

Title (en)
METHOD FOR COOLING HOUSING OF MELTING UNIT AND MELTING UNIT

Title (de)
VERFAHREN ZUR KÜHLUNG DES GEHÄUSES EINES SCHMELZAGGREGATS UND SCHMELZAGGREGAT

Title (fr)
PROCÉDÉ DE REFROIDISSEMENT D'UN CORPS D'APPAREIL DE FONTE ET APPAREIL DE FONTE

Publication
EP 2960608 A4 20161109 (EN)

Application
EP 13876077 A 20130221

Priority
RU 2013000138 W 20130221

Abstract (en)
[origin: EP2960608A1] The invention relates to a method and device for cooling the housing of a melting unit melting chamber. In the method, a liquid metal heat carrier is used to cool the upper portion of an airtight cavity, formed by a double-walled metal shell of the melting chamber housing, by means of inputting the liquid metal heat carrier into the cavity which encompasses a free space, a slag bath and the upper portion of a lined metal bath, while the lower portion of the airtight cavity, formed by the double-walled metal shell of the housing and separated from the upper portion thereof and encompassing the lower portion of the lined metal bath, is cooled only by means of a gaseous heat carrier which is inputted through pipe fittings situated on the lateral surface of an external wall of a heat-exchanger, heated gaseous heat carrier is removed from the heat-exchanger by means of pipe fittings situated on the lateral surface of the external wall of the heat-exchanger, and the temperature of the liquid metal heat carrier is maintained within certain limits by means of adjusting the flow rate of the cold gaseous heat carrier which passes through the heat-exchanger in accordance with readings of a device which sets the temperature of the liquid metal heat carrier. A device is disclosed for carrying out the method. Higher output and lower costs are achieved.

IPC 8 full level
F27D 9/00 (2006.01); **F27B 3/24** (2006.01)

CPC (source: EP RU)
F27D 9/00 (2013.01 - EP); **F27D 1/12** (2013.01 - RU); **F27D 9/00** (2013.01 - RU); **F27D 2009/0005** (2013.01 - EP)

Citation (search report)

- [AD] RU 2383837 C1 20100310 - OOO PROMY KOMPANIJA T METALLOV [RU]
- [A] CN 202562297 U 20121128 - LUOYANG BAJIA ELECTRIC TECHNOLOGY CO LTD
- [A] US 4294433 A 19811013 - VANJUKOV ANDREI V, et al
- [A] US 4301320 A 19811117 - HOCHSTRASSER OTTO, et al
- [A] US 2004218657 A1 20041104 - POPOV IVAYLOV [DE], et al
- [A] US 4796569 A 19890110 - BOMMER ROLF [DE]
- See references of WO 2014129921A1

Cited by
CN109468449A

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)
EP 2960608 A1 20151230; EP 2960608 A4 20161109; RU 2014129686 A 20160210; RU 2617071 C2 20170419; WO 2014129921 A1 20140828

DOCDB simple family (application)
EP 13876077 A 20130221; RU 2013000138 W 20130221; RU 2014129686 A 20130221