

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

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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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CN110662849A; CN109536843A

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