

Title (en)
HOT-ROLLED STEEL PLATE FOR HIGH-STRENGTH LINE PIPE AND HAVING TENSILE STRENGTH OF AT LEAST 540 MPa

Title (de)
HEISSGEWALZTE STAHLPLATTE FÜR EIN HOCHFESTES LEITUNGSROHR MIT EINER ZUGFESTIGKEIT VON MINDESTENS 540 MPA

Title (fr)
PLAQUE D'ACIER LAMINÉE À CHAUD POUR TUYAU DE CANALISATION À HAUTE RÉSISTANCE ET POSSÉDANT UNE RÉSISTANCE À LA TRACTION D'AU MOINS 540 MPa

Publication
EP 2927338 A1 20151007 (EN)

Application
EP 14742727 A 20140123

Priority
• JP 2013010977 A 20130124
• JP 2014000319 W 20140123

Abstract (en)
An object is to provide a hot-rolled steel sheet for a high strength linepipe excellent in terms of HIC resistance which is suitably used as a raw material of a high strength electric resistance welded linepipe of X70 or more in accordance with API standards. A hot-rolled steel sheet for a high strength linepipe having a tensile strength of 540 MPa or more, the steel sheet having a chemical composition containing, by mass%, C: 0.02% or more and 0.06% or less, Si: 0.05% or more and 0.25% or less, Mn: 0.60% or more and 1.10% or less, P: 0.008% or less, S: 0.0010% or less, Nb: 0.020% or more and 0.060% or less, Ti: 0.001% or more and 0.020% or less, Al: 0.01% or more and 0.08% or less, Ca: 0.0005% or more and 0.0050% or less, one or more selected from among Cu: 0.50% or less, Ni: 0.50% or less, Cr: 0.50% or less, Mo: 0.50% or less, and V: 0.10% or less, and the balance being Fe and inevitable impurities, in which the relationships $0.60 \leq CP \leq 0.90$ and $CM \leq 3.05$ are satisfied.

IPC 8 full level
C21D 9/50 (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/08** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/16** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01)

CPC (source: EP US)
C21D 8/02 (2013.01 - EP US); **C21D 8/0205** (2013.01 - EP US); **C21D 8/0226** (2013.01 - US); **C21D 9/46** (2013.01 - US); **C21D 9/50** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US); **C22C 38/002** (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 38/08** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/14** (2013.01 - EP US); **C22C 38/16** (2013.01 - EP US); **C22C 38/20** (2013.01 - US); **C22C 38/24** (2013.01 - US); **C22C 38/26** (2013.01 - US); **C22C 38/28** (2013.01 - 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); **C21D 2211/002** (2013.01 - EP US)

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2927338 A1 20151007; **EP 2927338 A4 20151216**; **EP 2927338 B1 20161102**; CN 104937124 A 20150923; JP 5884201 B2 20160315; JP WO2014115548 A1 20170126; KR 20150088320 A 20150731; US 2015368737 A1 20151224; WO 2014115548 A1 20140731

DOCDB simple family (application)
EP 14742727 A 20140123; CN 201480004904 A 20140123; JP 2014000319 W 20140123; JP 2014558502 A 20140123; KR 20157017735 A 20140123; US 201414763476 A 20140123