

Title (en)  
HIGH-STRENGTH COLD-ROLLED STEEL SHEET EXCELLENT IN WELDABILITY AND PROCESS FOR PRODUCTION OF SAME

Title (de)  
HOCHFESTES KALTGEWALZTES STAHLBLECH MIT HERVORRAGENDER SCHWEISSBARKEIT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
TÔLE D'ACIER LAMINÉE À FROID DE HAUTE RÉSISTANCE, PRÉSENTANT UNE EXCELLENTE APTITUDE AU SOUDAGE, ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 2312007 A4 20120801 (EN)**

Application  
**EP 09804914 A 20090724**

Priority  
• JP 2009063622 W 20090724  
• JP 2008201735 A 20080805

Abstract (en)  
[origin: EP2312007A1] A high strength cold rolled steel sheet with excellent weldability in which humping bead is not formed by performing plasma welding at high speed and that has a TS of 440 MPa or more, which does not deteriorate the formability of a tailor-welded-blank, and a method for manufacturing the high strength cold rolled steel sheet are provided. The high strength cold rolled steel sheet that is excellent in weldability and has a TS of 440 MPa or more includes a composition including C: 0.0005 to 0.005%, Si: 0.1 to 1.0%, Mn: 1 to 2.5%, P: 0.01 to 0.2%, S: 0.015% or less, sol. Al: 0.05% or less, N: 0.007% or less, Ti: 0.01 to 0.1%, B: 0.0005 to 0.0020%, Cu: 0.05 to 0.5%, and Ni: 0.03 to 0.5% by mass with the balance Fe and incidental impurities; and a microstructure constituted by a ferrite single phase.

IPC 8 full level  
**C22C 38/00** (2006.01); **B21B 3/00** (2006.01); **C21D 9/46** (2006.01); **C22C 38/16** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP KR US)  
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Citation (search report)  
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• [A] JP H10183253 A 19980714 - NISSHIN STEEL CO LTD  
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Designated contracting state (EPC)  
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