

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 B1 20191225 (EN)

Application
EP 11734786 A 20110118

Priority
• JP 2010262087 A 20101125
• JP 2010011948 A 20100122
• JP 2011051151 W 20110118

Abstract (en)
[origin: EP2527482A1] 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) \neq 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)

Citation (examination)
AUTORENKOLLEKTIV: "Spurenelemente im Stahl - Moeglichkeiten zur Beeinflussung im Smelzbetrieb", SPURENELEMENTE IN STAEBLEN, VERLAG STAHLISEN, DUESSELDORF, DE, 1 January 1985 (1985-01-01), pages 19 - 22, XP002433212

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