Title (en)

STACKED HEADER, HEAT EXCHANGER, AND AIR CONDITIONING DEVICE

Title (de)

GESTAPELTER KOPF, WÄRMETAUSCHER UND KLIMATISIERUNGSVORRICHTUNG

Title (fr)

COLLECTEUR EMPILÉ, ÉCHANGEUR DE CHALEUR ET DISPOSITIF DE CLIMATISATION

Publication

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Application

EP 13884840 A 20130515

Priority

JP 2013063602 W 20130515

Abstract (en)

[origin: EP2998681A1] A stacking-type header 2 according to the present invention includes a first plate-shaped unit 11 having a plurality of first outlet flow passages 11 A, a second plate-shaped unit 12 stacked on the first plate-shaped unit 11 and having a distribution flow passage 12A, the distribution flow passage 12A causing refrigerant entering from a first inlet flow passage 12a to be distributed and flow out to the first outlet flow passages 11A. The distribution flow passage 12A includes at least one branching flow passage 12b. The second plate-shaped unit 12 has at least one first plate-shaped member that has at least one first projection formed by press working. The branching flow passage 12b is formed as the inside of the first projection is closed in a region other than a region where refrigerant flows in and a region where refrigerant flows out.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [A] US 6892805 B1 20050517 - VALENSA JEROEN [US]
- [A] US 5241839 A 19930907 - HUGHES GREGORY G [US]
- See references of WO 2014184913A1

Cited by

EP4220064A4; US2023358451A1; EP3779346A4; EP3940329A1; EP3988888A1; US11098927B2; US11629897B2; US11402162B2; US11454451B2; US11906249B2

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 13884840 A 20130515; CN 201420244830 U 20140514; HK 16104754 A 20160426; JP 2013063602 W 20130515; JP 2015516825 A 20130515