

Title (en)

METHOD AND DEVICE FOR CHANGING THE TEMPERATURE OF METAL STRIPS IN A FLATNESS-ADAPTIVE MANNER

Title (de)

VERFAHREN UND VORRICHTUNG ZUR PLANHEITSADAPTIVEN TEMPERATURÄNDERUNG VON METALLBÄNDERN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE VARIATION DE TEMPÉRATURE, ADAPTATIVE EN TERMES DE PLANÉITÉ, DE BANDES MÉTALLIQUES

Publication

EP 3328566 B1 20190828 (DE)

Application

EP 16751521 A 20160727

Priority

- DE 102015112293 A 20150728
- EP 2016067933 W 20160727

Abstract (en)

[origin: WO2017017150A1] The invention relates to a device for changing the temperature of a metal strip, in particular a metal strip made of aluminum or an aluminum alloy, comprising means for changing the temperature of the metal strip by heating or cooling, wherein the metal strip is moved in the strip direction relative to the means for changing the temperature of the metal strip using means for transporting the metal strip. The aim of the invention is to provide a device for changing the temperature of metal strips, said device allowing an improved process control and a higher degree of precision with respect to the flatness of the treated metal strip, in particular during temperature changes of the aluminum strip. According to the invention, this is achieved using a device in that means for changing the temperature of the metal strip have a plurality of individual temperature-control means which heat or cool the metal strip only in some regions, and in each case at least a plurality of the temperature-control means can be positioned in a translationally and/or rotationally variable manner relative to the metal strip.

IPC 8 full level

B21B 37/44 (2006.01); **C21D 1/34** (2006.01); **C21D 1/667** (2006.01); **C21D 9/46** (2006.01); **C21D 11/00** (2006.01); **C22F 1/04** (2006.01)

CPC (source: EP US)

B21B 37/44 (2013.01 - EP US); **C21D 1/34** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C21D 11/00** (2013.01 - EP US); **C22F 1/04** (2013.01 - EP US); **C21D 1/667** (2013.01 - EP US); **C21D 2221/00** (2013.01 - EP US)

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

DOCDB simple family (publication)

DE 102015112293 A1 20170202; CN 107848001 A 20180327; CN 107848001 B 20210504; EP 3328566 A1 20180606; EP 3328566 B1 20190828; ES 2746956 T3 20200309; HR P20191672 T1 20191213; HU E046231 T2 20200228; LT 3328566 T 20191010; PL 3328566 T3 20200131; RS 59396 B1 20191129; SI 3328566 T1 20191129; US 10676807 B2 20200609; US 2018135156 A1 20180517; WO 2017017150 A1 20170202

DOCDB simple family (application)

DE 102015112293 A 20150728; CN 201680044331 A 20160727; EP 16751521 A 20160727; EP 2016067933 W 20160727; ES 16751521 T 20160727; HR P20191672 T 20190917; HU E16751521 A 20160727; LT 16751521 T 20160727; PL 16751521 T 20160727; RS P20191206 A 20160727; SI 201630394 T 20160727; US 201815867289 A 20180110