

Title (en)

METHOD FOR OPERATING AN ALTERNATING-CURRENT ELECTRIC ARC FURNACE, DEVICE FOR PERFORMING THE METHOD, AND ALTERNATING-CURRENT ELECTRIC ARC FURNACE HAVING SUCH A DEVICE

Title (de)

VERFAHREN ZUM BETRIEB EINES WECHSELSTROM-ELEKTROLICHTBOGENOFENS, VORRICHTUNG ZUR DURCHFÜHRUNG DES VERFAHRENS SOWIE EIN WECHSELSTROM-ELEKTROLICHTBOGENOFEN MIT EINER SOLCHEN VORRICHTUNG

Title (fr)

PROCÉDÉ PERMETTANT DE FAIRE FONCTIONNER UN FOUR À ARC À COURANT ALTERNATIF, DISPOSITIF PERMETTANT LA MISE EN UVRE DUDIT PROCÉDÉ, AINSI QUE FOUR À ARC À COURANT ALTERNATIF MUNI DUDIT DISPOSITIF

Publication

EP 2683999 A1 20140115 (DE)

Application

EP 12713904 A 20120320

Priority

- EP 11162238 A 20110413
- EP 2012054863 W 20120320
- EP 12713904 A 20120320

Abstract (en)

[origin: EP2511638A1] Operating an electric arc furnace comprising at least one electrode for producing a melt in a furnace vessel, comprises measuring vibrations on a wall of the furnace vessel, by which a slag height of the melt is determined. The deviation of a determined actual value of the slag height is given by a set value of control and/or control signals, through which an arc length of at least one electrode is adjusted. An independent claim is also included for an apparatus for performing the method comprising at least one body sound sensor for detecting vibrations, where the electric arc furnace comprises at least one electrode for producing a melt in the furnace vessel, a computing unit for calculating the actual value of a slag height in the furnace vessel and a controlling or regulating unit for adjusting the arc length of at least one electrode during deviations of the actual value of the slag height from the desired value.

IPC 8 full level

C21C 5/52 (2006.01); **F27B 3/28** (2006.01); **F27D 11/10** (2006.01); **F27D 19/00** (2006.01); **F27D 21/00** (2006.01)

CPC (source: EP RU US)

C21C 5/5211 (2013.01 - EP US); **F27B 3/28** (2013.01 - EP RU US); **F27D 11/10** (2013.01 - EP US); **F27D 19/00** (2013.01 - EP US); **F27D 21/0028** (2013.01 - EP US); **C21C 5/52** (2013.01 - RU); **F27D 19/00** (2013.01 - RU); **F27D 21/04** (2013.01 - RU); **G06N 5/048** (2013.01 - EP US); **Y02P 10/20** (2015.11 - EP US)

Citation (search report)

See references of WO 2012139859A1

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 2511638 A1 20121017; EP 2683999 A1 20140115; MX 2013011878 A 20131101; MX 338597 B 20160422; RU 2013150350 A 20150520; RU 2605739 C2 20161227; US 2014112365 A1 20140424; WO 2012139859 A1 20121018

DOCDB simple family (application)

EP 11162238 A 20110413; EP 12713904 A 20120320; EP 2012054863 W 20120320; MX 2013011878 A 20120320; RU 2013150350 A 20120320; US 201214111419 A 20120320