Title (en)

Method for heating in an industrial furnace

Title (de)

Verfahren zur Erwärmung in einem Industrieofen

Title (fr)

Procédé de chauffage dans un four industriel

Publication

EP 2071262 A1 20090617 (EN)

Application

EP 08171076 A 20081209

Priority

SE 0702774 A 20071213

Abstract (en)

A method for heating billets or ingots in an industrial furnace by means of at least one burner, in which furnace the heating power (P) continuously introduced into the furnace is controlled by means of a regulator whose input parameter is the temperature (T furnace) of the furnace atmosphere, which temperature (T furnace) is measured by means of a temperature measuring device, wherein the regulator is caused to control the heating in at least one first heating step and a subsequent second temperature equalising step. The invention is characterised in that the instantaneous heating power (P) is measured continuously, in that the derivative of the heating power (P) with respect to time (dP/dt) is calculated continuously, and in that the heating is interrupted when a primary condition, namely that this derivative (dP/dt) falls within a predetermined interval ([dP/dP cond 1 , dP/dP cond 2]), is met, provided that the heating at this time is in the subsequent second temperature equalising step.

IPC 8 full level

F27D 19/00 (2006.01); **C21D 11/00** (2006.01)

CPC (source: EP SE)

C21D 9/0081 (2013.01 - EP SE); **C21D 9/70** (2013.01 - SE); **C21D 11/00** (2013.01 - EP SE); **F27D 19/00** (2013.01 - EP); F27D 2019/0034 (2013.01 - EP)

Citation (applicant)

None

Citation (search report)

- [X] US 2788175 A 19570409 - RUDOLF BOUREK, et al
- [A] DE 2808771 A1 19790906 - HOESCH WERKE AG

Cited by

ES2415560R1; US10648738B2; WO2011131802A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 08171076 A 20081209; RU 2008149158 A 20081212; SE 0702774 A 20071213