

Title (en)

METHOD AND DEVICE FOR PRODUCING A METAL STRIP BY CONTINUOUS ROLLING

Title (de)

VERFAHREN UND VORRICHTUNG ZUM HERSTELLEN EINES METALLISCHEN BANDES DURCH ENDLOSVALZEN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE FABRICATION D'UNE BANDE MÉTALLIQUE PAR LAMINAGE CONTINU

Publication

EP 3359317 A1 20180815 (DE)

Application

EP 16782023 A 20161007

Priority

- DE 102015219652 A 20151009
- DE 102015223787 A 20151130
- EP 2016074002 W 20161007

Abstract (en)

[origin: WO2017060428A1] The invention relates to a method for producing a metal strip by continuous rolling, in which first a slab (1) is cast in a casting machine (2) and this cast is then rolled continuously in a rolling train (3) comprising at least one rolling stand, wherein the material of the slab (1) is cooled in the region of a strand guide (4) by spraying on a cooling medium (5) by means of a number of cooling devices (6), wherein each cooling device (6) has a number of spraying nozzles (7), which are arranged next to one another in a direction transverse (Q) to the conveying direction (F) and by means of which the cooling medium (5) is discharged onto the slab (1). To achieve a higher quality of the slab, and consequently of the strip, the invention provides that at least one of the cooling devices (6) is operated in such a way that cooling medium (5) is only discharged onto the slab (1) by means of a number of spraying nozzles (7) arranged in the middle region (M) of the slab (1), while the spraying nozzles (7) located in the edge region (K) of the slab (1) discharge no cooling medium (5) or only a reduced amount of cooling medium (5) onto the slab (1), wherein, in the region of the strand guide (4) and/or in the region between the strand guide (4) and the rolling train (3), preferably the edge region (K) of the slab (1) is protected from cooling by means of a thermal insulation (8) and/or the slab (1) is heated in its edge region (K) along an equalizing zone between the casting machine (2) and the rolling train (3). The invention also relates to a device for producing the strip.

IPC 8 full level

B22D 11/12 (2006.01); **B21B 37/44** (2006.01); **B21B 45/02** (2006.01); **B22D 11/124** (2006.01); **B22D 11/22** (2006.01)

CPC (source: EP)

B21B 37/44 (2013.01); **B21B 45/0218** (2013.01); **B21B 45/0233** (2013.01); **B22D 11/1206** (2013.01); **B22D 11/1213** (2013.01); **B22D 11/1246** (2013.01); **B22D 11/225** (2013.01)

Citation (search report)

See references of WO 2017060428A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2017060428 A1 20170413; DE 102015223787 A1 20170413; EP 3359317 A1 20180815; EP 3359317 B1 20191218

DOCDB simple family (application)

EP 2016074002 W 20161007; DE 102015223787 A 20151130; EP 16782023 A 20161007