

Title (en)
STEEL SHEET FOR CAN, AND METHOD FOR PRODUCING SAME

Title (de)
STAHLBLECH FÜR DOSE UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
TÔLE D'ACIER DE CANETTE ET SON PROCÉDÉ DE PRODUCTION

Publication
EP 3845678 A4 20220119 (EN)

Application
EP 19853931 A 20190827

Priority

- JP 2018161900 A 20180830
- JP 2019033548 W 20190827

Abstract (en)
[origin: EP3845678A1] Provided is a steel sheet for cans that has uniform deformability and excellent formability in addition to high strength and excellent ductility. A steel sheet for cans comprises a chemical composition containing, in mass%, C: 0.020-0.130 %, Si: ≤ 0.04 %, Mn: 0.10-1.20 %, P: 0.007-0.100 %, S: ≤ 0.030 %, Al: 0.001-0.100 %, N: > 0.0120 % and ≤ 0.0200 %, Nb: 0.0060-0.0300 %, and Cr: ≤ 0.040 %, with a balance being Fe and inevitable impurities, wherein a ratio of Nb content in precipitates of < 20 nm in size to Nb content in all precipitates is ≥ 40 %, an average interval of all precipitates is ≤ 30 nm, an upper yield stress is 500-640 MPa and a total elongation is ≥ 10 % after heat treatment at 210 °C for 10 min.

IPC 8 full level
C22C 38/00 (2006.01); **B21B 1/00** (2006.01); **C21D 8/02** (2006.01); **C21D 8/04** (2006.01); **C21D 9/00** (2006.01); **C21D 9/46** (2006.01); **C21D 9/48** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/12** (2006.01); **C22C 38/18** (2006.01); **C22C 38/26** (2006.01); **C23C 30/00** (2006.01)

CPC (source: EP)
C21D 8/0226 (2013.01); **C21D 8/0236** (2013.01); **C21D 8/0268** (2013.01); **C21D 8/041** (2013.01); **C21D 9/0068** (2013.01); **C21D 9/46** (2013.01); **C21D 9/48** (2013.01); **C22C 38/001** (2013.01); **C22C 38/04** (2013.01); **C22C 38/06** (2013.01); **C22C 38/12** (2013.01); **C22C 38/18** (2013.01); **C23C 30/00** (2013.01); **C21D 2211/004** (2013.01)

Citation (search report)

- [XY] JP 5939368 B1 20160622
- [XY] WO 2016157878 A1 20161006 - JFE STEEL CORP [JP]
- [YDA] JP H08325670 A 19961210 - KAWASAKI STEEL CO
- [A] EP 1741800 A1 20070110 - JFE STEEL CORP [JP]
- [A] JP 2016191111 A 20161110 - JFE STEEL CORP
- See also references of WO 2020045449A1

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 3845678 A1 20210707; **EP 3845678 A4 20220119**; JP 6809619 B2 20210106; JP WO2020045449 A1 20200903; MX 2021002226 A 20210527; MY 196226 A 20230323; PH 12021550410 A1 20210920; WO 2020045449 A1 20200305

DOCDB simple family (application)
EP 19853931 A 20190827; JP 2019033548 W 20190827; JP 2019571562 A 20190827; MX 2021002226 A 20190827; MY PI2021000881 A 20190827; PH 12021550410 A 20210226