

Title (en)
SIDE WALL COOLING SYSTEM FOR A MELTING FURNACE

Title (de)
SEITENWANDKÜHLUNGSVORRICHTUNG FÜR SCHMELZÖFEN

Title (fr)
SYSTÈME DE REFROIDISSEMENT DE PAROIS LATÉRALES DE FOURS DE FUSION

Publication
EP 2847531 B1 20160113 (DE)

Application
EP 13720968 A 20130508

Priority
• DE 102012207934 A 20120511
• DE 102012214147 A 20120809
• EP 2013059627 W 20130508

Abstract (en)
[origin: WO2013167677A1] The invention relates to a cooling device for a melting furnace, in particular for cooling a liquid slag (S) in a reduction furnace. The device comprises a lining (3) for laterally shielding a liquid molten metal bath (M) and a liquid slag (S) which is located on said bath, and the device also comprises a metal plate (5) which is arranged on a lining (3) side facing away from the molten metal bath (M) and the slag (S). The metal plate (5) comprises a plurality of slots (13) which are oriented in a substantially vertical manner and which are arranged adjacently to one another, wherein one copper plate (7) extends into the lining (3) through each of the slots (13) substantially perpendicular to the metal plate (5). The device further comprises cooling channels (9) through which coolant can flow and each of which is arranged between two adjacently arranged slots (13) and the copper plates (7) extending through said slots (13) on the metal plate (5) side facing away from the molten metal bath (M) and the slag (S). The invention additionally relates to a furnace comprising the cooling device and to a method for producing such a cooling device or such a furnace.

IPC 8 full level
F27D 1/12 (2006.01); **C21B 7/10** (2006.01); **C21C 5/46** (2006.01); **F27B 3/24** (2006.01)

CPC (source: EP)
C21C 5/4646 (2013.01); **F27B 3/24** (2013.01); **F27D 1/12** (2013.01)

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)
WO 2013167677 A1 20131114; CA 2874076 A1 20131114; CA 2874076 C 20160830; DE 102012214147 A1 20131114;
EP 2847531 A1 20150318; EP 2847531 B1 20160113; ZA 201408198 B 20151125

DOCDB simple family (application)
EP 2013059627 W 20130508; CA 2874076 A 20130508; DE 102012214147 A 20120809; EP 13720968 A 20130508; ZA 201408198 A 20141110