

Title (en)

HOMOGENIZATION OF MARTENSITIC STAINLESS STEEL AFTER REMELTING UNDER A LAYER OF SLAG

Title (de)

HOMOGENISIERUNG VON MARTENSITISCHEM EDELSTAHL NACH DEM UMSCHMELZEN UNTER EINER SCHLACKESCHICHT

Title (fr)

HOMOGENEISATION D'ACIERS MARTENSITIQUES INOXYDABLES APRES REFUSION SOUS LAITIER

Publication

EP 2488672 A1 20120822 (FR)

Application

EP 10781969 A 20101011

Priority

- FR 0957108 A 20091012
- FR 2010052140 W 20101011

Abstract (en)

[origin: WO2011045513A1] The present invention relates to a method for producing a martensitic stainless steel that includes a step in which an ingot of the steel is remelted under a layer of slag, followed by a step in which the ingot is cooled. Before the skin temperature of the ingot resulting from the slag remelting step drops below the martensitic transformation temperature M_s of the steel, the ingot is placed in a furnace, the initial temperature T_0 of which is then above the cooling-induced pearlite transformation finish temperature Ar_1 of the steel. In the furnace, the ingot is subjected to a homogenization treatment at least for a holding time t after the temperature of the coolest point in the ingot has reached a homogenization temperature T , said holding time t being equal to at least one hour and the homogenization temperature T varying between approximately 900°C and the burning temperature of the steel.

IPC 8 full level

C21D 6/00 (2006.01); **C22B 9/18** (2006.01)

CPC (source: EP US)

C21D 6/002 (2013.01 - EP US); **C21D 6/004** (2013.01 - EP US); **C22B 9/18** (2013.01 - EP US)

Citation (search report)

See references of WO 2011045513A1

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)

FR 2951197 A1 20110415; **FR 2951197 B1 20111125**; BR 112012008520 A2 20160405; BR 112012008520 B1 20180417; CA 2777034 A1 20110421; CA 2777034 C 20171107; CN 102575313 A 20120711; CN 102575313 B 20151125; EP 2488672 A1 20120822; EP 2488672 B1 20190508; JP 2013507530 A 20130304; JP 5868859 B2 20160224; RU 2012119594 A 20131120; RU 2536574 C2 20141227; US 2012260771 A1 20121018; US 8911527 B2 20141216; WO 2011045513 A1 20110421

DOCDB simple family (application)

FR 0957108 A 20091012; BR 112012008520 A 20101011; CA 2777034 A 20101011; CN 201080046202 A 20101011; EP 10781969 A 20101011; FR 2010052140 W 20101011; JP 2012533671 A 20101011; RU 2012119594 A 20101011; US 201013501377 A 20101011