

Title (en)
Automotive air conditioning system evaporator

Title (de)
Verdampfer für Kraftfahrzeug-Klimaanlage

Title (fr)
Evaporateur pour système de conditionnement d'air pour véhicule automobile

Publication
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Application
EP 00115565 A 20000719

Priority
DE 19933913 A 19990720

Abstract (en)
[origin: EP1070929A2] The invention concerns an automotive air conditioning system evaporator (2) with an extended collector (4), whose collector cover is rounded for stability under pressure, divided internally across the collector into a first and a second compartment (8, 10), which are associated with an inlet and outlet for the evaporator coolant, and which exhibits divided transverse slots along its length, common to both compartments, in which is provided a flat pipe array (20), constructed for dual flow as a minimum, linked with each other by means of zigzag fins for the purpose of heat transfer, whose ends are at any given time inserted into a transverse slot in the collector cover in such a way, that one flow (22) in the flat pipes communicates with one compartment and the other flow (24) in the flat pipes (20) communicates with the other compartment. The invention provides for the first or second wall (32, 34) of both compartments (8, 10) formed by the collector cover at any given time to be configured as a rounded tube for pressure stability. <IMAGE>

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Cited by
JP2013134016A; EP1460364A3; CN103277945A; EP1452814A4; CN104930758A; CN105020941A; US7650935B2; US7000690B2;
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