

Title (en)
HIGH-STRENGTH STEEL SHEET

Title (de)
ULTRAHOCHFESTES STAHLBLECH

Title (fr)
TÔLE D'ACIER HAUTE RÉSISTANCE

Publication
EP 2177640 A4 20120118 (EN)

Application
EP 08792282 A 20080731

Priority
• JP 2008064175 W 20080731
• JP 2007198944 A 20070731

Abstract (en)
[origin: EP2177640A1] A high-strength steel sheet having high stretch flangeability after working and corrosion resistance after painting is provided. The steel sheet contains, on the basis of mass percent, C: 0.02% to 0.20%, Si: 0.3% or less, Mn: 0.5% to 2.5%, P: 0.06% or less, S: 0.01% or less, Al: 0.1% or less, Ti: 0.05% to 0.25%, and V: 0.05% to 0.25%, the remainder being Fe and incidental impurities. The steel sheet has a substantially ferritic single phase, the ferritic single phase containing precipitates having a size of less than 20 nm, the precipitates containing 200 to 1750 mass ppm Ti and 150 to 1750 mass ppm V, V dissolved in solid solution being 200 or more but less than 1750 mass ppm.

IPC 8 full level
C21D 8/02 (2006.01); **C21D 9/46** (2006.01); **C22C 38/14** (2006.01); **C22C 38/38** (2006.01)

CPC (source: EP US)
C21D 8/0426 (2013.01 - EP US); **C21D 9/48** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/14** (2013.01 - EP US); **C22C 38/24** (2013.01 - EP US); **C22C 38/28** (2013.01 - EP US); **C21D 2211/004** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US)

Citation (search report)
• [X] JP 2005002406 A 20050106 - SUMITOMO METAL IND
• [X] JP 2005120430 A 20050512 - JFE STEEL KK
• [A] JP 2002363649 A 20021218 - NIPPON KOKAN KK
• See references of WO 2009017256A1

Cited by
US10202667B2; EP2843075A4; EP2767606A4; US2014141280A1; EP2735623A4; EP2808413A4; US2014295210A1; EP2765211A4; US9657380B2; JP2012172238A

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