

Title (en)  
Heat exchange device

Title (de)  
Wärmeübertragereinrichtung

Title (fr)  
Appareil d'échange de chaleur

Publication  
**EP 1818643 A3 20080723 (DE)**

Application  
**EP 06024482 A 20061125**

Priority  
DE 102005062297 A 20051224

Abstract (en)  
[origin: US2007144803A1] A heat exchanger device, in particular a cross-flow cooler for a motor vehicle, is disposed between two vehicle side rails. The heat exchanger device includes a heat-exchange zone, in particular a cooler/fin network, and at least two collecting/distributor tanks disposed to the side of the heat-exchange zone and extend substantially vertically. In order to utilize a construction space between the vehicle side rails as efficiently as possible, the collecting/distributor tanks have externally, in the region of the vehicle side rails, a respective recess configured complementary to the side rails.

IPC 8 full level  
**F28F 9/00** (2006.01); **F28D 1/053** (2006.01)

CPC (source: EP US)  
**F28D 1/05325** (2013.01 - EP US); **F28F 9/002** (2013.01 - EP US); **F28F 9/0209** (2013.01 - EP US); **F28F 9/262** (2013.01 - EP US);  
**F28D 2001/0266** (2013.01 - EP US); **F28D 2021/0094** (2013.01 - EP US)

Citation (search report)  
• [X] EP 0764824 A1 19970326 - SOC D FINISSAGE DE PRODUITS ME [FR]  
• [X] FR 2785376 A1 20000505 - VALEO THERMIQUE MOTEUR SA [FR]  
• [X] US 2003213587 A1 20031120 - MANO TAKAMITSU [JP], et al

Cited by  
GB2450244A; GB2450244B

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**US 2007144803 A1 20070628**; DE 102005062297 A1 20070705; EP 1818643 A2 20070815; EP 1818643 A3 20080723;  
EP 1818643 B1 20130724; JP 2007168770 A 20070705

DOCDB simple family (application)  
**US 64583406 A 20061226**; DE 102005062297 A 20051224; EP 06024482 A 20061125; JP 2006335647 A 20061213