

Title (en)  
ELECTROSEAMED STEEL PIPE FOR LINE PIPE

Title (de)  
ELEKTRONAHTEGESCHWEISSTES STAHLROHR FÜR LEITUNGSROHRE

Title (fr)  
TUYAU EN ACIER ÉLECTROSOUDE POUR TUYAU DE CANALISATION

Publication  
**EP 3428299 B1 20200722 (EN)**

Application  
**EP 17823802 A 20170313**

Priority  
• JP 2016134289 A 20160706  
• JP 2017010024 W 20170313

Abstract (en)  
[origin: EP3428299A1] An electric resistance welded steel pipe for a line pipe, in which a base metal portion includes, in terms of % by mass, 0.030 to less than 0.080% of C, 0.30 to 1.00% of Mn, 0.005 to 0.050% of Ti, 0.010 to 0.100% of Nb, 0.001 to 0.020% of N, 0.010 to 0.450% of Si, and 0.001 to 0.100% of Al, and the balance includes Fe and impurities, and wherein C<sub>Neq</sub>, expressed by Formula (1), is from 0.190 to 0.320, a Mn/Si ratio is 2.0 or more, LR, expressed by Formula (2), is 0.210 or more, in a case in which a metallographic microstructure of the base metal portion is observed using a SEM at a magnification of 1,000 times, an areal ratio of ferrite is from 40 to 80%, and the balance includes tempered bainite; C<sub>Neq</sub> = C + Mn/6 + Cr/5 + (Ni + Cu)/15 + Nb + Mo + V Formula (1); LR = (2.1 × C + Nb)/Mn Formula (2).

IPC 8 full level  
**C22C 38/00** (2006.01); **C21D 8/02** (2006.01); **C21D 8/10** (2006.01); **C21D 9/08** (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 38/26** (2006.01); **C22C 38/28** (2006.01); **C22C 38/50** (2006.01)

CPC (source: EP KR)  
**C21D 8/02** (2013.01 - KR); **C21D 8/0205** (2013.01 - EP); **C21D 8/0226** (2013.01 - EP); **C21D 8/105** (2013.01 - EP); **C21D 9/08** (2013.01 - EP KR); **C22C 38/00** (2013.01 - EP); **C22C 38/001** (2013.01 - EP KR); **C22C 38/002** (2013.01 - EP); **C22C 38/005** (2013.01 - EP); **C22C 38/02** (2013.01 - EP KR); **C22C 38/04** (2013.01 - EP KR); **C22C 38/06** (2013.01 - EP KR); **C22C 38/08** (2013.01 - EP); **C22C 38/12** (2013.01 - EP KR); **C22C 38/14** (2013.01 - EP KR); **C22C 38/16** (2013.01 - EP); **C22C 38/26** (2013.01 - EP); **C22C 38/28** (2013.01 - EP); **C22C 38/50** (2013.01 - EP); **C21D 8/02** (2013.01 - EP); **C21D 2211/002** (2013.01 - EP KR); **C21D 2211/005** (2013.01 - EP KR)

Cited by  
WO2021133343A1; TWI738246B

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 3428299 A1 20190116**; **EP 3428299 A4 20190821**; **EP 3428299 B1 20200722**; CN 109072379 A 20181221; CN 109072379 B 20201106; KR 102129296 B1 20200703; KR 20180123519 A 20181116; WO 2018008194 A1 20180111

DOCDB simple family (application)  
**EP 17823802 A 20170313**; CN 201780023247 A 20170313; JP 2017010024 W 20170313; KR 20187029059 A 20170313