

Title (en)  
HIGH-STRENGTH STEEL PLATE AND MANUFACTURING METHOD THEREOF

Title (de)  
HOCHFESTE STAHLPLATTE UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
PLAQUE D'ACIER À HAUTE RÉSISTANCE ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 3495523 A4 20200226 (EN)**

Application  
**EP 17836781 A 20170721**

Priority  
• JP 2016153110 A 20160803  
• JP 2017026569 W 20170721

Abstract (en)  
[origin: EP3495523A1] Disclosed is a high-strength sheet including: C: 0.15% by mass to 0.35% by mass, total of Si and Al: 0.5% by mass to 3.0% by mass, Mn: 1.0% by mass to 4.0% by mass, P: 0.05% by mass or less, and S: 0.01% by mass or less, with the balance being Fe and inevitable impurities, wherein the steel structure satisfies that: a ferrite fraction is 5% or less, the total fraction of tempered martensite and tempered bainite is 60% or more, the amount of retained austenite is 10% or more, MA has an average size of 1.0  $\mu\text{m}$  or less, a half-width of the concentration distribution of Mn in the carbon-concentrated region that is equal to the amount of retained austenite is 0.3% by mass or more, and a scattering intensity at the q value of 1 nm<sup>-1</sup> X-ray small angle scattering is 1.0 cmor less.

IPC 8 full level  
**C22C 38/00** (2006.01); **C21D 1/18** (2006.01); **C21D 1/19** (2006.01); **C21D 6/00** (2006.01); **C21D 9/46** (2006.01); **C21D 9/48** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01)

CPC (source: EP US)  
**C21D 1/18** (2013.01 - EP US); **C21D 1/19** (2013.01 - EP); **C21D 6/005** (2013.01 - EP US); **C21D 6/008** (2013.01 - EP US); **C21D 9/46** (2013.01 - US); **C21D 9/48** (2013.01 - EP); **C22C 38/00** (2013.01 - US); **C22C 38/002** (2013.01 - US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US)

Citation (search report)  
• [A] EP 2660345 A2 20131106 - POSCO [KR]  
• [A] US 2001015245 A1 20010823 - EBERLE KLAUS [DE], et al  
• See references of WO 2018025675A1

Cited by  
EP4180546A4; EP4206344A4; EP4180545A4; EP4206343A4

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