

Title (en)

Heat exchanger for air conditioning systems comprising a conduit with longitudinal fins

Title (de)

Wärmetauscher für Klimaanlage systeme umfassend eine Leitung mit Längsrippen

Title (fr)

Échangeur de chaleur pour des systèmes de climatisation d'air comprenant un conduit avec des ailettes longitudinales

Publication

**EP 2439476 A3 20140813 (EN)**

Application

**EP 11275117 A 20111004**

Priority

GB 201016750 A 20101005

Abstract (en)

[origin: EP2439476A2] In the field of heat exchangers for air conditioning systems there is a need for an improved heat exchanger which provides improved efficiency in terms of overall packaging and performance. A heat exchanger (70; 90; 100; 140), for use in an air conditioning system of a building, comprises an elongate fluid conduit (32) which has first and second elongate heat exchange fins (34, 36) extending laterally therefrom. Opposed faces (38, 40) of the first and second fins (34, 36) define an acute angle therebetween. The fluid conduit (32) defines a discrete conduit body (42), the first fin (34) defines a first fin body (44), and the second fin (36) defines a second fin body (46). The conduit body (42) is thermally coupled to at least one of the first and second fin bodies (44, 46) by a discrete heat exchange member (72).

IPC 8 full level

**F28F 1/20** (2006.01); **F28D 1/047** (2006.01); **F28F 1/14** (2006.01); **F28F 13/06** (2006.01); **F28F 13/12** (2006.01)

CPC (source: EP GB US)

**F24F 1/0059** (2013.01 - GB); **F24F 13/30** (2013.01 - EP US); **F28D 1/04** (2013.01 - GB); **F28D 1/0477** (2013.01 - EP US); **F28F 1/14** (2013.01 - EP US); **F28F 1/20** (2013.01 - EP GB US); **F28F 1/42** (2013.01 - GB); **F28F 13/06** (2013.01 - EP US); **F28F 13/12** (2013.01 - EP US); **F28F 2215/08** (2013.01 - EP US)

Citation (search report)

- [I] WO 9742456 A1 19971113 - SUNFIN TECHNOLOGIES OY [FI], et al
- [A] US 2007034367 A1 20070215 - WIEDER HORST K [US]
- [A] DE 4435209 A1 19960404 - MUELLER FRIEDRICH UDO [DE]
- [A] EP 1767871 A1 20070328 - IRSAP SPA [IT]

Cited by

EP3039349A4; CN103528418A; EP3499167B1

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 2439476 A2 20120411**; **EP 2439476 A3 20140813**; AU 2011226994 A1 20120419; GB 201016750 D0 20101117; GB 2484300 A 20120411; GB 2484300 B 20160810; US 2012080174 A1 20120405

DOCDB simple family (application)

**EP 11275117 A 20111004**; AU 2011226994 A 20111003; GB 201016750 A 20101005; US 201113253310 A 20111005