Title (en)

COLD-ROLLED STEEL SHEET HAVING EXCELLENT SPOT WELDABILITY, AND MANUFACTURING METHOD THEREFOR

Title (de)

KALTGEWALZTES STAHLBLECH MIT EXZELLENTER PUNKTSCHWEISSBARKEIT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TÔLE EN ACIER LAMINÉE À FROID DOTÉE D'EXCELLENTES PROPRIÉTÉS DE SOUDAGE PAR POINT, ET PROCÉDÉ DE FABRICATION DE CELLE-CI

Publication

EP 3178954 A1 20170614 (EN)

Application

EP 15829208 A 20150731

Priority

- JP 2014162834 A 20140808
- JP 2015003881 W 20150731

Abstract (en)

A cold-rolled steel sheet having excellent spot weldability suitable for use in vehicles, electric appliances, etc. is provided. The cold-rolled steel sheet has a steel composition containing, in mass%: C: 0.05% to 0.13%; Si: 0.05% to 2.0%; Mn: 1.5% to 4.0%; P: 0.05% or less; S: 0.005% or less; Al: 0.01% to 0.10%; Cr: 0.05% to 1.0%; Nb: 0.010% to 0.070%; Ti: 0.005% to 0.040%; and N: 0.0005% to 0.0065%, with a mass ratio Ti/N of Ti and N being 2.5 or more and 7.5 or less, and a balance being Fe and incidental impurities, wherein 70 mass% or more ofTi in steel exists as a precipitate, and 15 mass% or more of Nb in the steel exists as solute Nb, and a tensile strength is 980 MPa or more.

IPC 8 full level

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CPC (source: EP US)

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Designated contracting state (EPC)

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