

Title (en)
FLAT TUBE CONDENSER, MANUFACTURING METHOD AND USES

Publication
EP 0374896 A3 19901024 (DE)

Application
EP 89123580 A 19891220

Priority
• DE 3843306 A 19881222
• DE 3918312 A 19890605

Abstract (en)
[origin: EP0374896A2] The invention relates to a flat tubular condenser for a vehicle air-conditioning unit, in which the coolant is led through flat tubes (2) subdivided into a plurality of ducts, and in cross-flow thereto ambient air is led along ribbed segments folded in a zig-zag or wavy fashion, individual flat tubes being connected in parallel in groups into the same coolant circuit through the condenser by manifolds (10) arranged at their two ends. According to the invention it is provided that the manifold sheath (62) is composed of two arcuate flat parts (66, 68) of Al or an Al alloy, which are mutually overlapping and are soldered to one another in the two overlap regions (64), that only one (the first) flat part (66) is provided with plug-in slots for receiving one flat tube (2) in each case, and that the first flat part is coated with solder for the purpose of soldering to the flat tubes and the second flat part. Furthermore, the invention relates to a method of producing the manifold sheath of a special embodiment of such a flat tube condenser, and applications. <IMAGE>

IPC 1-7
F25B 39/04; F28F 9/02

IPC 8 full level
F25B 39/04 (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP)
F25B 39/04 (2013.01); **F28F 9/0212** (2013.01); **F28F 9/0224** (2013.01); **F28D 2021/0084** (2013.01); **F28F 2275/122** (2013.01)

Citation (search report)
• [Y] DE 2238493 A1 19730215 - CHAUSSON USINES SA
• [YD] EP 0255313 A2 19880203 - SHOWA ALUMINIUM CO LTD [JP]
• [A] EP 0219974 B1 19961106 - MODINE MFG CO [US]
• [AD] DE 3744643 A1 19890713 - SUEDEDEUTSCHE KUEHLER BEHR [DE]

Cited by
EP0958953A1; EP0559983A1; EP1701126A1; FR2712968A1; EP2058620A4; FR2755220A1; FR2860063A1; EP1596147A1; EP1043552A1; EP0519451A1; FR2665757A1; EP0854327A1; FR2681421A1; ES2065824A2; DE4305060A1; DE4305060C2; US5297624A; US5251692A; FR2660425A1; FR2968224A1; FR2789169A1; EP0683373A1; DE9319559U1; JP2017172837A; US6250103B1; FR2766265A1; EP0676607A1; US5579833A; EP1712868A3; WO0047939A1; WO2012076495A1; US9546828B2; JP2015108463A

Designated contracting state (EPC)
DE ES GB

DOCDB simple family (publication)
EP 0374896 A2 19900627; EP 0374896 A3 19901024; DE 3918312 A1 19901206

DOCDB simple family (application)
EP 89123580 A 19891220; DE 3918312 A 19890605