

Title (en)
HOT-ROLLED STEEL SHEET AND METHOD FOR PRODUCING SAME

Title (de)
HEISSGEWALZTES STAHLBLECH UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
TÔLE D'ACIER LAMINÉE À CHAUD ET SON PROCÉDÉ DE PRODUCTION

Publication
EP 3279353 A4 20180207 (EN)

Application
EP 16771783 A 20160330

Priority
• JP 2015075329 A 20150401
• JP 2016001834 W 20160330

Abstract (en)
[origin: EP3279353A1] A hot rolled steel sheet comprises: a predetermined chemical composition; a microstructure in which a total area ratio of a tempered bainite phase and a tempered martensite phase is 70% or more, a total area ratio of a coarse pearlite phase, a martensite phase, and a retained austenite phase is 10% or less, the tempered bainite phase and the tempered martensite phase have laths with an average width of 1.0 μm or less as a substructure, a proportion of Fe-based carbides with an aspect ratio of 5 or less in Fe-based carbides precipitated inside and at boundaries of the laths is 80% or more, and MC-type carbides with an average particle size of 20 nm or less are dispersed and precipitated inside and at the boundaries of the laths; and an average dislocation density of $1.0 \times 10^{14} \text{ m}^{-2}$ or more and $5.0 \times 10^{15} \text{ m}^{-2}$ or less.

IPC 8 full level
C22C 38/00 (2006.01); **C21D 6/00** (2006.01); **C21D 6/02** (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 38/10** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/16** (2006.01); **C22C 38/22** (2006.01); **C22C 38/28** (2006.01); **C22C 38/38** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP US)
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Citation (search report)
• [A] WO 2014171062 A1 20141023 - JFE STEEL CORP [JP]
• [A] EP 2617853 A1 20130724 - JFE STEEL CORP [JP]
• [A] JP 2014218692 A 20141120 - NIPPON STEEL & SUMITOMO METAL CORP
• [A] EP 2762582 A1 20140806 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
• See references of WO 2016157896A1

Cited by
EP4083241A4; US11965223B2

Designated contracting state (EPC)
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