Title (en)

METHOD FOR MANUFACTURING A HIGH-STRENGTH COLD-ROLLED STEEL SHEET HAVING EXCELLENT FORMABILITY AND CRASHWORTHINESS

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES HOCHFESTEN KALTGEWALZTEN STAHLBLECHS MIT AUSGEZEICHNETER FORMBARKEIT UND CRASHFESTIGKEIT

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE TÔLE D'ACIER LAMINÉE À FROID À HAUTE RÉSISTANCE AYANT UNE EXCELLENTE FORMABILITÉ ET RÉSISTANCE À L'IMPACT

Publication

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Application

EP 10855912 A 20100812

Priority

JP 2010063949 W 20100812

Abstract (en)

[origin: EP2604715A1] A high-strength cold rolled steel sheet having excellent ductility and stretch flangeability and a method for manufacturing the same are provided. A high-strength cold rolled steel sheet having excellent formability and crashworthiness includes, on a mass% basis, C: 0.05 to 0.3%, Si: 0.3 to 2.5%, Mn: 0.5 to 3.5%, P: 0.003 to 0.100%, S: 0.02% or less, Al: 0.010 to 0.5%, and balance being iron and unavoidable impurities, the high-strength cold rolled steel sheet having a microstructure including 20% or more of ferrite on an area fraction basis, 10 to 60% of tempered martensite on an area fraction basis, 0 to 10% of martensite on an area fraction basis, and 3 to 15% of retained austenite on a volume fraction basis.

IPC 8 full level

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CPC (source: EP KR US)

C21D 1/25 (2013.01 - EP US); **C21D 8/0205** (2013.01 - US); **C21D 9/46** (2013.01 - EP KR US); **C22C 38/001** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/08** (2013.01 - US); **C22C 38/12** (2013.01 - US); **C22C 38/14** (2013.01 - US); **C22C 38/16** (2013.01 - US); **C22C 38/34** (2013.01 - US); **C22C 38/58** (2013.01 - KR); **C22C 38/60** (2013.01 - US); C21D 9/02 (2013.01 - EP US); C21D 2211/001 (2013.01 - EP US); C21D 2211/005 (2013.01 - EP US); C21D 2211/008 (2013.01 - EP US)

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EP3012339A4; EP3653739A1; EP3460088A4; US10329636B2; US10450642B2; US11365465B2; US10156005B2; EP3919637A4; US10174396B2; US11827948B2; WO2017108897A1; WO2017109542A1

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DOCDB simple family (application)

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