

Title (en)
HIGH-STRENGTH MULTIPHASE STEEL AND METHOD FOR PRODUCING A STRIP MADE FROM THIS STEEL WITH A MINIMUM TENSILE STRENGTH OF 580 MPA

Title (de)
HOCHFESTER MEHRPHASENSTAHL UND VERFAHREN ZUR HERSTELLUNG EINES BANDES AUS DIESEM STAHL MIT EINER MINDESTZUGFESTIGKEIT VON 580MPA

Title (fr)
ACIER MULTIPHASE À HAUTE RÉSISTANCE ET PROCÉDÉ POUR LA FABRICATION D'UNE BANDE FAITE DE CET ACIER PRÉSENTANT UNE RÉSISTANCE À LA TRACTION MINIMALE DE 580 MPA

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Application
EP 13732078 A 20130524

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• DE 2013000299 W 20130524

Abstract (en)
[origin: WO2013189474A1] The invention relates to a high-strength multiphase steel with minimum tensile strengths of 580 MPa, preferably a dual-phase structure for a cold-rolled or hot-rolled steel strip with improved forming properties, particularly for lightweight vehicle construction. The multiphase steel consists of the elements (contents in mass-%): C 0.075 to \leq 0.105; Si 0.600 to \leq 0.800; Mn 1.000 to \leq 2.250; Cr 0.280 to \leq 0.480; Al 0.010 to \leq 0.060; P \leq 0.020; N \leq 0.0100; S \leq 0.0150, remainder iron, including typical steel-accompanying elements not mentioned above, which are impurities introduced by smelting, with the condition that the Mn content is preferably \leq 1.500% for strip thicknesses up to 1 mm, the Mn content is preferably \leq 1.750% for strip thicknesses of 1 to 2 mm, and the Mn content is preferably \geq 1.500% for strip thicknesses \geq 2 mm.

IPC 8 full level
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CPC (source: EP KR RU US)
C21D 1/74 (2013.01 - US); **C21D 1/84** (2013.01 - US); **C21D 6/002** (2013.01 - US); **C21D 6/005** (2013.01 - US); **C21D 6/008** (2013.01 - US); **C21D 8/02** (2013.01 - RU); **C21D 8/0205** (2013.01 - EP KR US); **C21D 8/0226** (2013.01 - EP KR US); **C21D 8/0236** (2013.01 - EP KR US); **C21D 9/46** (2013.01 - RU); **C21D 9/52** (2013.01 - EP US); **C21D 11/00** (2013.01 - US); **C22C 1/02** (2013.01 - EP US); **C22C 38/001** (2013.01 - US); **C22C 38/002** (2013.01 - US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP US); **C22C 38/18** (2013.01 - EP RU US); **C22C 38/22** (2013.01 - US); **C22C 38/26** (2013.01 - US); **C22C 38/38** (2013.01 - EP KR RU US); **C23C 2/06** (2013.01 - RU US)

Citation (examination)
US 2010003161 A1 20100107 - USAMI AKIRA [JP], et al

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