

Title (en)
STACKED-TUBE HEAT EXCHANGER

Title (de)
STAPELROHR-WÄRMETAUSCHER

Title (fr)
ECHANGEUR THERMIQUE A TUBES EMPILES

Publication
EP 1869389 A4 20100714 (EN)

Application
EP 06721699 A 20060321

Priority
• CA 2006000431 W 20060321
• CA 2503424 A 20050401

Abstract (en)
[origin: WO2006102736A1] A headerless heat exchanger has a core comprised of a stack of flat tubes of rectangular cross section through which a first heat exchange fluid passes. The tubes are expanded in height at their end portions to provide spaces between adjacent plate pairs for passage of a second heat exchange fluid between the tubes. The sides of the tubes are coplanar, at least in the end portions of the tubes, to provide flat surfaces along which the core is sealed to side plates of the heat exchanger, for example by brazing or welding. The side plates may be separately formed or may comprise part of a continuous housing. The tubes are preferably formed from plate pairs having nesting side walls.

IPC 8 full level
B23P 15/26 (2006.01); **F28D 7/16** (2006.01); **F28F 1/02** (2006.01); **F28F 9/04** (2006.01); **F28F 9/22** (2006.01)

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Citation (search report)
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• [Y] US 2003019616 A1 20030130 - HAYASHI TAKAYUKI [JP], et al
• [X] WO 03081159 A1 20031002 - VALEO THERMIQUE MOTEUR SA [FR], et al
• [A] US 2003196785 A1 20031023 - KNECHT WOLFGANG [DE], et al
• See references of WO 2006102736A1

Designated contracting state (EPC)
DE IT

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