

Title (en)
HIGH-STRENGTH, HIGHLY WORKABLE STEEL SHEET, AND METHOD FOR MANUFACTURING SAME

Title (de)
HOCHFESTES, LEICHT ZU VERARBEITENDES STAHLBLECH UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
TÔLE D'ACIER FACILEMENT FAÇONNABLE, DE RÉSISTANCE ÉLEVÉE, ET SON PROCÉDÉ DE FABRICATION

Publication
EP 2835438 A1 20150211 (EN)

Application
EP 13773084 A 20130403

Priority
• JP 2012087940 A 20120406
• JP 2013060175 W 20130403

Abstract (en)
A high strength and high formability steel sheet contains, by mass% of the steel sheet: greater than 0.020% and less than 0.040% of C; not less than 0.003% and not greater than 0.100% of Si; not less than 0.10% and not greater than 0.60% of Mn; not less than 0.001% and not greater than 0.100% of P; not less than 0.001% and not greater than 0.020% of S; not less than 0.005% and not greater than 0.100% of Al; and greater than 0.0130% and not greater than 0.0170% of N, wherein a remainder is Fe and inevitable impurities, and the steel sheet has: a tensile strength in a rolling direction of not lower than 520 MPa; an Erichsen value of not less than 5.0 mm; and a resin film layer at least on a side to be an inner surface of a can.

IPC 8 full level
B21B 3/00 (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 38/50** (2006.01); **C25D 5/26** (2006.01); **C25D 5/48** (2006.01); **C25D 7/06** (2006.01)

CPC (source: EP KR US)
B21B 3/00 (2013.01 - EP US); **B65D 25/14** (2013.01 - EP KR US); **C21D 1/26** (2013.01 - US); **C21D 8/0226** (2013.01 - KR US); **C21D 8/0236** (2013.01 - KR); **C21D 8/0247** (2013.01 - EP US); **C21D 8/0263** (2013.01 - KR US); **C21D 8/0268** (2013.01 - EP KR US); **C21D 8/0284** (2013.01 - EP KR US); **C21D 9/46** (2013.01 - EP KR US); **C22C 38/00** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C25D 5/36** (2013.01 - KR US); **C25D 5/48** (2013.01 - EP KR US); **C25D 7/0614** (2013.01 - EP US); **B05D 2202/10** (2013.01 - EP US); **B05D 2701/10** (2013.01 - EP US); **B22D 11/00** (2013.01 - EP US); **C21D 8/0236** (2013.01 - EP US); **C21D 2251/00** (2013.01 - KR US); **Y10T 428/263** (2015.01 - EP US); **Y10T 428/31678** (2015.04 - EP US)

Cited by
WO2021175562A1; DE202021100700U1

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)
BA ME

DOCDB simple family (publication)
EP 2835438 A1 20150211; **EP 2835438 A4 20151223**; **EP 2835438 B1 20190626**; CN 104245985 A 20141224; CN 104245985 B 20170811; CO 7061066 A2 20140919; JP 5804195 B2 20151104; JP WO2013151085 A1 20151217; KR 20140117602 A 20141007; MY 185149 A 20210430; TW 201410879 A 20140316; TW I473889 B 20150221; US 2015064448 A1 20150305; WO 2013151085 A1 20131010

DOCDB simple family (application)
EP 13773084 A 20130403; CN 201380017624 A 20130403; CO 14183641 A 20140821; JP 2013060175 W 20130403; JP 2014509184 A 20130403; KR 20147023503 A 20130403; MY PI2014702906 A 20130403; TW 102112360 A 20130408; US 201314382363 A 20130403