

Title (en)

FIN TUBE HEAT EXCHANGER

Title (de)

RIPPENROHRWÄRMETAUSCHER

Title (fr)

ÉCHANGEUR DE CHALEUR À TUBE À AILETTES

Publication

**EP 1906129 A4 20100811 (EN)**

Application

**EP 06767333 A 20060626**

Priority

- JP 2006312716 W 20060626
- JP 2005194254 A 20050701

Abstract (en)

[origin: EP1906129A1] To simultaneously achieve both a heat transfer promoting effect and water drainability by guide fins in a fin tube heat exchanger. A fin tube heat exchanger (1) has heat transfer fins (2) disposed in an air flow and plural heat transfer tubes (3) that are inserted in the heat transfer fins (2) and disposed in a direction substantially orthogonal to a flow direction of the air flow. On the heat transfer fins (2), a set of guide fins (21a, 21 b) and a set of guide fins (21 c, 21 d) arranged straightly from upstream to downstream in the flow direction of the air flow are formed, by cutting and raising, on the heat transfer fin (2) surfaces on both sides of the heat transfer tubes (3). Straight lines (L 1 , L 2 ) that hypothetically interconnect the guide fins (21a, 21 b) and the guide fins (21 c, 21 d) slant with respect to the flow direction of the air flow so as to guide the air flow in the vicinities of the heat transfer tubes (3) to rear sides of the heat transfer tubes (3) in the flow direction of the air flow.

IPC 8 full level

**F28F 1/32** (2006.01)

CPC (source: EP KR US)

**F28D 1/047** (2013.01 - KR); **F28F 1/32** (2013.01 - KR); **F28F 1/325** (2013.01 - EP US); **F28F 13/06** (2013.01 - EP US);  
**F28F 17/005** (2013.01 - EP US)

Citation (search report)

- [XA] US 2003000686 A1 20030102 - KESTER DOUGLAS A [US]
- [XA] JP H109786 A 19980116 - MATSUSHITA REFRIGERATION
- See references of WO 2007004457A1

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CN112964112A; AU2009252652B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

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CN 100554855 C 20091028; CN 101208575 A 20080625; ES 2370795 T3 20111222; JP 2007010279 A 20070118; KR 100973225 B1 20100730;  
KR 20080011445 A 20080204; US 2010175864 A1 20100715; WO 2007004457 A1 20070111; WO 2007004457 A8 20080131

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