

Title (en)  
HIGH-STRENGTH STEEL SHEET AND PRODUCTION METHOD FOR SAME, AND PRODUCTION METHOD FOR HIGH-STRENGTH GALVANIZED STEEL SHEET

Title (de)  
HOCHFESTES STAHLBLECH UND HERSTELLUNGSVERFAHREN DAFÜR UND HERSTELLUNGSVERFAHREN FÜR HOCHFESTES VERZINKTES STAHLBLECH

Title (fr)  
TÔLE D'ACIER À HAUTE RÉSISTANCE AINSI QUE PROCÉDÉ DE FABRICATION DE CELLE-CI, ET PROCÉDÉ DE FABRICATION DE TÔLE D'ACIER GALVANISÉ À HAUTE RÉSISTANCE

Publication  
**EP 3178953 A1 20170614 (EN)**

Application  
**EP 15829161 A 20150805**

Priority  
• JP 2014161672 A 20140807  
• JP 2015003943 W 20150805

Abstract (en)  
Disclosed is a high-strength steel sheet having a tensile strength (TS) of 780 MPa or more and excellent in ductility, stretch flangeability, surface characteristics, and stability as a material that can be obtained by providing a predetermined chemical composition and a steel microstructure that contains, by area, 25-80 % of ferrite and bainitic ferrite in total, and 3-20 % of martensite, and that contains, by volume, 10 % or more of retained austenite, in which the retained austenite has a mean grain size of 2 μm or less, a mean Mn content in the retained austenite in mass% is at least 1.2 times the Mn content in the steel sheet in mass%, an area ratio of retained austenite having a mean C content in mass% at least 2.1 times the C content in the steel sheet in mass% is 60 % or more of an area ratio of the entire retained austenite.

IPC 8 full level  
**C22C 38/00** (2006.01); **C21D 9/46** (2006.01); **C22C 18/04** (2006.01); **C22C 38/04** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP US)  
**C21D 6/005** (2013.01 - EP US); **C21D 6/008** (2013.01 - EP US); **C21D 8/0205** (2013.01 - EP US); **C21D 8/0226** (2013.01 - EP US); **C21D 8/0236** (2013.01 - EP US); **C21D 8/0263** (2013.01 - EP US); **C21D 8/0273** (2013.01 - EP US); **C21D 8/0278** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/005** (2013.01 - EP US); **C22C 38/008** (2013.01 - EP US); **C22C 38/02** (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 38/16** (2013.01 - EP US); **C22C 38/38** (2013.01 - EP US); **C22C 38/60** (2013.01 - EP US); **C23C 2/02** (2013.01 - EP US); **C23C 2/0224** (2022.08 - EP US); **C23C 2/024** (2022.08 - EP US); **C23C 2/06** (2013.01 - EP US); **C23F 17/00** (2013.01 - US); **C21D 2211/001** (2013.01 - EP US); **C21D 2211/002** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US); **C21D 2211/008** (2013.01 - EP US); **C22C 18/04** (2013.01 - EP US)

Cited by  
EP3733897A4; EP3733898A4

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
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DOCDB simple family (publication)  
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**EP 15829161 A 20150805**; CN 201580042276 A 20150805; JP 2015003943 W 20150805; JP 2015559373 A 20150805; MX 2017001720 A 20150805; US 201515326540 A 20150805