

Title (en)
HEAT EXCHANGER FOR MOTOR VEHICLES

Title (de)
WÄRMETAUSCHER FÜR KRAFTFAHRZEUGE

Title (fr)
ÉCHANGEUR THERMIQUE POUR VEHICULES AUTOMOBILES

Publication
EP 2021717 B1 20110817 (DE)

Application
EP 07711950 A 20070315

Priority
• EP 2007002271 W 20070315
• DE 102006019024 A 20060425

Abstract (en)
[origin: WO2007121812A1] The invention relates to a heat exchanger for motor vehicles, for example charge air cooler or cooling liquid cooler, composed of tubes (1) which are formed from in each case two plates (1a, 1b) and which have two opposite longitudinal sides (L1, L2) and two opposite narrow sides (S), wherein one of the longitudinal sides (L1) is the inflow side (A) for for example cooling air, and composed of heat exchange fins (2) or the like arranged between the tubes (1), through which heat exchange fins (2) the cooling air flows freely, and composed of collecting spaces (3) which are formed at the ends (4a, 4b) of the tubes (1) or of the plates (1a, 1b), characterized in that at least the one end (4a) of the tubes (1) opens out into the longitudinal side (L2) which is remote from the inflow side (A), and in that the other end (4b) of the tubes (1) opens out either likewise into the remote longitudinal side (L2) or into the longitudinal side (L1) which forms the inflow side (A), or into one of the narrow sides (S). The heat exchanger has comparatively large heat-exchanging surfaces.

IPC 8 full level
F28D 1/03 (2006.01)

CPC (source: EP US)
F28D 1/0316 (2013.01 - EP US); **F28D 1/0471** (2013.01 - EP US); **F28F 9/0221** (2013.01 - EP US); **F28F 13/06** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
DE 102006019024 A1 20071031; CN 101432589 A 20090513; EP 2021717 A1 20090211; EP 2021717 B1 20110817;
US 2009260787 A1 20091022; WO 2007121812 A1 20071101; WO 2007121812 A8 20071213; WO 2007121812 A9 20081002

DOCDB simple family (application)
DE 102006019024 A 20060425; CN 200780015038 A 20070315; EP 07711950 A 20070315; EP 2007002271 W 20070315;
US 29708507 A 20070315