

Title (en)

EXTRUDED PERFORATED ALUMINUM ALLOY TUBE FOR HEAT EXCHANGERS, AND METHOD FOR PRODUCING SAME

Title (de)

EXTRUDIERTES PERFORIERTES ROHR AUS ALUMINIUMLEGIERUNG FÜR WÄRMETAUSCHER UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

TUBE EN ALLIAGE D'ALUMINIUM PERFORÉ EXTRUDÉ D'ÉCHANGEURS DE CHALEUR, ET SON PROCÉDÉ DE PRODUCTION

Publication

EP 4137596 A1 20230222 (EN)

Application

EP 21821464 A 20210602

Priority

- JP 2020101475 A 20200611
- JP 2021020947 W 20210602

Abstract (en)

An aluminum alloy extruded multi-hole tube for a heat exchanger is formed of an aluminum alloy comprising Mn of 0.60 to 1.80 mass % and Si of more than 0.00 mass % and less than 0.20 mass %, with the balance being Al and inevitable impurities. The aluminum alloy has a ratio (Mn/Si) of the Mn content to the Si content being 15.0 or more. Strength change (tensile strength (A) of the aluminum alloy after heating test - tensile strength (B) of the aluminum alloy before heating test) in a heating test at 600°C±10°C for 3 minutes is -5 MPa or more. The present invention can provide an aluminum alloy extruded multi-hole tube for a heat exchanger having excellent extrudability and high strength after brazing, and a method for manufacturing the same.

IPC 8 full level

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

CPC (source: EP US)

B21C 23/002 (2013.01 - EP); **B21C 23/085** (2013.01 - EP); **B21C 29/003** (2013.01 - EP); **B21C 37/151** (2013.01 - EP); **C22C 21/00** (2013.01 - EP US); **C22F 1/04** (2013.01 - EP US); **F28F 1/022** (2013.01 - EP US); **F28F 21/084** (2013.01 - EP US); **F28F 2275/04** (2013.01 - EP)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4137596 A1 20230222; **EP 4137596 A4 20240417**; CN 115698354 A 20230203; JP 2021195583 A 20211227; JP 7521943 B2 20240724; US 2023250523 A1 20230810; WO 2021251228 A1 20211216

DOCDB simple family (application)

EP 21821464 A 20210602; CN 202180041415 A 20210602; JP 2020101475 A 20200611; JP 2021020947 W 20210602; US 202118008745 A 20210602