

Title (en)

Cooled furnace roller, in particular for a roller hearth furnace

Title (de)

Kühlbare Ofenrolle, insbesondere für einen Rollenherdofen

Title (fr)

Rouleau refroidi de four, en particulier pour un four à sole à rouleaux

Publication

EP 1197721 B1 20051207 (DE)

Application

EP 01119495 A 20010814

Priority

DE 10047046 A 20000922

Abstract (en)

[origin: DE10047046A1] Furnace roll (1) comprises a shaft (3) with inner lying coolant channels (4, 5) arranged outside of the furnace; and supporting rings (7) arranged on the shaft using a receiving bore (6) and forming a conveying surface. A clamping ring (8) made of metal or metal alloy is arranged between the supporting rings and the shaft to form an optimum metallic contact for unhindered heat transfer. Steel bushings (9) are connected to the shaft to form a torsion-stable connection. Preferred Features: The clamping ring is made of a copper malleable alloy according to DIN 17666 or is made of copper, copper alloy or a soft copper/silver alloy. The supporting rings are coated with a hard metal coating (12) on its peripheral transporting surface.

IPC 1-7

F27D 3/02

IPC 8 full level

B65G 39/00 (2006.01); **B22D 11/12** (2006.01); **F16C 13/00** (2006.01); **F27B 9/24** (2006.01); **F27D 3/02** (2006.01)

CPC (source: EP US)

F27D 3/026 (2013.01 - EP US)

Cited by

EP3312536A1; CN102009070A; CN104748546A; DE102017208710A1; WO2018059940A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1197721 A1 20020417; **EP 1197721 B1 20051207**; AT E312326 T1 20051215; DE 10047046 A1 20020411; DE 50108294 D1 20060112; JP 2002172452 A 20020618; JP 5000821 B2 20120815; US 2002079624 A1 20020627; US 6638472 B2 20031028

DOCDB simple family (application)

EP 01119495 A 20010814; AT 01119495 T 20010814; DE 10047046 A 20000922; DE 50108294 T 20010814; JP 2001281745 A 20010917; US 96307301 A 20010924