

Title (en)

Aluminium alloy sheet for bottle cans superior in high-temperature properties

Title (de)

Blech aus Aluminiumlegierung mit hervorragendem Hochtemperaturverhalten für Flaschendose

Title (fr)

Tôle en alliage d'aluminium ayant une excellente résistance à haute température pour boîte-boisson

Publication

EP 2281911 A1 20110209 (EN)

Application

EP 10010379 A 20060307

Priority

- EP 06715351 A 20060307
- JP 2005089369 A 20050325
- JP 2005089370 A 20050325
- JP 2005089371 A 20050325

Abstract (en)

An aluminum alloy sheet for bottle cans superior in high-temperature properties, the aluminum alloy sheet comprising the following composition: Mn 0.7-1.5% (mass %, also in the following), Mg 0.8-1.7%, Fe 0.1-0.7%, Si 0.05-0.5%, Cu 0.1-0.6%, with the remainder being Al and inevitable impurities, and comprising a crystal structure elongated in a rolling direction and with an average aspect ratio of crystal grains of 3 or more as determined through an examination from above of a part located at the center in the through-thickness direction, wherein the difference between a maximum value and a minimum value of tensile strength in 0°, 45° and 90° directions relative to the rolling direction is 25 MPa or less, and a difference between a maximum value and a minimum value of n values obtained by tensile tests in 0°, 45° and 90° directions relative to the rolling direction is 0.03 or less.

IPC 8 full level

C22C 21/06 (2006.01); **C22C 21/00** (2006.01); **C22F 1/00** (2006.01); **C22F 1/04** (2006.01); **C22F 1/047** (2006.01)

CPC (source: EP KR US)

C22C 21/00 (2013.01 - EP KR US); **C22C 21/06** (2013.01 - KR); **C22C 21/08** (2013.01 - EP US)

Citation (applicant)

- JP 2001162344 A 20010619 - DAIWA CAN CO LTD
- JP 2003277865 A 20031002 - KOBE STEEL LTD
- JP 2003342657 A 20031203 - KOBE STEEL LTD

Citation (search report)

- [XD] JP 2003342657 A 20031203 - KOBE STEEL LTD
- [A] JP 2004244701 A 20040902 - KOBE STEEL LTD
- [A] JP H10310837 A 19981124 - FURUKAWA ELECTRIC CO LTD
- [A] JP H11140576 A 19990525 - FURUKAWA ELECTRIC CO LTD

Cited by

EP3268503B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1870481 A1 20071226; **EP 1870481 A4 20080528**; CA 2602657 A1 20061005; EP 2281910 A1 20110209; EP 2281911 A1 20110209; KR 100953799 B1 20100421; KR 20070107148 A 20071106; US 2009053099 A1 20090226; WO 2006103887 A1 20061005

DOCDB simple family (application)

EP 06715351 A 20060307; CA 2602657 A 20060307; EP 10010378 A 20060307; EP 10010379 A 20060307; JP 2006304381 W 20060307; KR 20077021791 A 20060307; US 90966506 A 20060307