

Title (en)  
ELECTRODE SUPPORT ARM SYSTEM

Title (de)  
ELEKTRODENTRAGARMSYSTEM

Title (fr)  
SYSTÈME À BRAS SUPPORT D'ÉLECTRODES

Publication  
**EP 2545747 A1 20130116 (DE)**

Application  
**EP 11707833 A 20110307**

Priority  
• DE 102010052086 A 20101117  
• DE 102010010994 A 20100310  
• EP 2011053384 W 20110307

Abstract (en)  
[origin: CA2792909A1] The invention relates to an electrode support arm system for metallurgical furnaces, having an electrode support arm (1) having an electrode support arm head (13) implemented as an electrode support device at the front part thereof, designed as a hollow profile having a wall formed at least partially of conductive material having high conductivity, through which a coolant can be guided. According to the invention, flow guide plates and/or displacers are disposed within the electrode support arm (1) implemented as a hollow profile and within the electrode support device implemented on the electrode support arm head (13), by which the coolant flow can be channelized and affected with respect to flow speed, such that optimal flow speeds of the coolant are present at all locations within the electrode support arm (1) and the electrode support arm head (13), wherein highly thermally loaded regions, such as the contact surfaces on the electrode support arm head (13), can be more intensively cooled than other, less intensely thermally loaded regions of the electrode support arm (1).

IPC 8 full level  
**H05B 7/101** (2006.01); **H05B 7/12** (2006.01)

CPC (source: EP KR US)  
**H05B 7/10** (2013.01 - KR); **H05B 7/101** (2013.01 - EP US); **H05B 7/12** (2013.01 - EP KR US)

Citation (search report)  
See references of WO 2011110522A1

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)  
**DE 102010052086 A1 20110915**; BR 112012022762 A2 20160719; CA 2792909 A1 20110915; CA 2792909 C 20160510; CN 102870496 A 20130109; CN 102870496 B 20151125; EP 2545747 A1 20130116; EP 2545747 B1 20140514; JP 2013521625 A 20130610; KR 20120123725 A 20121109; MA 34210 B1 20130502; US 2013039379 A1 20130214; WO 2011110522 A1 20110915

DOCDB simple family (application)  
**DE 102010052086 A 20101117**; BR 112012022762 A 20110307; CA 2792909 A 20110307; CN 201180023302 A 20110307; EP 11707833 A 20110307; EP 2011053384 W 20110307; JP 2012556474 A 20110307; KR 20127026123 A 20110307; MA 35279 A 20120928; US 201113583654 A 20110307