

Title (en)

Heat exchanger, more particularly supercharge air cooler, for automotive vehicle

Title (de)

Wärmeübertrager, insbesondere Ladeluftkühler, für ein Kraftfahrzeug

Title (fr)

Echangeur de chaleur, en particulier radiateur d'air de suralimentation, pour véhicule automobile

Publication

EP 0864839 A3 19990421 (DE)

Application

EP 98103324 A 19980226

Priority

- DE 19709909 A 19970311
- DE 19722100 A 19970527

Abstract (en)

[origin: EP0864839A2] The heat exchanger has a ribbed block of tubes located between two flow boxes. Each flow box (3) is assembled from at least two shell elements which are brought together tightly in a longitudinal plane of the block (2). The boxes are each joined by a union to a flow circuit. Each box is designed to be bulbous towards the end in a flow region of the flow medium by curved walls with large radii from the union (8). Each box is assembled from two half shells serving as shell elements. Two half shells each have a jointing flange along their edges.

IPC 1-7

F28F 9/02

IPC 8 full level

F28D 1/053 (2006.01); **F28F 9/02** (2006.01); **F28F 9/04** (2006.01)

CPC (source: EP)

F28D 1/05366 (2013.01); **F28F 9/02** (2013.01); **F28F 9/0246** (2013.01); **F28D 2021/0082** (2013.01); **F28D 2021/0094** (2013.01)

Citation (search report)

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- [Y] DE 3906747 A1 19900913 - SUEDEDEUTSCHE KUEHLER BEHR [DE]
- [Y] US 2443703 A 19480622 - CHRISTENSEN DONALD W
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- [A] DE 19509654 A1 19960919 - KLOECKNER HUMBOLDT DEUTZ AG [DE], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 420 (M - 1023) 11 September 1990 (1990-09-11)

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CN104364599A; EP1923653A1; EP2474805A1; WO2014003880A1; WO2006050982A1

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0864839 A2 19980916; EP 0864839 A3 19990421; EP 0864839 B1 20020206; JP 3996258 B2 20071024; JP H10292996 A 19981104

DOCDB simple family (application)

EP 98103324 A 19980226; JP 5547198 A 19980306