

Title (en)

THICK STEEL PLATE HAVING GOOD ULTRALOW-TEMPERATURE TOUGHNESS

Title (de)

DICKE STAHLPLATTE MIT SEHR GUTER ROBUSTHEIT BEI EXTREM NIEDRIGEN TEMPERATUREN

Title (fr)

PLAQUE D'ACIER ÉPAISSE AYANT UNE BONNE DURETÉ À TEMPÉRATURE ULTRABASSE

Publication

EP 2889391 A4 20160518 (EN)

Application

EP 13831371 A 20130819

Priority

- JP 2012184593 A 20120823
- JP 2013072120 W 20130819

Abstract (en)

[origin: EP2889391A1] A thick steel plate that contains definite components in the steel, said thick steel plate satisfying the following requirements: the average roundness (A) of inclusions present in the steel, the equivalent circle diameter of said inclusions exceeding 1.0 μm , is not greater than 1.8; the volume fraction (V) of the retained austenite phase at -196°C is 2.0-12.0%; and value (B) represented by formula (1) is 1.3 or greater.

IPC 8 full level

C21C 7/04 (2006.01); **C21C 7/06** (2006.01); **C21D 6/00** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (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 38/40** (2006.01); **C22C 38/44** (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 9/46** (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); **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); **C22C 38/40** (2013.01 - EP); **C22C 38/44** (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 - KR); **C21D 2211/004** (2013.01 - EP)

Citation (search report)

- [X] WO 2012005330 A1 20120112 - NIPPON STEEL CORP [JP], et al
- [X] EP 1942203 A1 20080709 - SUMITOMO METAL IND [JP]
- [X] JP 2011219848 A 20111104 - SUMITOMO METAL IND
- [X] JP 2011219849 A 20111104 - SUMITOMO METAL IND
- [AD] JP 2001123245 A 20010508 - NIPPON STEEL CORP
- [A] JP 2004263281 A 20040924 - JFE STEEL KK
- See references of WO 2014030618A1

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