

Title (en)  
LINE PIPE-USE ELECTRIC RESISTANCE WELDED STEEL PIPE

Title (de)  
ELEKTRISCH WIDERSTANDSGESCHWEISSTES STAHLROHR ZUR VERWENDUNG FÜR LEITUNGSROHRE

Title (fr)  
TUBE EN ACIER SOUDÉ PAR RÉSISTANCE ÉLECTRIQUE À USAGE DE TUBE DE CANALISATION

Publication  
**EP 4066954 A4 20230705 (EN)**

Application  
**EP 20919182 A 20200210**

Priority  
JP 2020005072 W 20200210

Abstract (en)  
[origin: EP4066954A1] An electric resistance welded steel pipe for a linepipe comprising a base metal portion and an electric resistance welded portion, wherein a chemical composition of the base metal portion includes, in terms of % by mass, 0.030 to 0.090% of C, 0.01 to 0.50% of Si, 0.50 to 1.50% of Mn, 0.005 to 0.060% of Nb, 0.005 to 0.030% of Ti, 0.0001 to 0.0040% of Ca, 0.0010 to 0.0080% of N, and a balance of Fe and impurities,  $\Delta YS$ , which is a value obtained by subtracting a yield strength of the electric resistance welded portion from a yield strength of the base metal portion, is from 0 to 80 MPa, and AHv, which is a value obtained by subtracting a Vickers hardness of an inner surface layer of the electric resistance welded portion from a Vickers hardness of an outer surface layer of the electric resistance welded portion, is from 0 to 25 Hv.

IPC 8 full level  
**C22C 38/04** (2006.01); **C21D 1/60** (2006.01); **C21D 6/00** (2006.01); **C21D 8/10** (2006.01); **C21D 9/08** (2006.01); **C21D 9/50** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (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)

CPC (source: EP KR)  
**B21C 37/08** (2013.01 - KR); **C21D 1/60** (2013.01 - EP); **C21D 6/005** (2013.01 - EP); **C21D 8/105** (2013.01 - EP); **C21D 9/08** (2013.01 - EP KR); **C21D 9/085** (2013.01 - EP); **C21D 9/505** (2013.01 - EP); **C22C 38/001** (2013.01 - EP); **C22C 38/002** (2013.01 - EP); **C22C 38/005** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **C22C 38/06** (2013.01 - EP); **C22C 38/08** (2013.01 - EP); **C22C 38/12** (2013.01 - EP); **C22C 38/14** (2013.01 - EP); **C22C 38/16** (2013.01 - EP); **C22C 38/26** (2013.01 - EP); **C22C 38/28** (2013.01 - EP); **C22C 38/42** (2013.01 - KR); **C22C 38/44** (2013.01 - KR); **C22C 38/54** (2013.01 - KR); **C21D 2211/003** (2013.01 - EP); **C21D 2211/005** (2013.01 - EP KR); **C21D 2211/009** (2013.01 - EP KR)

Citation (search report)

- [X] EP 3546610 A1 20191002 - NIPPON STEEL CORP [JP]
- [A] WO 2018235244 A1 20181227 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
- [A] JP 6575734 B1 20190918
- [A] EP 3375900 A1 20180919 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
- [A] EP 2752499 A1 20140709 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
- [A] US 2015203933 A1 20150723 - TOYODA SHUNSUKE [JP], et al
- [A] US 2017307111 A1 20171026 - MATSUKI YASUHIRO [JP]
- [A] JP 2015190026 A 20151102 - JFE STEEL CORP
- See references of WO 2021161366A1

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 4066954 A1 20221005**; **EP 4066954 A4 20230705**; JP 7226595 B2 20230221; JP WO2021161366 A1 20210819; KR 20220105166 A 20220726; WO 2021161366 A1 20210819

DOCDB simple family (application)  
**EP 20919182 A 20200210**; JP 2020005072 W 20200210; JP 2021577721 A 20200210; KR 20227021826 A 20200210