

Title (en)  
HEAT EXCHANGER

Title (de)  
WÄRMETAUSCHER

Title (fr)  
CHANGEUR THERMIQUE

Publication  
**EP 1664655 B1 20081029 (DE)**

Application  
**EP 04763801 A 20040804**

Priority  
• EP 2004008754 W 20040804  
• DE 10342241 A 20030911

Abstract (en)  
[origin: US2007267187A1] A heat exchanger ( 1 ), particularly for motor vehicles, comprises flat tubes ( 2 ) whose interior can be flowed through by first fluids and whose exterior can be subjected to the action of a second fluid. The flat tubes ( 2 ) are situated essentially transversal to the flowing direction of the second fluid while being parallel to one another and are interspaced in such a manner as to form flow paths for the second fluid that pass through the heat exchanger ( 1 ). Cooling ribs ( 3 ) extending between adjacent flat tubes ( 2 ) are situated in the flow paths. A number of corrugated ribs are provided, which are located one behind the other in the flowing direction of the second fluid and which are offset with regard to one another in the flowing direction of the first fluid.

IPC 8 full level  
**F28F 1/12** (2006.01)

CPC (source: EP US)  
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DOCDB simple family (publication)  
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**EP 2004008754 W 20040804**; AT 04763801 T 20040804; BR PI0414273 A 20040804; CN 200480026219 A 20040804; DE 10342241 A 20030911; DE 502004008363 T 20040804; EP 04763801 A 20040804; JP 2006525649 A 20040804; US 57129504 A 20040804