

Title (en)
HEAT EXCHANGER AND REFRIGERATION CYCLE AIR CONDITIONER USING SAME

Title (de)
WÄRMETAUSCHER UND KÄLTEKREISLAUF-KLIMAANLAGE DAMIT

Title (fr)
ÉCHANGEUR DE CHALEUR ET CONDITIONNEUR D'AIR À CYCLE DE RÉFRIGÉRATION L'UTILISANT

Publication
EP 2980516 A4 20161207 (EN)

Application
EP 13880586 A 20130327

Priority
JP 2013058995 W 20130327

Abstract (en)
[origin: EP2980516A1] Provided is a heat exchanger (1), including: a parallel-flow-type heat exchange unit (3) including a plurality of heat exchange pipes (11, 13) each extending in an up-and-down direction, the parallel-flow-type heat exchange unit including at least a front row portion (7) and a back row portion (9), the front row portion and the back row portion each including the plurality of heat exchange pipes each extending in the up-and-down direction; and a plate fin-and-tube-type heat exchange unit (5) including a plurality of plate fins (25) each extending in the up-and-down direction, the plate fin-and-tube-type heat exchange unit being arranged in front of a lower portion of a front surface of the parallel-flow-type heat exchange unit. An outlet end of the plate fin-and-tube-type heat exchange unit and an inlet end of the parallel-flow-type heat exchange unit are connected to each other by a pipe.

IPC 8 full level
F28D 1/053 (2006.01); **F25B 39/02** (2006.01); **F28D 1/04** (2006.01); **F28D 1/047** (2006.01); **F28F 1/12** (2006.01); **F28F 1/32** (2006.01); **F28F 9/26** (2006.01)

CPC (source: EP)
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Citation (search report)

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- [Y] JP 2002013840 A 20020118 - TOYO RADIATOR CO LTD
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- [A] JP S6422509 U 19890206
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- [A] WO 2012009460 A2 20120119 - KEISLING EARL [US], et al
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