

Title (en)

Heat exchanger for improving thermal efficiency and air conditioner mounted therewith

Title (de)

Wärmetauscher zum Verbessern des thermischen Wirkungsgrades und Klimaanlage mit einem solchen Wärmetauscher

Title (fr)

Echangeur de chaleur pour améliorer l'efficacité thermique et climatiseur comprenant un tel échangeur de chaleur

Publication

EP 1696187 A3 20080625 (EN)

Application

EP 06000843 A 20060116

Priority

KR 20050008074 A 20050128

Abstract (en)

[origin: EP1696187A2] A heat exchanger of an air conditioner is disclosed whereby refrigerant is not biased to a particular heat exchange line but evenly flows in all the heat exchange lines. The heat exchanger comprises: a housing (51) having air inlets (51a,51b,51c) and an air outlet (51d); and a plurality of heat exchange lines (52,53) each formed inside the housing (51) in a serpentine shape for refrigerant to flow and switch the flow direction, and wherein the plurality of heat exchange lines (52,53) are arranged in such a manner that each line crosses each other before and after the infusion directions of air introduced via the air inlets.

IPC 8 full level

F25B 5/02 (2006.01); **F24F 1/0063** (2019.01); **F24F 1/0067** (2019.01); **F25B 39/02** (2006.01)

CPC (source: EP KR US)

A45D 8/002 (2021.01 - KR); **A45D 8/006** (2021.01 - KR); **A45D 8/36** (2013.01 - KR); **F24F 1/0057** (2019.01 - EP US); **F24F 1/0063** (2019.01 - EP KR US); **F24F 1/0067** (2019.01 - EP KR US); **F24F 1/26** (2013.01 - EP US); **F24F 1/32** (2013.01 - EP US); **F25B 39/00** (2013.01 - EP US)

Citation (search report)

- [X] US 5542271 A 19960806 - KUDOH MITUO [JP], et al
- [X] JP H04359798 A 19921214 - SHARP KK
- [X] JP 2003214723 A 20030730 - HITACHI LTD
- [A] JP H1096525 A 19980414 - FUJITSU GENERAL LTD

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1696187 A2 20060830; **EP 1696187 A3 20080625**; CN 1811305 A 20060802; JP 2006207998 A 20060810; KR 20060087173 A 20060802; US 2006168982 A1 20060803

DOCDB simple family (application)

EP 06000843 A 20060116; CN 200610002765 A 20060125; JP 2006016351 A 20060125; KR 20050008074 A 20050128; US 33759606 A 20060124