

Title (en)
HEAT EXCHANGER

Publication
EP 0044734 A3 19820721 (EN)

Application
EP 81303307 A 19810720

Priority
GB 8024041 A 19800723

Abstract (en)
[origin: EP0044734A2] A heat exchanger has a number of parallel tubes 14 enclosed within a shell 10 and having an inlet 12 and an outlet 13 for passing fluid through the tubes. Fin elements 20 extend across the tubes to form secondary heat exchange surfaces and another fluid is fed between the tubes to pass over the elements. The elements 20 have openings 25 between the tubes 14 and the openings are flanked by tags 26. The tubes 14 are spaced apart such that the available cross-section for the other fluid is constant. The tubes 14 are in rows R transverse to the flow and the spacing between tubes in the rows R is greater than between tubes in adjacent rows R.

IPC 1-7
F28D 7/00; **F28F 1/32**; **F28F 9/22**

IPC 8 full level
F28F 1/32 (2006.01); **F28F 9/22** (2006.01)

CPC (source: EP)
F28F 1/325 (2013.01); **F28F 9/22** (2013.01)

Citation (search report)

- [YD] GB 1544927 A 19790425 - BORG WARNER
- [Y] FR 2346660 A1 19771028 - VOLKSWAGENWERK AG [DE]
- [A] GB 1313973 A 19730418 - HUTOGEPGYAR
- [A] DE 2306562 A1 19740815 - VOLKSWAGENWERK AG
- [A] DE 2530064 A1 19770127 - VOLKSWAGENWERK AG
- [AD] GB 818589 A 19590819 - CHAUSSON USINES SA
- [AD] GB 717613 A 19541027 - SERCK RADIATORS LTD

Cited by
CN101957150A; NL1012029C2; FR2542860A1; FR2499232A1; CN112313467A; DE10333463A1; DE10333463B4; DE10333463C5; US11262139B2; WO2020015777A1; WO0068629A1

Designated contracting state (EPC)
DE FR GB IT NL SE

DOCDB simple family (publication)
EP 0044734 A2 19820127; **EP 0044734 A3 19820721**; **EP 0044734 B1 19850220**; DE 3169039 D1 19850328

DOCDB simple family (application)
EP 81303307 A 19810720; DE 3169039 T 19810720