

Title (en)  
METHOD FOR PRODUCING A COLD-ROLLED STEEL STRIP HAVING TRIP-CHARACTERISTICS MADE OF A HIGH-STRENGTH MANGAN-CONTAINING STEEL

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES KALTGEWALZTEN STAHLBANDES MIT TRIP-EIGENSCHFTEN AUS EINEM HOCHFESTEN, MANGANHALTIGEN STAHL

Title (fr)  
PROCÉDÉ DE FABRICATION D'UNE BANDE D'ACIER LAMINÉE À FROID PRÉSENTANT DES PROPRIÉTÉS TRIP À PARTIR D'UN ACIER À RÉSISTANCE ÉLEVÉE CONTENANT DU MANGANÈSE

Publication  
**EP 3469108 A1 20190417 (DE)**

Application  
**EP 17730110 A 20170608**

Priority  
• DE 102016110661 A 20160609  
• EP 2017063958 W 20170608

Abstract (en)  
[origin: WO2017211952A1] The invention relates to a method for producing a cold-rolled steel strip made of a high-strength mangan-containing steel with TRIP-characteristics, containing (in wt.%) C: 0.0005 to 0.9, Mn: more than 3.0 to 12, with the remaining portion being iron including unavoidable steel-associated elements, with the optional addition of one or more of the following elements (in wt.%): Al: up to 10; Si: up to 6; Cr: up to 6; Nb: up to 1.5; V: up to 1.5; Ti: up to 1.5; Mo: up to 3; Cu: up to 3; Sn: up to 0.5; W: up to 5; Co: up to 8; Zr: up to 0.5; Ta: up to 0.5; Te: up to 0.5; B: up to 0.15; P: max. 0.1, in particular < 0.04; S: max. 0.1, in particular < 0.02; N: max. 0.1, in particular < 0.05; Ca: up to 0.1. According to the invention, in order to improve a corresponding method, the cold-rolling to a required end thickness occurs at a temperature of over 50°C to 400°C before the first impact.

IPC 8 full level  
**C21D 7/02** (2006.01); **C22C 38/02** (2006.01)

CPC (source: EP KR RU US)  
**C21D 6/002** (2013.01 - US); **C21D 6/005** (2013.01 - US); **C21D 6/008** (2013.01 - US); **C21D 7/02** (2013.01 - RU); **C21D 8/0205** (2013.01 - US); **C21D 8/0226** (2013.01 - US); **C21D 8/0236** (2013.01 - EP KR US); **C21D 8/0263** (2013.01 - US); **C21D 8/0278** (2013.01 - US); **C21D 8/105** (2013.01 - KR); **C21D 9/52** (2013.01 - US); **C22C 33/04** (2013.01 - RU); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - RU); **C22C 38/06** (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/38** (2013.01 - EP US); **C21D 8/105** (2013.01 - EP US); **C21D 2201/02** (2013.01 - KR); **C21D 2211/001** (2013.01 - EP US); **C21D 2211/008** (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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**DE 102016110661 A1 20171214**; EP 3469108 A1 20190417; KR 20190020694 A 20190304; RU 2711696 C1 20200121; US 2019256943 A1 20190822; WO 2017211952 A1 20171214

DOCDB simple family (application)  
**DE 102016110661 A 20160609**; EP 17730110 A 20170608; EP 2017063958 W 20170608; KR 20187037616 A 20170608; RU 2018143508 A 20170608; US 201716308319 A 20170608