1 20160314; EA 030271 B1 20180731; EA 201690339 A1 20160630; EP 3030695 A1 20160615; EP 3030695 A4 20170329; EP 3030695 B1 20181017; FR 3009564 A1 20150213; MY 178282 A 20201007; SI 3030695 T1 20190228; TR 201821117 T4 20190221; US 10344390 B2 20190709; US 2016201208 A1 20160714

DOCDB simple family (application)  
**CA 2014050722 W 20140730**; AR P140102940 A 20140805; AR P140102941 A 20140805; AR P140102942 A 20140805; AU 2014305613 A 20140730; BR 112016001961 A 20140730; CA 2919050 A 20140730; CN 201480044967 A 20140730; DK PA201670126 A 20160303; EA 201690339 A 20140730; EP 14834860 A 20140730; FR 1301910 A 20130809; MY PI2016700419 A 20140730; SI 201431028 T 20140730; TR 201821117 T 20140730; US 201414911099 A 20140730