

Title (en)

Heat exchanger for air conditioner having different circuit pattern depending on distance from fan

Title (de)

Wärmeübertrager für eine Klimaanlage mit verschiedenen vom Gebläseabstand abhängigen Schaltkreisen

Title (fr)

Echangeur de chaleur pour dispositif de conditionnement d'air avec différents circuits selon leurs distance au ventilateur

Publication

**EP 1757869 A3 20071226 (EN)**

Application

**EP 06017726 A 20060825**

Priority

KR 20050078570 A 20050826

Abstract (en)

[origin: EP1757869A2] Disclosed is a heat exchanger for an air conditioner. The heat exchanger of the invention comprises a plurality of circuits. The circuits are formed into different patterns to have path lengths different from each other, and have a shorter path length as the circuits are closer to a fan generating an air flow. According to the heat exchanger, the areas of heat contact of the circuits are different correspondingly to the differences of the flow rate and velocity of the air depending on the distances from the fan, so that the efficiency of the air conditioner can be improved.

IPC 8 full level

**F24F 1/0063** (2019.01); **F24F 13/30** (2006.01); **F28B 1/06** (2006.01); **F28F 9/26** (2006.01)

CPC (source: EP KR US)

**F24F 1/0063** (2019.01 - EP US); **F24F 13/30** (2013.01 - EP); **F25B 1/00** (2013.01 - KR); **F25B 39/00** (2013.01 - KR); **F25B 41/00** (2013.01 - KR); **F28B 1/06** (2013.01 - EP); **F28D 1/0477** (2013.01 - EP); **F28F 13/08** (2013.01 - EP)

Citation (search report)

- [X] US 6672375 B1 20040106 - SHIPPY GLEN F [US], et al
- [X] EP 0085381 A2 19830810 - CARRIER CORP [US]
- [X] JP S58129176 A 19830802 - MITSUBISHI ELECTRIC CORP
- [A] JP H03113290 A 19910514 - HITACHI LTD
- [A] JP H01118199 A 19890510 - KAWAI MUSICAL INSTR MFG CO

Cited by

JP2011163740A; EP2916086A1; JP2016109382A; WO2011099255A1; US10508862B2

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 1757869 A2 20070228**; **EP 1757869 A3 20071226**; AU 2006203362 A1 20070315; CN 1940398 A 20070404; KR 100631273 B1 20061004

DOCDB simple family (application)

**EP 06017726 A 20060825**; AU 2006203362 A 20060808; CN 200610121297 A 20060824; KR 20050078570 A 20050826