

Title (en)

ALUMINUM ALLOY MATERIAL AND METHOD FOR MANUFACTURING ALUMINUM ALLOY MATERIAL

Title (de)

ALUMINIUMLEGIERUNGSMATERIAL UND VERFAHREN ZUR HERSTELLUNG VON ALUMINIUMLEGIERUNGSMATERIAL

Title (fr)

MATÉRIAU D'ALLIAGE D'ALUMINIUM ET PROCÉDÉ DE FABRICATION D'UN MATÉRIAU D'ALLIAGE D'ALUMINIUM

Publication

EP 3819392 A1 20210512 (EN)

Application

EP 19830522 A 20190610

Priority

- JP 2018126421 A 20180702
- JP 2019022865 W 20190610

Abstract (en)

An aluminum alloy material has a composition containing 3% by mass or more and 10% by mass or less of Fe and the balance of Al and incidental impurities, and a structure including a matrix and a compound. The matrix is composed mainly of Al, the compound contains Al and Fe, and a relative density is 85% or more. In any cross section, the matrix has an average crystal grain size of 1,100 nm or less, and the compound has an average major-axis length of 100 nm or less.

IPC 8 full level

B22F 3/00 (2021.01); **C22C 1/04** (2006.01); **C22C 21/00** (2006.01); **C22F 1/04** (2006.01); **B22F 1/068** (2022.01)

CPC (source: EP US)

B22F 9/008 (2013.01 - EP US); **C22C 1/0416** (2013.01 - EP US); **C22C 21/00** (2013.01 - EP US); **C22F 1/04** (2013.01 - EP); **B22F 1/068** (2022.01 - EP US); **B22F 2998/10** (2013.01 - EP US); **B22F 2999/00** (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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3819392 A1 20210512; **EP 3819392 A4 20210512**; CN 112189057 A 20210105; JP WO2020008809 A1 20210802; US 2021310102 A1 20211007; WO 2020008809 A1 20200109

DOCDB simple family (application)

EP 19830522 A 20190610; CN 201980034672 A 20190610; JP 2019022865 W 20190610; JP 2020528748 A 20190610; US 201916973934 A 20190610