

Title (en)

METHOD FOR PRODUCING CONVENTIONALLY HOT-ROLLED PROFILED STRIP PRODUCTS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON KONVENTIONELL WARMGEWALZTEN, PROFILIERTEN WARMBANDERZEUGNISSEN

Title (fr)

PROCÉDÉ POUR LA FABRICATION DE PRODUITS DE TYPE FEUILLARD À CHAUD PROFILÉS, LAMINÉS À CHAUD DE MANIÈRE CLASSIQUE

Publication

EP 3902931 A1 20211103 (DE)

Application

EP 19832078 A 20191218

Priority

- DE 102018132860 A 20181219
- EP 2019086062 W 20191218

Abstract (en)

[origin: WO2020127561A1] The invention relates to a method for producing conventionally hot-rolled strip products. A steel alloy is melted, the molten steel alloy is cast into slabs, and the slabs are hot-rolled to a desired degree of formation with a desired strip thickness after being heated to a temperature above Ac3, wherein the strip is rolled above the recrystallization temperature of the alloy. The strip is cooled to room temperature after the rolling process and is momentarily heated to a temperature of > Ac3 for hardening purposes and then re-cooled. The invention is characterized in that the heating process is carried out with a temperature increase of more than 5 K/s, preferably more than 10 K/s, particularly more than 50 K/s, in particular more than 100 K/s, and is maintained at a desired target temperature for 0.5 to 60 s, and the cooling process is then carried out. The steel strip or the blank, which has been produced by a normalizing rolling process, is profiled into a component in a forming process.

IPC 8 full level

C21D 1/18 (2006.01); **C21D 1/25** (2006.01); **C21D 1/34** (2006.01); **C21D 1/42** (2006.01); **C21D 6/00** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/08** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/16** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/54** (2006.01)

CPC (source: EP US)

C21D 1/02 (2013.01 - EP US); **C21D 1/18** (2013.01 - EP US); **C21D 1/25** (2013.01 - EP); **C21D 1/34** (2013.01 - EP); **C21D 1/42** (2013.01 - EP); **C21D 6/00** (2013.01 - EP); **C21D 6/005** (2013.01 - EP); **C21D 6/008** (2013.01 - EP); **C21D 8/02** (2013.01 - EP); **C21D 8/0226** (2013.01 - EP US); **C21D 8/0247** (2013.01 - EP); **C21D 8/0263** (2013.01 - EP US); **C21D 8/0273** (2013.01 - US); **C21D 9/08** (2013.01 - EP); **C21D 9/46** (2013.01 - EP); **C22C 38/001** (2013.01 - US); **C22C 38/002** (2013.01 - US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/08** (2013.01 - EP); **C22C 38/12** (2013.01 - EP); **C22C 38/14** (2013.01 - EP); **C22C 38/16** (2013.01 - EP); **C22C 38/38** (2013.01 - EP); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C22C 38/54** (2013.01 - EP US); **C22C 38/58** (2013.01 - EP); **C21D 6/004** (2013.01 - EP); **C21D 2211/001** (2013.01 - US); **C21D 2211/008** (2013.01 - EP US); **Y02P 10/25** (2015.11 - EP)

Citation (search report)

See references of WO 2020127561A1

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 2020127561 A1 20200625; DE 102018132860 A1 20200625; EP 3902931 A1 20211103; US 2022145414 A1 20220512

DOCDB simple family (application)

EP 2019086062 W 20191218; DE 102018132860 A 20181219; EP 19832078 A 20191218; US 201917413435 A 20191218