

Title (en)
HEAT EXCHANGER

Title (de)
WÄRMETAUSCHER

Title (fr)
ÉCHANGEUR THERMIQUE

Publication
EP 3156752 A4 20180221 (EN)

Application
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Priority
JP 2014065766 W 20140613

Abstract (en)
[origin: EP3156752A1] A heat exchanger according to the present invention has: a plurality of heat transfer pipes that are disposed in parallel with spaces therebetween; distribution headers that are respectively connected to lower ends of the plurality of heat transfer pipes so as to communicate with the heat transfer pipes and distribute a refrigerant; and fins that are provided in an air duct between the heat transfer pipes adjacent to each other. The distribution headers have top surfaces inclined downward from a windward side to a leeward side.

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Citation (search report)

- [XAY] JP 2013126817 A 20130627 - KEIHIN THERMAL TECHNOLOGY CORP
- [Y] JP 2006170601 A 20060629 - SHOWA DENKO KK
- [Y] JP 2009299963 A 20091224 - SHARP KK
- [Y] JP S6189449 A 19860507 - HITACHI LTD
- [X] US 2004016535 A1 20040129 - SHIMANUKI HIROYASU [JP], et al
- [X] KR 20100073217 A 20100701 - DOOSAN INFRACORE CO LTD [KR]
- [X] JP H11108583 A 19990423 - CALSONIC CORP
- [X] EP 0325844 A1 19890802 - MODINE MFG CO [US]
- [A] EP 1998133 A1 20081203 - CALSONIC KANSEI CORP [JP]
- See references of WO 2015189990A1

Cited by
CN112368536A; US11573056B2; EP3805651A4; EP4279850A3; US11506402B2; EP3805651B1

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DOCDB simple family (publication)
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