

Title (en)  
HEAT EXCHANGER

Title (de)  
WÄRMEÜBERTRÄGER

Title (fr)  
ECHANGEUR THERMIQUE

Publication  
**EP 1530703 B1 20071212 (DE)**

Application  
**EP 03747885 A 20030807**

Priority  
• DE 10237648 A 20020813  
• EP 0308778 W 20030807

Abstract (en)  
[origin: DE10237648A1] At one end (8) the several flat tubes (2) in the heat transmitter (1) are fed with fluid (F) via a manifold (6). The tubes fit positively into the manifold, each having a recess in the outside contour (10) of the tube which matches that of the manifold. The tube (1) end (9) has several openings (13) and the tube end contour (10) can be open, the tube fitted with outside stays and one tube at least has a center stay. The inside contour (12) of the tube (8) has an opening (14) and this end can be materially joined to the manifold. Preferred use is vehicle air conditioning.

IPC 8 full level  
**F28F 9/02** (2006.01); **F28D 1/053** (2006.01); **F28F 9/18** (2006.01)

CPC (source: EP US)  
**F28D 1/05383** (2013.01 - EP US); **F28F 9/0221** (2013.01 - EP US); **F28F 9/182** (2013.01 - EP US)

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)  
**US 2005236149 A1 20051027**; AT E380994 T1 20071215; AU 2003266971 A1 20040329; DE 10237648 A1 20040226;  
DE 50308809 D1 20080124; EP 1530703 A1 20050518; EP 1530703 B1 20071212; WO 2004023056 A1 20040318

DOCDB simple family (application)  
**US 52440805 A 20050214**; AT 03747885 T 20030807; AU 2003266971 A 20030807; DE 10237648 A 20020813; DE 50308809 T 20030807;  
EP 0308778 W 20030807; EP 03747885 A 20030807