

Title (en)
THICK STEEL PLATE HAVING EXCELLENT CRYOGENIC TOUGHNESS

Title (de)
DICKE STAHLPLATTE MIT HERVORRAGENDER KRYOGENER ZÄHIGKEIT

Title (fr)
TÔLE D'ACIER ÉPAISSE AYANT UNE EXCELLENTE RÉSISTANCE CRYOGÉNIQUE

Publication
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Application
EP 17000237 A 20131211

Priority

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- JP 2012285916 A 20121227
- EP 13861920 A 20131211

Abstract (en)
This steel plate contains predetermined steel chemical compositions and has a Di value of 5.0 or more, where the Di value is defined by the steel chemical compositions. The steel plate includes a retained austenite phase (retained γ) existing at -196°C in a volume fraction of 2.0% to 5.0% and has a specific content of Mn and Ni.

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

CPC (source: EP)
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Citation (applicant)

- JP S49135813 A 19741227
- JP S5113308 A 19760202 - NIPPON STEEL CORP
- JP 2011241419 A 20111201 - SUMITOMO METAL IND, et al
- YANO ET AL.: "Effects of ferrite-austenite two-phase region heat treatment of 6% Ni steel on low-temperature toughness", TETSU-TO HAGANE, vol. 6, 1973, pages 752 - 763
- FURUYA ET AL.: "Development of 6% Ni steel for LNG tanks", CAMP-ISIJ, vol. 23, 2010, pages 1322
- "Cryogenic-Temperature Impact Test of Austenitic Stainless Cast Steel", JOURNAL OF THE HIGH PRESSURE GAS SAFETY INSTITUTE OF JAPAN, vol. 24, pages 181

Citation (search report)

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- [XA] US 4776900 A 19881011 - YANO SEINOSUKE [JP], et al
- [AD] JP 2011241419 A 20111201 - SUMITOMO METAL IND, et al

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