

Title (en)

PLANAR HEAT EXCHANGER, IN PARTICULAR FOR MOTOR VEHICLE, AND METHOD FOR MAKING SAME

Title (de)

FLACHER WÄRMETAUSCHER, INSBESONDERE FÜR EIN KRAFTFAHRZEUG UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

ECHANGEUR DE PLAN, EN PARTICULIER POUR VEHICULE AUTOMOBILE, ET PROCEDE POUR SA FABRICATION

Publication

**EP 1527309 A2 20050504 (FR)**

Application

**EP 03756510 A 20030728**

Priority

- FR 0302373 W 20030728
- FR 0210095 A 20020808

Abstract (en)

[origin: FR2843448A1] The heat exchanger comprises parallel tubes (10) located in a plane. Cooling fins are connected to the tubes and directed in the plane of the tubes. The tubes discharge into manifolds (4,6) having a thickness equal to that of the tubes and formed from a rolled metal sheets. An Independent claim is included for a method of manufacturing the heat exchanger.

IPC 1-7

**F28D 1/053**

IPC 8 full level

**F28D 1/02** (2006.01); **F28D 1/053** (2006.01); **F28F 1/02** (2006.01); **F28F 1/16** (2006.01); **F28F 9/02** (2006.01); **F28F 9/18** (2006.01)

CPC (source: EP)

**F28D 1/0246** (2013.01); **F28D 1/05375** (2013.01); **F28F 1/022** (2013.01); **F28F 1/16** (2013.01); **F28F 9/02** (2013.01); **F28F 9/182** (2013.01); **F28D 2021/0092** (2013.01)

Citation (search report)

See references of WO 2004017005A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**FR 2843448 A1 20040213**; **FR 2843448 B1 20050429**; AU 2003285349 A1 20040303; AU 2003285349 A8 20040303; EP 1527309 A2 20050504; WO 2004017005 A2 20040226; WO 2004017005 A3 20040401

DOCDB simple family (application)

**FR 0210095 A 20020808**; AU 2003285349 A 20030728; EP 03756510 A 20030728; FR 0302373 W 20030728