

Title (en)

HEAT EXCHANGER AND AIR CONDITIONER

Title (de)

WÄRMETAUSCHER UND KLIMAANLAGE

Title (fr)

ÉCHANGEUR DE CHALEUR ET CLIMATISEUR

Publication

EP 4116642 A1 20230111 (EN)

Application

EP 20923061 A 20200305

Priority

JP 2020009421 W 20200305

Abstract (en)

A heat exchanger for an air conditioner for which a zeotropic refrigerant mixture is used is obtained, and the heat exchanger, when used as an evaporator, enables reduction of the amount of required refrigerant without deteriorating the heat transfer performance. The heat exchanger includes: a plurality of fins 11 stacked together at predetermined intervals therebetween; first heat transfer pipes 31 to 36 which extend through the plurality of fins 11, in which a heat medium flows, and which have a plurality of grooves in the inner surface of the pipes; and second heat transfer pipes 37, 38 extending through the plurality of fins 11, having one end connected to one end of the first heat transfer pipes 31 to 36 to form one heat medium flow path, being smaller in pipe diameter than the first heat transfer pipes 31 to 36, and having an inner surface shape providing a pressure loss per unit length smaller than that of the first heat transfer pipes 31 to 36.

IPC 8 full level

F25B 39/02 (2006.01); **F25B 1/00** (2006.01); **F25B 39/04** (2006.01); **F28F 13/02** (2006.01); **F28F 13/06** (2006.01)

CPC (source: EP US)

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Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

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