

Title (en)

Metallurgical melt and treatment assembly

Title (de)

Metallurgisches Schmelz- und Behandlungsaggregat

Title (fr)

Agrégat de fusion et de traitement métallurgique

Publication

**EP 2253916 B1 20110119 (DE)**

Application

**EP 09006813 A 20090520**

Priority

EP 09006813 A 20090520

Abstract (en)

[origin: EP2253916A1] The unit has a set of injectors (10) extending through an outer metal casing (12) and an inner fire resistant lining (14) for injecting treatment gas i.e. air, on molten metal (50) over respective nozzle openings (10m). Gas flushing devices are arranged beneath the corresponding injectors for injecting the gas on the molten metal, such that the molten metal is raised over the lining and flows through the nozzle openings. The flushing devices have aligned or unaligned porosity, such that cavities with a diameter less than 10 mm are formed in the molten metal over the flushing devices.

IPC 8 full level

**F27D 25/00** (2010.01)

CPC (source: EP KR)

**C22B 15/0041** (2013.01 - EP); **C22B 15/0043** (2013.01 - EP); **F27B 3/22** (2013.01 - EP KR); **F27B 7/20** (2013.01 - KR);  
**F27B 7/205** (2013.01 - EP); **F27B 7/36** (2013.01 - KR); **F27B 7/362** (2013.01 - EP); **F27D 3/16** (2013.01 - EP); **F27D 3/18** (2013.01 - EP);  
**F27D 25/008** (2013.01 - EP); **C22B 9/05** (2013.01 - EP)

Cited by

EP2927331A1

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 MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

**EP 2253916 A1 20101124; EP 2253916 B1 20110119;** AT E496267 T1 20110215; AU 2010251491 A1 20111117; AU 2010251491 B2 20130131;  
BR PI1011059 A2 20160809; CA 2760352 A1 20101125; CA 2760352 C 20140211; CL 2011002867 A1 20120427; CN 102428335 A 20120425;  
CN 102428335 B 20140514; DE 502009000332 D1 20110303; ES 2357684 T3 20110428; JP 2012527595 A 20121108;  
JP 5421455 B2 20140219; KR 101322572 B1 20131028; KR 20120024577 A 20120314; PE 20121144 A1 20120827; PL 2253916 T3 20110531;  
WO 2010133283 A1 20101125

DOCDB simple family (application)

**EP 09006813 A 20090520;** AT 09006813 T 20090520; AU 2010251491 A 20100422; BR PI1011059 A 20100422; CA 2760352 A 20100422;  
CL 2011002867 A 20111114; CN 201080022275 A 20100422; DE 502009000332 T 20090520; EP 2010002467 W 20100422;  
ES 09006813 T 20090520; JP 2012511161 A 20100422; KR 20117026026 A 20100422; PE 2011001970 A 20100422; PL 09006813 T 20090520