

Title (en)

HEAT EXCHANGER, IN PARTICULAR A CHARGE INTERCOOLER OR COOLANT COOLER FOR MOTOR VEHICLES

Title (de)

WÄRMEÜBERTRÄGER, INSbesondere LADELUFTKÜHLER ODER KÜHLMITTELKÜHLER FÜR KRAFTFAHRZEUGE

Title (fr)

ECHANGEUR DE CHALEUR, EN PARTICULIER REFROIDISSEUR D'AIR DE SURALIMENTATION OU REFROIDISSEUR DE MILIEU DE REFROIDISSEMENT POUR DES VÉHICULES À MOTEUR

Publication

EP 1842023 B1 20100407 (DE)

Application

EP 06706201 A 20060112

Priority

- EP 2006000201 W 20060112
- DE 102005002417 A 20050118

Abstract (en)

[origin: US2008078540A1] The invention relates to a heat exchanger (1), in particular a charge intercooler or coolant cooler for motor vehicles, which comprises a soldered block which is made of pipes (4), ribs and at least one pipe base (2), in addition to at least one plastic box (3) which has a wall (3a) which extends in the cross-section and which is approximately U shaped and a surrounding flange (3b). The box is mechanically connected to the pipe base over flange (3b). According to the disclosure, reinforcing ribs are arranged on the inner side of the plastic box (3) in a transition area between the flange (3b) and the wall (3a).

IPC 8 full level

F28F 9/02 (2006.01); **F28D 1/053** (2006.01)

CPC (source: EP US)

F28D 1/05366 (2013.01 - EP US); **F28F 9/0226** (2013.01 - EP US); **F28F 21/067** (2013.01 - EP US); **F28D 2021/0082** (2013.01 - EP US);
F28D 2021/0094 (2013.01 - EP US); **F28F 2225/08** (2013.01 - EP US)

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

DOCDB simple family (publication)

US 2008078540 A1 20080403; AT E463710 T1 20100415; CN 100559110 C 20091111; CN 101107492 A 20080116;
DE 102005002417 A1 20060727; DE 502006006637 D1 20100520; EP 1842023 A1 20071010; EP 1842023 B1 20100407;
JP 2008527305 A 20080724; JP 5283385 B2 20130904; WO 2006077044 A1 20060727

DOCDB simple family (application)

US 79545906 A 20060112; AT 06706201 T 20060112; CN 200680002499 A 20060112; DE 102005002417 A 20050118;
DE 502006006637 T 20060112; EP 06706201 A 20060112; EP 2006000201 W 20060112; JP 2007550749 A 20060112