

Title (en)
HOT ROLLED HIGH TENSILE STRENGTH STEEL SHEET AND METHOD FOR MANUFACTURING SAME

Title (de)
WARMGEWALZTES HOCHFESTES STAHLBLECH UND DESSEN HERSTELLUNGSVERFAHREN

Title (fr)
FEUILLE D'ACIER LAMINÉE À CHAUD À HAUTE RÉSISTANCE ET SON PROCÉDÉ DE FABRICATION

Publication
EP 2799575 B1 20161221 (EN)

Application
EP 12863451 A 20121221

Priority
• JP 2011285906 A 20111227
• JP 2012008211 W 20121221

Abstract (en)
[origin: EP2799575A1] The present invention provides a hot rolled high tensile strength steel sheet that exhibits excellent deformation characteristics after formed into pipes or tubes, without suffering local buckling when deformed by bending as steel pipes or tubes, and thus is suitable for making line pipes and oil well pipes or tubes. The steel sheet has a chemical composition containing, by mass%, C: 0.04-0.08 %, Si: 0.50 % or less, Mn: 0.8-2.2 %, P: 0.02 % or less, S: 0.006 % or less, Al: 0.1 % or less, N: 0.008 % or less, and Cr: 0.05-0.8 %, and further Nb: 0.01-0.08 %, V: 0.001-0.12 %, and Ti: 0.005-0.04 % in adjusted amounts, with the balance including Fe and incidental impurities. The steel sheet has a surface layer having a microstructure containing bainite as a main phase, martensite as a second phase in a volume fraction of 0.5-4 %, and at least one of ferrite phase, pearlite, and cementite as a third phase in a total volume fraction of 10 % or less.

IPC 8 full level
B21B 1/00 (2006.01); **C21D 8/02** (2006.01); **C21D 8/10** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/06** (2006.01); **C22C 38/24** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01); **C22C 38/38** (2006.01)

CPC (source: EP KR US)
B21B 1/00 (2013.01 - EP US); **C21D 8/02** (2013.01 - KR); **C21D 8/0205** (2013.01 - EP US); **C21D 8/0226** (2013.01 - EP US); **C21D 8/105** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/005** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/24** (2013.01 - EP US); **C22C 38/26** (2013.01 - EP US); **C22C 38/28** (2013.01 - EP US); **C22C 38/32** (2013.01 - EP US); **C22C 38/38** (2013.01 - EP KR US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C22C 38/58** (2013.01 - EP KR); **C21D 8/02** (2013.01 - EP US); **C21D 2211/002** (2013.01 - EP US); **C21D 2211/003** (2013.01 - US); **C21D 2211/005** (2013.01 - US); **C21D 2211/008** (2013.01 - EP US); **C21D 2211/009** (2013.01 - US)

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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2799575 A1 20141105; EP 2799575 A4 20151028; EP 2799575 B1 20161221; CN 104011245 A 20140827; CN 104011245 B 20170301; IN 1252KON2014 A 20151016; JP 5812115 B2 20151111; JP WO2013099192 A1 20150430; KR 101664635 B1 20161010; KR 20140099321 A 20140811; US 2014352852 A1 20141204; WO 2013099192 A1 20130704; WO 2013099192 A8 20140626

DOCDB simple family (application)
EP 12863451 A 20121221; CN 201280065034 A 20121221; IN 1252KON2014 A 20140610; JP 2012008211 W 20121221; JP 2013551228 A 20121221; KR 20147018457 A 20121221; US 201214368857 A 20121221