

Title (en)  
DEVICE AND METHOD FOR OBTAINING METALS OR METAL COMPOUNDS

Title (de)  
VORRICHTUNG UND VERFAHREN ZUR GEWINNUNG VON METALLEN ODER METALLVERBINDUNGEN

Title (fr)  
DISPOSITIF ET PROCÉDÉ POUR RÉCUPÉRER DES MÉTAUX OU DES COMPOSÉS MÉTALLIQUES

Publication  
**EP 2235461 A1 20101006 (DE)**

Application  
**EP 08862095 A 20081211**

Priority  
• EP 2008010490 W 20081211  
• DE 102007061025 A 20071218  
• DE 102008021886 A 20080502

Abstract (en)  
[origin: WO2009076945A1] The invention relates to a device for extracting metals or metal compounds from a material containing the metal or the metal compound, with a furnace vessel (2), with a first inlet for supplying the material, a first outlet (10) for discharging exhaust gas, one or more electrodes (1) for melting and/or reducing the material supplied, which protrude into the furnace vessel, with a bottom electrode (5) formed as a cathode, a space (16) provided in the region of the slag tap hole (12) and serving as a settling zone, with an electromagnet or permanent magnet (6), which is placed in the furnace vessel in such a way that a DC current flow produced in the furnace vessel is crossed by the magnetic field, and also a tap hole (8) for removing the molten metal or the metal compound and an overflow or tap hole (12) for the slag.

IPC 8 full level  
**F27B 3/08** (2006.01); **C21C 5/52** (2006.01)

CPC (source: EP)  
**C21C 5/5229** (2013.01); **C21C 5/5247** (2013.01); **C21C 5/5252** (2013.01); **F27B 3/085** (2013.01)

Citation (search report)  
See references of WO 2009077114A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**DE 102008058605 A1 20090702**; BR PI0820788 A2 20150616; BR PI0820788 A8 20161011; BR PI0820788 B1 20170613; BR PI0821164 A2 20150616; BR PI0821164 B1 20180102; CL 2008003748 A1 20090515; CL 2008003801 A1 20091016; CN 101903729 A 20101201; CN 101903729 B 20130717; CN 101903730 A 20101201; CN 101903730 B 20131225; EP 2225520 A1 20100908; EP 2225520 B1 20170712; EP 2235461 A1 20101006; EP 2235461 B1 20170531; PE 20091533 A1 20091003; PE 20091616 A1 20091107; RU 2010129525 A 20120127; RU 2010129916 A 20120127; RU 2455599 C2 20120710; RU 2455600 C2 20120710; WO 2009076945 A1 20090625; WO 2009077114 A1 20090625; ZA 201003734 B 20110330; ZA 201004163 B 20110223

DOCDB simple family (application)  
**DE 102008058605 A 20081119**; BR PI0820788 A 20081211; BR PI0821164 A 20081217; CL 2008003748 A 20081216; CL 2008003801 A 20081218; CN 200880121164 A 20081217; CN 200880121557 A 20081211; DE 2008002125 W 20081217; EP 08861906 A 20081217; EP 08862095 A 20081211; EP 2008010490 W 20081211; PE 2008002085 A 20081217; PE 2008002113 A 20081218; RU 2010129525 A 20081217; RU 2010129916 A 20081211; ZA 201003734 A 20100526; ZA 201004163 A 20100610