

Title (en)

STEEL ALLOY FOR A LOW-ALLOY, HIGH-STRENGTH STEEL

Title (de)

STAHLLEGIERUNG FÜR EINEN NIEDRIG LEGIERTEN, HOCHFESTEN STAHL

Title (fr)

ALLIAGE D'ACIER POUR UN ACIER FAIBLEMENT ALLIÉ À HAUTE RÉSISTANCE

Publication

**EP 2895635 B1 20190306 (DE)**

Application

**EP 13789475 A 20130828**

Priority

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- DE 2013000519 W 20130828

Abstract (en)

[origin: WO2014040585A1] The invention relates to a low-alloy, high-strength, carbide-free bainitic steel for producing bands, sheets and tubes having the following chemical composition (in % by weight): 0.10 - 0.70 C; 0.25 - 4.00 Si; 0.05 - 3.00 Al; 1.00 - 3.00 Mn; 0.10 - 2.00 Cr; 0.001 - 0.50 Nb; 0.001 - 0.025 N; max. 0.15 P; max. 0.05 S; remainder iron having steel production-related impurities to one or more elements from Mo, Ni, Co, W, Nb, Ti or V and Zr are optionally added and rare earths provided that in order to avoid primary precipitations of Al the condition  $Al \times N < 5 \times 10^{-3}$  (% by weight) and in order to suppress cementite formation the condition  $Si + Al > 4 \times C$  (% by weight) are satisfied.

IPC 8 full level

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CPC (source: EP RU US)

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Cited by

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DOCDB simple family (publication)

**WO 2014040585 A1 20140320**; AR 092556 A1 20150422; AU 2013314787 A1 20150430; AU 2018201165 A1 20180322; AU 2018201165 B2 20190926; BR 112015005216 A2 20220726; CA 2881686 A1 20140320; CL 2015000634 A1 20151120; DK 2895635 T3 20190520; EP 2895635 A1 20150722; EP 2895635 B1 20190306; ES 2729562 T3 20191104; JP 2015533942 A 20151126; JP 6513568 B2 20190515; KR 102079612 B1 20200220; KR 20150070150 A 20150624; MX 2015003103 A 20151022; PE 20151042 A1 20150727; PL 2895635 T3 20190830; RU 2015113522 A 20161110; RU 2620216 C2 20170523; SI 2895635 T1 20190628; TR 201903460 T4 20190422; TW 201432061 A 20140816; UA 116111 C2 20180212; US 2015267282 A1 20150924; US 2020131608 A1 20200430; ZA 201502450 B 20160928

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