

Title (en)

AUTOMOBILE HEAT EXCHANGER MODULE COMPRISING A FAN SHROUD AND A HEAT EXCHANGER, IN PARTICULAR FOR MOTOR VEHICLE

Title (de)

WÄRMEAUSTAUSCHMODUL MIT LÜFTERHAUBE UND WÄRMETAUSCHER INSBESONDERE FÜR KRAFTFAHRZEUG

Title (fr)

MODULE D'ECHANGE DE CHALEUR COMPRENANT UNE BUSE DE VENTILATEUR ET UN ECHANGEUR DE CHALEUR, EN PARTICULIER POUR VEHICULE AUTOMOBILE

Publication

EP 1044349 A1 20001018 (FR)

Application

EP 99950851 A 19991027

Priority

- FR 9902618 W 19991027
- FR 9813586 A 19981029

Abstract (en)

[origin: FR2785379A1] The invention concerns a heat exchanger, in particular for motor vehicle, comprising a fan shroud (12) mounted on a heat exchanger (10). The shroud (12) comprises at least two blocks (34) to be engaged in the housings (38) of a first collector box (16) of the heat exchanger, and at least two elastic snap-on brackets (42) each provided with an opening (58) for allowing through a pin (60) projecting from a side surface of a second collector box (18) of the heat exchanger.

IPC 1-7

F28F 9/00; **F04D 29/60**; **F04D 29/58**

IPC 8 full level

F04D 29/58 (2006.01); **F04D 29/60** (2006.01); **F28F 9/00** (2006.01)

CPC (source: EP US)

F04D 29/582 (2013.01 - EP US); **F04D 29/601** (2013.01 - EP US); **F28F 9/002** (2013.01 - EP US); **F28F 2275/085** (2013.01 - EP US)

Citation (search report)

See references of WO 0026599A1

Designated contracting state (EPC)

DE ES GB IT

DOCDB simple family (publication)

FR 2785379 A1 20000505; **FR 2785379 B1 20010615**; BR 9907072 A 20001017; DE 69916015 D1 20040506; DE 69916015 T2 20040812; EP 1044349 A1 20001018; EP 1044349 B1 20040331; US 6315034 B1 20011113; WO 0026599 A1 20000511

DOCDB simple family (application)

FR 9813586 A 19981029; BR 9907072 A 19991027; DE 69916015 T 19991027; EP 99950851 A 19991027; FR 9902618 W 19991027; US 58261200 A 20001024