

Title (en)

COLD ROLLED HIGH STRENGTH LOW ALLOY STEEL STRIP

Title (de)

KALTGEWALZTES, HOCHFESTES, NIEDRIGLEGIERTES STAHLBAND

Title (fr)

BANDE EN ACIER À FAIBLE TENEUR EN ALLIAGE, À HAUTE RÉSISTANCE ET LAMINÉ À FROID

Publication

EP 3186406 B1 20200408 (EN)

Application

EP 15757135 A 20150824

Priority

- EP 14182131 A 20140825
- EP 2015001724 W 20150824

Abstract (en)

[origin: WO2016030010A1] The invention relates to a high strength low alloy steel. According to the invention the high strength low alloy steel strip, sheet or blank, coated with zinc or a zinc alloy, has the following composition in weight%: C: 0.03 - 0.07, Mn: 0.70 - 1.60, Si: ≤ 0.01 - 0.2, Al: 0.005 - 0.1, Cr: ≤ 0.1, Cu: ≤ 0.2, N: ≤ 0.008, P: ≤ 0.03, S: ≤ 0.025, O: ≤ 0.01, Ti: 0.02 - 0.07, V: 0.04 - 0.15, Mo: ≤ 0.03, Nb: ≤ 0.03, Ca: ≤ 0.05, the remainder being iron and unavoidable impurities, wherein the steel strip, sheet or blank has a yield strength Rp0,2 of at least 420 MPa.

IPC 8 full level

C22C 38/04 (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 38/06** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C23C 2/02** (2006.01); **C23C 2/06** (2006.01); **C23C 2/20** (2006.01); **C23C 2/40** (2006.01); **C23F 17/00** (2006.01)

CPC (source: CN EP KR US)

C21D 6/005 (2013.01 - EP US); **C21D 8/0205** (2013.01 - EP US); **C21D 8/0226** (2013.01 - CN EP KR US); **C21D 8/0236** (2013.01 - EP KR US); **C21D 8/0263** (2013.01 - CN EP KR US); **C21D 8/0278** (2013.01 - EP KR US); **C21D 9/46** (2013.01 - CN EP KR US); **C22C 38/001** (2013.01 - EP KR US); **C22C 38/002** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - CN EP US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/12** (2013.01 - CN EP KR US); **C22C 38/14** (2013.01 - CN EP US); **C22C 38/20** (2013.01 - KR); **C22C 38/22** (2013.01 - KR); **C22C 38/24** (2013.01 - KR); **C22C 38/26** (2013.01 - KR); **C22C 38/28** (2013.01 - KR); **C22C 38/38** (2013.01 - KR); **C23C 2/02** (2013.01 - CN EP US); **C23C 2/022** (2022.08 - CN EP US); **C23C 2/0224** (2022.08 - KR); **C23C 2/024** (2022.08 - KR); **C23C 2/06** (2013.01 - CN EP KR US); **C23C 2/40** (2013.01 - CN EP KR US); **C23F 17/00** (2013.01 - 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)

WO 2016030010 A1 20160303; BR 112017003147 A2 20171128; CA 2959096 A1 20160303; CA 2959096 C 20190625; CN 107075652 A 20170818; EP 3186406 A1 20170705; EP 3186406 B1 20200408; JP 2018502213 A 20180125; KR 20170047254 A 20170504; MX 2017002410 A 20170523; US 2017275724 A1 20170928; ZA 201700943 B 20181219

DOCDB simple family (application)

EP 2015001724 W 20150824; BR 112017003147 A 20150824; CA 2959096 A 20150824; CN 201580045534 A 20150824; EP 15757135 A 20150824; JP 2017511320 A 20150824; KR 20177005778 A 20150824; MX 2017002410 A 20150824; US 201515504941 A 20150824; ZA 201700943 A 20170207