

Title (en)

LAMINATE-TYPE HEAT EXCHANGER AND HEAT PUMP SYSTEM EQUIPPED WITH SAME

Title (de)

BESCHICHTETER WÄRMETAUSCHER UND WÄRMEPUMPENSYSTEM DAMIT

Title (fr)

ÉCHANGEUR DE CHALEUR DU TYPE STRATIFIÉ ET SYSTÈME DE POMPE À CHALEUR LE COMPORANT

Publication

EP 2667136 A4 20160120 (EN)

Application

EP 11856572 A 20110118

Priority

JP 2011000222 W 20110118

Abstract (en)

[origin: EP2667136A1] To obtain a stacked heat exchanger in which the need to provide a step of bending heat exchanger pipes is eliminated and a space which cannot be utilized because of the provision of a header pipe is not produced, and also to obtain a heat pump system having the heat exchanger installed therein. A heat exchanger (10) is configured such that a plurality of rectangular first heat exchanger pipes (1) and a plurality of rectangular second heat exchanger pipes (2) are alternately stacked on each other. The first and second heat exchanger pipes (1 and 2) each have a refrigerant flow channel having a rectangular cross section through which a refrigerant flows. The first and second heat exchanger pipes (1 and 2) have substantially the same length in a direction in which refrigerants flow through the refrigerant flow channels and also have substantially the same width in the widthwise direction of the refrigerant flow channels.

IPC 8 full level

F28D 9/00 (2006.01); **F25B 13/00** (2006.01); **F25B 25/00** (2006.01); **F25B 39/02** (2006.01); **F25B 39/04** (2006.01); **F28D 7/00** (2006.01);
F28F 3/00 (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP)

F25B 39/022 (2013.01); **F25B 39/04** (2013.01); **F28D 7/0008** (2013.01); **F28D 7/0025** (2013.01); **F28D 9/005** (2013.01); **F28D 9/0081** (2013.01);
F28F 1/025 (2013.01); **F28F 9/0202** (2013.01); **F25B 13/00** (2013.01); **F25B 25/005** (2013.01); **F25B 2339/043** (2013.01);
F25B 2339/047 (2013.01); **F28F 2220/00** (2013.01)

Citation (search report)

- [XY] FR 2859779 A1 20050318 - VALEO CLIMATISATION [FR]
- [Y] EP 0402175 A1 19901212 - MOONEY BRIAN FRANCIS [IE]
- [X] GB 2447090 A 20080903 - STATOIL ASA [NO]
- [Y] EP 1770346 A1 20070404 - VALEO SYSTEMES THERMIQUES [FR]
- [Y] DE 19757803 A1 19990701 - BEHR GMBH & CO [DE]
- See references of WO 2012098572A1

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

DOCDB simple family (publication)

EP 2667136 A1 20131127; EP 2667136 A4 20160120; EP 2667136 B1 20200401; JP 5496369 B2 20140521; JP WO2012098572 A1 20140609;
WO 2012098572 A1 20120726

DOCDB simple family (application)

EP 11856572 A 20110118; JP 2011000222 W 20110118; JP 2012553451 A 20110118