Title (en)

PROCESS FOR PRODUCING A HIGH-STRENGTH HOT-DIP GALVANIZED STEEL SHEET WITH EXCELLENT MATERIAL STABILITY AND PROCESSABILITY

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES HOCHFESTES FEUERVERZINKTES STAHLBLECH MIT HERVORRAGENDER MATERIALSTABILITÄT UND VERARBEITBARKEIT

Title (fr)

PROCÉDÉ DE PRODUCTION D'UNE TÔLE EN ACIER GALVANISÉ AU TREMPÉ À HAUTE RÉSISTANCE PRÉSENTANT UNE EXCELLENTE STABILITÉ MATÉRIELLE ET UNE EXCELLENTE APTITUDE AU TRAITEMENT

Publication

EP 2527482 A1 20121128 (EN)

Application

EP 11734786 A 20110118

Priority

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- JP 2010011948 A 20100122
- JP 2011051151 W 20110118

Abstract (en)

A high strength galvanized steel sheet having excellent formability and stability of mechanical properties, the steel sheet having a component composition containing C: 0.04% or more, and 0.13% or less, Si: 0.7% or more, and 2.3% or less, Mn: 0.8% or more, and 2.0% or less, P: 0.1% or less, S: 0.01% or less, Al: 0.1% or less, N: 0.008% or less, and the remainder composed of Fe and incidental impurities on a percent by mass basis, wherein a steel microstructure includes 75% or more of ferrite phase, 1.0% or more of bainitic ferrite phase, and 1.0% or more, and 10.0% or less of pearlite phase on an area ratio basis, the area ratio of martensitic phase is 1.0% or more, and less than 5%, and the area ratio of martensitic phase/(area ratio of bainitic ferrite phase + area ratio of pearlite phase) #¤ 0.6 is satisfied.

IPC 8 full level

C22C 38/00 (2006.01); **C21D 8/02** (2006.01); **C21D 8/04** (2006.01); **C21D 9/46** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/12** (2006.01); **C22C 38/18** (2006.01); **C23C 2/02** (2006.01); **C23C 2/06** (2006.01); **C23C 2/28** (2006.01)

CPC (source: EP US)

C21D 8/0205 (2013.01 - EP); **C21D 8/0405** (2013.01 - EP); **C21D 9/46** (2013.01 - EP); **C22C 38/001** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **C22C 38/06** (2013.01 - EP); **C22C 38/12** (2013.01 - EP); **C22C 38/18** (2013.01 - EP); **C23C 2/02** (2013.01 - EP US); **C23C 2/0224** (2022.08 - EP US); **C23C 2/024** (2022.08 - EP US); **C23C 2/06** (2013.01 - EP); **C23C 2/28** (2013.01 - EP US); C21D 2211/002 (2013.01 - EP); C21D 2211/005 (2013.01 - EP); C21D 2211/008 (2013.01 - EP); C21D 2211/009 (2013.01 - EP)

Cited by

CN104350170A; EP2527484A4; US10570470B2

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