

Title (en)
Flat tube heat exchanger

Title (de)
Flachrohrwärmetauscher

Title (fr)
Echangeur de chaleur à tubes plats

Publication
EP 0964219 A1 19991215 (FR)

Application
EP 99401440 A 19990611

Priority
FR 9807453 A 19980612

Abstract (en)
The heat exchanger consists of a housing (2) containing a series of parallel flat tubes (3) of a heat conducting material for a fluid (F1) flowing in one direction, while the spaces (18) between the tubes are used to carry another fluid (F2) flowing in a second direction. Both the flat tubes and the spaces between them are divided into channels (19,21) by corrugated inserts (17,22), also of a heat conducting material.

IPC 1-7
F28D 9/00

IPC 8 full level
F28D 9/00 (2006.01)

CPC (source: EP US)
F28D 9/0006 (2013.01 - EP US); **F28D 9/0068** (2013.01 - EP US); **F28D 9/0081** (2013.01 - EP US); **F28F 2250/108** (2013.01 - EP US)

Citation (applicant)

- US 4276927 A 19810707 - FOUST HARRY D
- CH 382780 A 19641015 - RAMEN TORSTEN [SE]
- FR 882208 A 19611216

Citation (search report)

- [PX] EP 0908691 A1 19990414 - SOC ET ET DE CONST AERO NAVALE [FR]
- [XY] US 4276927 A 19810707 - FOUST HARRY D
- [Y] DE 1111221 B 19610720 - W J FRASER & CO LTD
- [Y] FR 2080838 A1 19711126 - SNECMA
- [X] FR 882208 A 19430521
- [A] CH 382780 A 19641015 - RAMEN TORSTEN [SE]
- [A] FR 1064137 A 19540511 - TECH STUDIEN AG

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Designated contracting state (EPC)
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DOCDB simple family (application)
EP 99401440 A 19990611; FR 9807453 A 19980612; IL 13043899 A 19990613; US 2237001 A 20011220; US 32979199 A 19990610