

Title (en)
Heat exchanger for automotive vehicle

Title (de)
Wärmeübertrager für Kraftfahrzeuge

Title (fr)
Echangeur de chaleur pour véhicule automobile

Publication
EP 1335173 A3 20050119 (DE)

Application
EP 03001827 A 20030129

Priority
DE 10205684 A 20020206

Abstract (en)
[origin: EP1335173A2] The heat transmission device consists of tubes, fins and a water box containing an auxiliary heat transmitter (75) such as an oil cooler. This heat transmitter consists of two metal plates (76), one lying on the other, bonded together. They plates may be welded along the flow channel (72). The auxiliary heat transmitter is fitted in the water box and soldered to it at the same time.

IPC 1-7
F28F 3/14; **F28F 3/04**; **B21D 53/04**

IPC 8 full level
B21D 53/04 (2006.01); **F28F 3/04** (2006.01); **F28F 3/14** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP)
B21D 53/045 (2013.01); **F28F 3/04** (2013.01); **F28F 3/14** (2013.01); **F28F 9/0234** (2013.01)

Citation (search report)

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- [Y] US 3178806 A 19650420 - KEITH NORVAL A
- [Y] DE 1227923 B 19661103 - TRANTER MFG INC
- [Y] EP 0611941 A2 19940824 - GIANNONI SRL [IT]
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Cited by
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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)
EP 1335173 A2 20030813; **EP 1335173 A3 20050119**; DE 10303542 A1 20030807

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EP 03001827 A 20030129; DE 10303542 A 20030129