

Title (en)

METHOD AND DEVICE FOR DETECTING THE SLAG LEVEL IN A METALLURGICAL VESSEL

Title (de)

VERFAHREN UND VORRICHTUNG ZUR DETEKTION DES SCHLACKEPEGELS IN EINEM METALLURGISCHEN GEFÄSS

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉTECTION DU NIVEAU DE SCORIES DANS UN RÉCIPIENT MÉTALLURGIQUE

Publication

EP 2870266 A2 20150513 (DE)

Application

EP 13734727 A 20130703

Priority

- DE 102012211714 A 20120705
- EP 2013064015 W 20130703

Abstract (en)

[origin: WO2014006081A2] The invention relates to a method and a device for detecting the slag level on a metal melt in a metallurgical vessel (1) by means of at least one signal-generating detecting apparatus (6), which is directed at the metallurgical vessel (1) and/or at least at a slag flow (3) flowing out from the metallurgical vessel. In a phase A, a slag level SPA is directly determined from the signals by means of a processing unit (8), and/or if direct detection of the slag level SPA is not possible, the width BMi of the slag flow (3) flowing out is detected in at least one direction i and the slag level SPB is determined by means of the processing unit on the basis of the amount of slag SM flowing out. The invention further relates to a method for controlling the amount of carbon carrier introduced into the metallurgical vessel, in order to set the slag level, wherein this control is performed on the basis of the determined slag level.

IPC 8 full level

C21C 5/46 (2006.01); **C21C 5/52** (2006.01); **F27B 3/28** (2006.01); **F27D 19/00** (2006.01); **F27D 21/00** (2006.01); **F27D 21/02** (2006.01)

CPC (source: EP US)

C21C 5/4673 (2013.01 - EP US); **F27B 3/28** (2013.01 - EP US); **F27D 19/00** (2013.01 - EP US); **F27D 21/0028** (2013.01 - EP US); **F27D 21/02** (2013.01 - EP US); **C21C 2005/5288** (2013.01 - EP US); **C21C 2300/02** (2013.01 - EP US); **F27D 2021/026** (2013.01 - EP US); **Y02P 10/20** (2015.11 - EP US)

Citation (search report)

See references of WO 2014006081A2

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2014006081 A2 20140109; **WO 2014006081 A3 20140619**; CN 104395483 A 20150304; CN 104395483 B 20170825; DE 102012211714 A1 20140522; EP 2870266 A2 20150513; MX 2014015148 A 20150305; US 2015192365 A1 20150709

DOCDB simple family (application)

EP 2013064015 W 20130703; CN 201380035815 A 20130703; DE 102012211714 A 20120705; EP 13734727 A 20130703; MX 2014015148 A 20130703; US 201314412833 A 20130703