

Title (en)  
METHOD FOR OPERATING A CHARGING MATERIAL PREHEATER AND CHARGING MATERIAL PREHEATER AND SMELTING FURNACE SYSTEM

Title (de)  
VERFAHREN ZUM BETREIBEN EINES CHARGIERGUTVORWÄRMERS, SOWIE CHARGIERGUTVORWÄRMER UND SCHMELZOFENANLAGE

Title (fr)  
PROCÉDÉ DE FONCTIONNEMENT D'UN DISPOSITIF DE PRÉCHAUFFAGE DE CHARGE, DISPOSITIF DE PRÉCHAUFFAGE DE CHARGE ET INSTALLATION FOUR DE FUSION

Publication  
**EP 2603757 A1 20130619 (DE)**

Application  
**EP 11740625 A 20110727**

Priority

- DE 102010039112 A 20100810
- EP 2011062914 W 20110727

Abstract (en)  
[origin: WO2012019913A1] The invention relates to a method for operating a charging material preheater for a smelting oven, to a charging material preheater, and to a smelting furnace system having such a charging material preheater. The charging material preheater comprises a shaft having a vertical shaft opening comprising at least one charging opening at the upper end thereof for filling the shaft opening with fragmented charging material and comprising an emptying opening at the lower end thereof, wherein a cross section of the shaft opening expands in the direction of the emptying opening, starting from the charging opening, and wherein the charging material preheater further comprises at least one retaining device in the region of the emptying opening for temporarily holding back the charging material in the shaft. The charging material preheater allows vertical lifting of the shaft into a preheating position relative to the charging material retained in the shaft, starting from a charging position, wherein at least one auxiliary opening is formed between at least one region of an inner wall of the shaft and the charging material retained in the shaft.

IPC 8 full level  
**F27B 3/18** (2006.01); **C21C 5/52** (2006.01); **C21C 5/56** (2006.01); **F27D 13/00** (2006.01)

CPC (source: EP)  
**C21C 5/5211** (2013.01); **C21C 5/527** (2013.01); **C21C 5/565** (2013.01); **F27B 3/186** (2013.01); **F27D 13/002** (2013.01); **C21C 2005/5282** (2013.01); **Y02P 10/20** (2015.11)

Citation (search report)  
See references of WO 2012019913A1

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)  
**WO 2012019913 A1 20120216**; EP 2603757 A1 20130619; MX 2013001556 A 20130307; RU 2013110305 A 20140920; RU 2576973 C2 20160310

DOCDB simple family (application)  
**EP 2011062914 W 20110727**; EP 11740625 A 20110727; MX 2013001556 A 20110727; RU 2013110305 A 20110727