

Title (en)

A heat exchanger, in particular a radiator for a vehicle, provided with a strengthening structure

Title (de)

Wärmetauscher, insbesondere Radiator für ein Kraftfahrzeug, mit Versteifungselement

Title (fr)

Echangeur de chaleur, en particulier radiateur pour véhicule, muni d'une structure de renforcement

Publication

**EP 0777097 A1 19970604 (EN)**

Application

**EP 96117328 A 19961029**

Priority

IT TO950877 A 19951102

Abstract (en)

A heat exchanger, in particular a radiator for a vehicle, including a plurality of parallel tubes fixed to a plurality of fins forming a parallelepipedal stack (12). The heat exchanger includes a strengthening structure including at least one connector element (24) fixed to a minor face (16) of the stack of fins and engaging a manifold assembly (18) situated at one end of the stack of fins (12). <IMAGE>

IPC 1-7

**F28F 9/00**

IPC 8 full level

**F28F 9/00** (2006.01)

CPC (source: EP)

**F28F 9/001** (2013.01)

Citation (search report)

- [PX] EP 0708303 A1 19960424 - VALEO THERMIQUE MOTEUR SA [FR]
- [X] EP 0567401 A1 19931027 - VALEO THERMIQUE MOTEUR SA [FR]
- [X] FR 2560368 A1 19850830 - VALEO [FR], et al
- [A] FR 2336653 A1 19770722 - SUEDDEUTSCHE KUEHLER BEHR [DE]
- [A] FR 2254771 A1 19750711 - CHAUSSON USINES SA [FR]
- [A] GB 2118709 A 19831102 - SUEDDEUTSCHE KUEHLER BEHR
- [A] FR 2472734 A1 19810703 - SUEDDEUTSCHE KUEHLER BEHR [DE]

Cited by

DE19824659A1; US7077192B2

Designated contracting state (EPC)

DE ES FR GB SE

DOCDB simple family (publication)

**EP 0777097 A1 19970604; EP 0777097 B1 20021204**; DE 69625162 D1 20030116; DE 69625162 T2 20030828; ES 2185734 T3 20030501;  
IT 1281005 B1 19980211; IT TO950877 A0 19951102; IT TO950877 A1 19970502

DOCDB simple family (application)

**EP 96117328 A 19961029**; DE 69625162 T 19961029; ES 96117328 T 19961029; IT TO950877 A 19951102