

Title (en)

DEVICE FOR HEAT-TREATING SHEET METAL STRIPS

Title (de)

VORRICHTUNG ZUR WÄRMEBEHANDLUNG VON BLECHBÄNDERN

Title (fr)

DISPOSITIF DE TRAITEMENT THERMIQUE DE BANDES MÉTALLIQUES

Publication

**EP 2488790 A1 20120822 (DE)**

Application

**EP 10760210 A 20100830**

Priority

- AT 16102009 A 20091013
- AT 2010000313 W 20100830

Abstract (en)

[origin: TW201113480A] An apparatus is described for the heat treatment of sheet-metal strips (6), comprising at least one jet pipe unit (1) which comprises three pipes disposed in a common axial plane parallel to the sheet-metal strip (6), which pipes are a central pipe (2) connectible to a burner and two external pipes (3) which are connected at both ends with the central pipe (2) via pipe bends (4), and a bearing pin (9) connected with the two pipe bends (4) between the central pipe (2) on the one hand and the two external pipes (3) on the other hand on the side of the jet pipe unit opposite of the burner. In order to take into account the occurring thermal expansions in the region of the pipe bends (4) it is proposed that the bearing pin (9) is arranged on a bridge (10) bridging a nip (11) between the two pipe bends (4) with two sections (12) extending on either side of the axis of the central pipe (2) and being inclined under an acute angle in relation to the axis of the central pipe (2). (Fig. 1)

IPC 8 full level

**F23C 3/00** (2006.01); **F23D 14/12** (2006.01); **F27D 99/00** (2010.01)

CPC (source: EP KR US)

**C21D 9/52** (2013.01 - KR); **F23C 3/002** (2013.01 - EP US); **F23D 14/126** (2021.05 - EP KR US); **F23D 91/02** (2015.07 - EP US);  
**F23M 9/003** (2013.01 - EP US); **F23M 9/08** (2013.01 - EP US); **F27D 99/0035** (2013.01 - EP US); **F23C 2900/03009** (2013.01 - EP US)

Citation (search report)

See references of WO 2011044596A1

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)

**AT 508264 A4 20101215; AT 508264 B1 20101215;** CA 2776760 A1 20110421; CN 102597621 A 20120718; EP 2488790 A1 20120822;  
JP 2013507598 A 20130304; JP 5542945 B2 20140709; KR 20120099399 A 20120910; MX 2012003805 A 20120508;  
RU 2012119519 A 20131120; RU 2506496 C2 20140210; TW 201113480 A 20110416; US 2012223466 A1 20120906;  
WO 2011044596 A1 20110421; ZA 201202059 B 20130529

DOCDB simple family (application)

**AT 16102009 A 20091013;** AT 2010000313 W 20100830; CA 2776760 A 20100830; CN 201080046114 A 20100830; EP 10760210 A 20100830;  
JP 2012533429 A 20100830; KR 20127009320 A 20100830; MX 2012003805 A 20100830; RU 2012119519 A 20100830;  
TW 99129385 A 20100901; US 201013501556 A 20100830; ZA 201202059 A 20120320