Title (en)

ALUMINUM ALLOY CONDUCTOR

Title (de)

ALUMINIUMLEGIERUNGSLEITER

Title (fr)

CONDUCTEUR EN ALLIAGE D'ALUMINIUM

Publication

EP 2540850 B1 20171115 (EN)

Application

EP 11747542 A 20110225

Priority

- JP 2010043489 A 20100226
- JP 2011054399 W 20110225

Abstract (en)

[origin: EP2540850A1] {Problems} To providing an aluminum alloy conductor, which has sufficient electrical conductivity and tensile strength, and which is excellent in resistance to bending fatigue, flexibility, and the like. {Means to solve} An aluminum alloy conductor, containing: 0.4 to 0.9 mass % of Fe, with the balance being Al and inevitable impurities, wherein the conductor contains two kinds of intermetallic compounds A and B, in which the intermetallic compound A has a particle size of 0.1 μm or more but 2 μm or less, and the intermetallic compound B has a particle size of 0.03 μm or more but less than 0.1 μm, and an area ratio a of the intermetallic compound A, and an area ratio b of the intermetallic compound B, in an arbitrary region in the conductor, satisfy: 1% #¤ a #¤ 6%, and 1% #¤ b #¤ 5%, respectively.

IPC 8 full level

C22C 21/00 (2006.01); **B21C 1/00** (2006.01); **C22F 1/00** (2006.01); **C22F 1/04** (2006.01); **H01B 1/02** (2006.01); **H01B 5/02** (2006.01)

CPC (source: EP US)

B21C 1/003 (2013.01 - EP US); **C22C 21/00** (2013.01 - EP US); **C22F 1/00** (2013.01 - EP US); **C22F 1/04** (2013.01 - EP US); **H01B 1/023** (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 2540850 A1 20130102; **EP 2540850 A4 20131106**; **EP 2540850 B1 20171115**; CN 102803531 A 20121128; CN 102803531 B 20151125; JP 4986253 B2 20120725; JP WO2011105586 A1 20130620; US 2012321507 A1 20121220; WO 2011105586 A1 20110901

DOCDB simple family (application)

EP 11747542 A 20110225; CN 201180010674 A 20110225; JP 2011054399 W 20110225; JP 2011528135 A 20110225; US 201213594480 A 20120824