Title (en)

THICK STEEL PLATE HAVING EXCELLENT LOW-TEMPERATURE IMPACT TOUGHNESS AND CTOD CHARACTERISTIC AND MANUFACTURING METHOD THEREFOR

Title (de)

DICKWANDIGE STAHLPLATTE MIT HERVORRAGENDER TIEFTEMPERATUR-SCHLAGZÄHIGKEIT UND CTOD-EIGENSCHAFT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TÔLE D'ACIER ÉPAISSE PRÉSENTANT D'EXCELLENTES CARACTÉRISTIQUES DE RÉSISTANCE AUX CHOCS À BASSE TEMPÉRATURE ET D'ÉCARTEMENT DE FISSURE, ET SON PROCÉDÉ DE FABRICATION

Publication

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Application

EP 17885144 A 20171222

Priority

- KR 20160178561 A 20161223
- KR 2017015320 W 20171222

Abstract (en)

[origin: EP3561115A1] An aspect of the present invention relates to a thick steel plate having excellent low-temperature impact toughness and CTOD characteristics, the thick steel plate comprising, by weight %: 0.02-0.06% of C, 0.005-0.08% of Si, 1.0-2.0% of Mn, 0.01% or less of P, 0.003% or less of S, 0.001-0.01% of Al, 0.5-2.0% of Ni, 0.001-0.02% of Ti, 0.005-0.03% of Nb, 0.05-0.4% of Cu, 0.002-0.006% of N, and a balance of Fe and inevitable impurities with the proviso of satisfying the following equations, wherein the thick steel plate has a microstructure including ferrite in an amount of 95 area % or greater and a sum of MA and cementite in an amount of 2 area % or less : Equation 1: 3.0≤Mn+2Ni≤4.3 and Equation 2: 0.05≤C+Si+10Al≤0.25 (wherein element symbols each represent contents thereof by weight %) .

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

- [I] KR 20090070485 A 20090701 - POSCO [KR]
- [I] EP 2799585 A1 20141105 - JFE STEEL CORP [JP]
- See references of WO 2018117727A1

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