

Title (en)
PROCESS FOR COATING STEEL STRIPS AND COATED STEEL STRIP

Title (de)
VERFAHREN ZUM BESCHICHTEN VON STAHLBÄNDERN UND BESCHICHTETES STAHLBAND

Title (fr)
PROCÉDÉ POUR REVÊTIR DES FEUILLARDS D'ACIER ET FEUILLARD D'ACIER REVÊTU

Publication
EP 2496722 A1 20120912 (DE)

Application
EP 10787680 A 20101025

Priority
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• DE 2010001253 W 20101025

Abstract (en)
[origin: US2012305139A1] In a method for coating steel strips having a base material composition (in weight-%) of: C 0.04-1.0; Mn 9.0-30.0; Al 0.05-15.0; Si 0.05-6.0; Cr \leq 6.5; Cu \leq 4; Ti+Zr \leq 0.7; Nb+V \leq 0.5, remainder iron including unavoidable steel-incidental elements, the steel strip undergoes annealing and subsequently is coated electrolytically with a coat formed from zinc or a zinc-containing alloy. During the course of annealing of the steel strip at temperatures between 800 and 1000° C. under a N₂-H₂ containing atmosphere, a surface-near zone is formed which is enriched with nitrides through reaction with elements contained in the steel, thereby preventing molten zinc from penetrating into the base material during welding of the coated steel strip.

IPC 8 full level
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CPC (source: EP KR US)
C21D 6/00 (2013.01 - KR); **C21D 8/0457** (2013.01 - EP KR US); **C21D 9/48** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C23C 8/26** (2013.01 - EP KR US)

Citation (examination)
• DE 102006039307 B3 20080221 - THYSENKRUPP STEEL AG [DE]
• US 2008083477 A1 20080410 - DRILLET PASCAL [FR], et al

Cited by
EP2580358A1

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