

Title (en)
HIGH STRENGTH STEEL PLATE AND MANUFACTURING METHOD THEREFOR

Title (de)
HOCHFESTE STAHLPLATTE UND HERSTELLUNGSVERFAHREN DAFÜR

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

Publication
EP 3730655 B1 20220518 (EN)

Application
EP 18891912 A 20181128

Priority
• KR 20170178924 A 20171224
• KR 2018014855 W 20181128

Abstract (en)
[origin: EP3730655A1] A high strength steel sheet according to an aspect of the present invention comprises, by weight %, 0.05-0.20% of C, 0.15-0.55% of Si, 0.9-1.75% of Mn, 0.001-0.05% of Al, 0.03 % or less of P, 0.03% or less of S, 0.05-0.3% of Cr, 0.05-0.6% of Ni, 0.005-0.35% of Cu, 0.05-0.2% of Mo, 0.005-0.07% of V, 0.005-0.04% of Nb, 0.0005-0.005% of Ca, 0.005-0.025% of Ti, 0.002-0.006% of N, less than 0.0005% of B, the balance of Fe and inevitable impurities, with the proviso of satisfying the relation that Cu + Ni + Cr + Mo: 1.5% or less; Cr + Mo: 0.4% or less; V + Nb: 0.1% or less; and Ca/S: 1.0 or higher and may include a combined structure of tempered martensite and tempered bainite as a microstructure.

IPC 8 full level
C22C 38/42 (2006.01); **C21D 1/18** (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 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01)

CPC (source: EP KR US)
C21D 1/18 (2013.01 - EP KR); **C21D 6/004** (2013.01 - US); **C21D 6/005** (2013.01 - US); **C21D 6/008** (2013.01 - US); **C21D 8/0205** (2013.01 - US); **C21D 8/0226** (2013.01 - EP); **C21D 8/0247** (2013.01 - KR); **C21D 8/0263** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP KR US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - KR US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP); **C22C 38/06** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP KR US); **C22C 38/44** (2013.01 - EP KR US); **C22C 38/46** (2013.01 - EP KR US); **C22C 38/48** (2013.01 - EP KR US); **C22C 38/50** (2013.01 - EP KR US); **C21D 2211/002** (2013.01 - EP KR US); **C21D 2211/008** (2013.01 - EP KR US)

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

DOCDB simple family (publication)
EP 3730655 A1 20201028; **EP 3730655 A4 20201028**; **EP 3730655 B1 20220518**; CN 111566249 A 20200821; CN 111566249 B 20220513; JP 2021508774 A 20210311; JP 7096337 B2 20220705; KR 102031450 B1 20191011; KR 20190077177 A 20190703; US 2020347478 A1 20201105; WO 2019124793 A1 20190627

DOCDB simple family (application)
EP 18891912 A 20181128; CN 201880082338 A 20181128; JP 2020535011 A 20181128; KR 20170178924 A 20171224; KR 2018014855 W 20181128; US 201816957021 A 20181128