

Title (en)
HIGH-CARBON STEEL SHEET AND METHOD OF MANUFACTURING THE SAME

Title (de)
STAHLBLECH MIT HOHEM KOHLENSTOFFGEHALT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
TÔLE D'ACIER À HAUTE TENEUR EN CARBONE ET PROCÉDÉ DE FABRICATION

Publication
EP 3208357 B1 20200513 (EN)

Application
EP 14903999 A 20141016

Priority
JP 2014077544 W 20141016

Abstract (en)
[origin: EP3208357A1] A high-carbon steel sheet includes: a chemical composition represented by, in mass%, C: 0.30% to 0.70%, B: 0.0004% to 0.0035%, and others; and a structure represented by a spheroidized ratio of cementite: 80% or more; and an average diameter of cementite: 0.3 μm to 2.2 μm, wherein a coefficient of micro-friction of ferrite on a surface of the steel sheet is less than 0.5.

IPC 8 full level
C21D 9/46 (2006.01); **C21D 6/00** (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/20** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01); **C22C 38/32** (2006.01); **C22C 38/38** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/54** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR US)
C21D 6/002 (2013.01 - 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 8/0247** (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 - EP US); **C22C 38/005** (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 38/20** (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/24** (2013.01 - EP US); **C22C 38/26** (2013.01 - EP US); **C22C 38/28** (2013.01 - EP US); **C22C 38/32** (2013.01 - EP US); **C22C 38/38** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP KR US); **C22C 38/54** (2013.01 - EP KR US); **C22C 38/58** (2013.01 - EP KR US); **C23G 1/081** (2013.01 - US); **C21D 2211/003** (2013.01 - EP KR US); **C21D 2211/005** (2013.01 - EP 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 3208357 A1 20170823; **EP 3208357 A4 20180425**; **EP 3208357 B1 20200513**; BR 112017007275 A2 20171226; CN 107075625 A 20170818; CN 107075625 B 20190709; ES 2807553 T3 20210223; JP 6388034 B2 20180912; JP WO2016059701 A1 20170803; KR 101919262 B1 20181115; KR 20170052681 A 20170512; MX 2017004601 A 20170710; PL 3208357 T3 20201102; US 2017306434 A1 20171026; WO 2016059701 A1 20160421

DOCDB simple family (application)
EP 14903999 A 20141016; BR 112017007275 A 20141016; CN 201480082444 A 20141016; ES 14903999 T 20141016; JP 2014077544 W 20141016; JP 2016553926 A 20141016; KR 20177009862 A 20141016; MX 2017004601 A 20141016; PL 14903999 T 20141016; US 201415513130 A 20141016