

Title (en)
THICK STEEL PLATE HAVING EXCEPTIONAL HAZ TOUGHNESS AT VERY LOW TEMPERATURES

Title (de)
DICKE STAHLPLATTE MIT HERVORRAGENDER WEZ-ZÄHIGKEIT BEI SEHR NIEDRIGEN TEMPERATUREN

Title (fr)
PLAQUE D'ACIER ÉPAISSE PRÉSENTANT UNE EXCEPTIONNELLE RÉSISTANCE DES ZONES AFFECTÉES THERMIQUEMENT À DES TEMPÉRATURES TRÈS BASSES

Publication
EP 3130687 A4 20170830 (EN)

Application
EP 15776770 A 20150331

Priority
• JP 2014079378 A 20140408
• JP 2015060285 W 20150331

Abstract (en)
[origin: EP3130687A1] This thick steel plate satisfies a prescribed chemical composition, and has a Di value of 2.5-5.0, a sol. N parameter of 20 ppm or less, and an Ni-Ti balance of $0.0024 \times ([\text{Ni}] - 7.5)^2 + 0.010 - [\text{Ti}]$ or less, and furthermore has a crystal grain diameter of 4.0 μm or less after heating at 700°C \times 5s and cooling from 700°C to 500°C in 19 s.

IPC 8 full level
C22C 38/00 (2006.01); **C21D 6/00** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C21D 9/50** (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 38/40** (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); **C22C 38/54** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR)
C21D 6/001 (2013.01 - EP); **C21D 8/0226** (2013.01 - EP); **C21D 9/46** (2013.01 - EP); **C21D 9/50** (2013.01 - EP); **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 KR); **C22C 38/02** (2013.01 - EP KR); **C22C 38/04** (2013.01 - EP KR); **C22C 38/06** (2013.01 - EP); **C22C 38/08** (2013.01 - EP KR); **C22C 38/12** (2013.01 - EP); **C22C 38/14** (2013.01 - EP KR); **C22C 38/16** (2013.01 - EP KR); **C22C 38/40** (2013.01 - EP); **C22C 38/42** (2013.01 - EP); **C22C 38/44** (2013.01 - EP); **C22C 38/46** (2013.01 - EP); **C22C 38/48** (2013.01 - EP); **C22C 38/50** (2013.01 - EP); **C22C 38/54** (2013.01 - EP); **C22C 38/58** (2013.01 - EP KR); **F17C 2203/0639** (2013.01 - EP); **F17C 2203/0648** (2013.01 - EP); **F17C 2203/0675** (2013.01 - EP)

Citation (search report)
• [X] EP 2592166 A1 20130515 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
• [X] JP 2014040648 A 20140306 - KOBE STEEL LTD
• [X] JP 2013234381 A 20131121 - KOBE STEEL LTD
• [E] EP 2933347 A1 20151021 - KOBE STEEL LTD [JP]
• [E] EP 2987885 A1 20160224 - KOBE STEEL LTD [JP]
• [A] JP 2014019936 A 20140203 - JFE STEEL CORP
• [A] JP 2001288512 A 20011019 - NIPPON STEEL CORP
• See references of WO 2015156179A1

Cited by
EP3712291A4; EP3730657A4; US11434557B2; US11591679B2

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