

Title (en)  
DEVICE FOR WARMING A METAL STRIP AND SYSTEMS FOR PRODUCING HOT-ROLLED METAL STRIPS, FITTED WITH SAID TYPE OF DEVICE

Title (de)  
VORRICHTUNG ZUM ERWÄRMEN EINES METALLBANDES SOWIE MIT EINER DERARTIGEN VORRICHTUNG AUSGESTATTETE ANLAGEN ZUM ERZEUGEN VON WARMGEWALZTEM METALLBAND

Title (fr)  
DISPOSITIF PERMETTANT DE CHAUFFER UNE BANDE METALLIQUE, ET INSTALLATIONS EQUIPEES DE CE DISPOSITIF, SERVANT A PRODUIRE DES BANDES METALLIQUES LAMINEES A CHAUD

Publication  
**EP 1648628 A1 20060426 (DE)**

Application  
**EP 04739323 A 20040524**

Priority  
• EP 2004005569 W 20040524  
• DE 10323796 A 20030523

Abstract (en)  
[origin: WO2004103595A1] The invention relates to a device for warming a metal strip (3). Said device only requires a small amount of space and the metal strip (3) can be heated to a predetermined temperature in a precise and rapid manner. The invention also relates to a system which is suitable for the production of hot-rolled metal strips, wherein despite the small amount of space available, the rolling stock can be heated in an optimum manner for the hot-rolling. As a result, the inventive device is fitted with at least one warming device (10, 11, 12, 13) working in an inductive manner. Said device comprises an inductor (14, 15, 16, 17) inducing an electromagnetic field and the inductor extends over the conveying path of the metal strip (3) which is to be warmed and the position thereof can be adjusted transversal to the conveying path according to the width of the metal strip.

IPC 1-7  
**B21B 45/00**; H05B 6/02; C21D 1/42

IPC 8 full level  
**B21B 45/00** (2006.01); **C21D 9/60** (2006.01); **H05B 6/02** (2006.01); **B21B 1/34** (2006.01); **B21B 1/46** (2006.01)

CPC (source: EP US)  
**B21B 45/004** (2013.01 - EP US); **C21D 9/60** (2013.01 - EP US); **B21B 1/34** (2013.01 - EP US); **B21B 1/46** (2013.01 - EP US); **Y02P 10/25** (2015.11 - EP US)

Citation (search report)  
See references of WO 2004103595A1

Cited by  
WO2022013066A1; EP3941157A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004103595 A1 20041202**; DE 10323796 B3 20050210; EP 1648628 A1 20060426; US 2007051152 A1 20070308

DOCDB simple family (application)  
**EP 2004005569 W 20040524**; DE 10323796 A 20030523; EP 04739323 A 20040524; US 55674304 A 20040524