

Title (en)

METHOD FOR OPERATING A BOTTOM PURGING SYSTEM OF A BOF CONVERTER

Title (de)

VERFAHREN ZUM BETREIBEN EINES BODENSPÜLSYSTEMS EINES BOF-KONVERTERS

Title (fr)

PROCÉDÉ D'UTILISATION D'UN SYSTÈME DE NETTOYAGE DU FOND D'UN CONVERTISSEUR BOF

Publication

EP 2440872 B1 20130320 (DE)

Application

EP 10723541 A 20100608

Priority

- EP 2010003411 W 20100608
- DE 102009024859 A 20090609
- DE 102010020179 A 20100511

Abstract (en)

[origin: WO2010142407A1] The invention relates to a method for operating a bottom purging system (100) of a BOF converter, said system having, in a distributed arrangement, a plurality of annular slot nozzles (11) consisting of a central pipe (2) and an outer pipe (7), with inert gas injection for decarburizing the melt in the converter. The aim of invention is to provide a method that considerably improves the durability of the nozzles and of the purging sink or block and thus raises the number of smelting cycles in the converter. This is achieved in that, via the central pipe (2), the inert gas (3) is at least intermittently injected together with hydrocarbon and jointly with a jacket gas (9) that is fed through the gap (8) between the central pipe and the outer pipe and that reacts with the inert gas or the gas mixture from the central pipe (2), wherein the jacket gas is split upon meeting the liquid steel, and a mushroom-shaped porous steel jacket (10) that circularly encloses the annular slot nozzles (11) is formed.

IPC 8 full level

F27D 3/16 (2006.01); **C21C 5/34** (2006.01); **C21C 5/48** (2006.01); **F27D 1/16** (2006.01)

CPC (source: EP)

C21C 5/34 (2013.01); **C21C 5/48** (2013.01); **F27D 1/1684** (2013.01); **F27D 3/16** (2013.01); **F27D 2003/164** (2013.01); **F27D 2003/165** (2013.01); **F27D 2003/166** (2013.01); **F27D 2003/167** (2013.01)

Cited by

CN106500513A; CN103591804A

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2010142407 A1 20101216; DE 102010020179 A1 20101216; EP 2440872 A1 20120418; EP 2440872 B1 20130320

DOCDB simple family (application)

EP 2010003411 W 20100608; DE 102010020179 A 20100511; EP 10723541 A 20100608