Title (en)

HEAT EXCHANGER

Title (de

WÄRMEÜBERTRAGER

Title (fr)

ÉCHANGEUR DE CHALEUR

Publication

EP 3334615 A1 20180620 (DE)

Application

EP 16805381 A 20161130

Priority

- DE 102015224082 A 20151202
- EP 2016079302 W 20161130

Abstract (en

[origin: WO2017093328A1] The present invention relates to a heat exchanger (10) with a heat exchanger block (15) which has a plurality of air ducts (16) through which an air flow (12) can flow in parallel, and a plurality of coolant ducts (17) through which a coolant flow (13) can flow, said air ducts and coolant ducts being coupled to one another in a heat-transmitting and media-separated manner, wherein the air ducts (16) and the coolant ducts (17) are arranged in the heat exchanger block (15) in accordance with the cross-flow principle. A particularly compact design can be achieved if a first heat exchanger stage (18) with an air inlet side (20) and a second heat exchanger stage (19) with an air outlet side (21) are provided within the heat exchanger block (15), if the air ducts (16) and the coolant ducts (17) are guided through the first heat exchanger stage (18) and through the second heat exchanger stage (19) in such a manner that they are coupled to one another in the first heat exchanger stage (18) and in the second heat exchanger stage (19) in a heat-transmitting and media-separated manner, and if thermoelectric modules (22) are arranged between the air ducts (16) and the coolant ducts (17) only in the second heat exchanger stage (19).

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2017093328A1

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