

Title (en)
COOLING FLUID COOLER

Title (de)
KÜHLFLÜSSIGKEITSKÜHLER

Title (fr)
REFROIDISSEUR POUR LIQUIDE DE REFROIDISSEMENT

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Application
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Priority
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Abstract (en)
[origin: WO2009010155A1] The invention relates to a cooling fluid cooler for motor vehicles having a soldered cooling network (1) made of flat tubes (101) and ribs (102), produced from very thin aluminum sheets (a, b, c), and having header or loop-around chambers (3) at the ends of the flat tubes (101) for the cooling fluid flowing in the flat tubes (101), said chambers being cooled by cooling air flowing through the ribs (102). The cooling fluid cooler has exceptional cooling power and a light weight. This is achieved according to the invention in that each flat tube (101) is made of at least two formed sheet metal strips (a, b, c), wherein at least the one sheet metal strip (a, b) forms the wall of the flat tube and the other sheet metal strip forms a wavy internal insert (c) forming channels (10) in the same, and that the ratio of the constriction factor on the cooling fluid side to the constriction factor on the cooling air side is approximately in the range of 0.20 to 0.44, wherein the hydraulic diameter on the cooling fluid side is approximately in the range of 0.8 to 1.5 mm.

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• JP 2001165587 A 20010622 - MITSUBISHI HEAVY IND LTD
• US 5185925 A 19930216 - RYAN RICHARD P [US], et al

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