

Title (en)

HIGH-STRENGTH MULTI-PHASE STEEL, AND METHOD FOR PRODUCING A STRIP FROM SAID STEEL

Title (de)

HOCHFESTER MEHRPHASENSTAHL UND VERFAHREN ZUR HERSTELLUNG EINES BANDES AUS DIESEM STAHL

Title (fr)

ACIER POLYPHASÉ À HAUTE RÉSISTANCE ET PROCÉDÉ DE FABRICATION D'UNE BANDE À PARTIR DUDIT ACIER

Publication

**EP 2836614 A1 20150218 (DE)**

Application

**EP 13717417 A 20130227**

Priority

- DE 102012006017 A 20120320
- DE 2013000125 W 20130227

Abstract (en)

[origin: WO2013139319A1] The invention relates to a high-strength multi-phase steel having tensile strengths of no less than 580 MPa, preferably with a dual-phase structure for a cold-rolled or hot-rolled steel strip having improved forming properties, in particular for lightweight vehicle construction, consisting of the following elements (contents in % by mass): C 0.075 to  $\leq 0.105$ ; Si 0.200 to  $\leq 0.300$ ; Mn 1.000 to  $\leq 2.000$ ; Cr 0.280 to  $\leq 0.480$ ; Al 0.10 to  $\leq 0.060$ ; P  $\leq 0.020$ ; Nb  $\geq 0.005$  to  $\leq 0.025$ ; N  $\leq 0.0100$ ; S  $\leq 0.0050$ ; the remainder iron, including conventional steel-accompanying elements not mentioned above. The invention further relates to a method for producing a cold-rolled or hot-rolled steel strip from said steel.

IPC 8 full level

**C21D 8/02** (2006.01); **C21D 1/18** (2006.01); **C21D 9/46** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/12** (2006.01); **C22C 38/18** (2006.01)

CPC (source: EP KR RU US)

**C21D 1/18** (2013.01 - EP KR US); **C21D 1/26** (2013.01 - EP KR US); **C21D 8/0205** (2013.01 - EP KR US); **C21D 8/0226** (2013.01 - EP KR US); **C21D 8/0247** (2013.01 - EP KR US); **C21D 8/0284** (2013.01 - EP KR US); **C21D 9/46** (2013.01 - EP KR US); **C21D 9/56** (2013.01 - EP KR US); **C22C 1/02** (2013.01 - EP KR US); **C22C 38/001** (2013.01 - EP KR US); **C22C 38/002** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/26** (2013.01 - EP KR US); **C22C 38/38** (2013.01 - EP KR US); **C23C 2/02** (2013.01 - EP RU US); **C23C 2/0224** (2022.08 - EP KR RU US); **C23C 2/024** (2022.08 - KR); **C23C 2/06** (2013.01 - KR); **C21D 8/02** (2013.01 - RU); **C21D 9/46** (2013.01 - RU); **C22C 38/00** (2013.01 - RU); **C23C 2/06** (2013.01 - RU)

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 102012006017 A1 20130926**; EP 2836614 A1 20150218; EP 2836614 B1 20190911; KR 102048792 B1 20191126; KR 20140138990 A 20141204; RU 2014142014 A 20160510; RU 2615957 C2 20170411; US 10519525 B2 20191231; US 2015034215 A1 20150205; WO 2013139319 A1 20130926

DOCDB simple family (application)

**DE 102012006017 A 20120320**; DE 2013000125 W 20130227; EP 13717417 A 20130227; KR 20147029179 A 20130227; RU 2014142014 A 20130227; US 201314386602 A 20130227