

Title (en)
Aluminium alloy extruded product, method of manufacturing the same, heat exchanger multi-port tube, and method of manufacturing heat exchanger including the multi-port tube

Title (de)
Stranggepresstes Produkt aus Aluminium-Legierung, Verfahren zu seiner Herstellung, Mehrfachleitungsrohr für Wärmetauscher, und Verfahren zur Herstellung vom Wärmetauscher mit dem Mehrfachleitungsrohr

Title (fr)
Produit extrudé en alliage d'aluminium, méthode pour sa production, tube à conduits multiples pour échangeur de chaleur et méthode de production d'échangeur de chaleur comprenant le tube à conduits multiples

Publication
EP 1746174 A1 20070124 (EN)

Application
EP 06015199 A 20060721

Priority
JP 2005212069 A 20050722

Abstract (en)
An aluminum alloy extruded product exhibiting excellent surface properties, comprising 0.8 to 1.6% of Mn and 0.4 to 0.8% of Si at a ratio of Mn content to Si content (Mn%/Si%) of 0.7 to 2.4, with the balance being Al and inevitable impurities, the number of intermetallic compounds with a diameter (circle equivalent diameter) of 0.1 to 0.9 μm dispersed in a matrix being 2×10^5 or more per square millimeter. The aluminum alloy extruded product allows extrusion of a thin multi-port tube at a high limiting extrusion rate, prevents deposits from adhering to the surface of the extruded tube, and may be suitably used as a constituent member for an aluminum alloy automotive heat exchanger.

IPC 8 full level
C22C 21/00 (2006.01); **C22F 1/04** (2006.01)

CPC (source: EP US)
C22F 1/08 (2013.01 - EP US); **F28F 1/022** (2013.01 - EP US); **F28F 21/084** (2013.01 - EP US); **F28F 2255/16** (2013.01 - EP US)

Citation (applicant)
JP H11335764 A 19991207 - MITSUBISHI ALUMINIUM

Citation (search report)

- [A] JP H11335764 A 19991207 - MITSUBISHI ALUMINIUM
- [AP] EP 1564307 A1 20050817 - DENSO CORP [JP], et al
- [A] WO 9706284 A1 19970220 - ALCAN INT LTD [CA], et al
- [A] JP H10310837 A 19981124 - FURUKAWA ELECTRIC CO LTD
- [A] EP 1090745 A1 20010411 - DENSO CORP [JP], et al
- [A] RU 2170282 C2 20010710 - ETALLURGICHESKIJ ZD, et al
- [A] EP 0302623 A1 19890208 - NORSK HYDRO AS [NO]
- [A] JP H1072651 A 19980317 - SHOWA ALUMINUM CORP

Cited by
EP1983272A1; EP4169647A4; CN104858260A; EP3449026A4; US11255002B2; WO2013148934A1

Designated contracting state (EPC)
CZ DE GB IT

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1746174 A1 20070124; **EP 1746174 B1 20080625**; CN 100582274 C 20100120; CN 1900335 A 20070124; DE 602006001552 D1 20080807; JP 2007031730 A 20070208; JP 4824358 B2 20111130; US 2007017605 A1 20070125; US 2011114228 A1 20110519

DOCDB simple family (application)
EP 06015199 A 20060721; CN 200610107433 A 20060724; DE 602006001552 T 20060721; JP 2005212069 A 20050722; US 48994106 A 20060720; US 93079311 A 20110118