

Title (en)

INTEGRATED MULTI-CIRCUIT MICROCHANNEL HEAT EXCHANGER

Title (de)

INTEGRIERTER MIKROKANALWÄRMETAUSCHER MIT MEHREREN SCHALTKREISEN

Title (fr)

ECHANGEUR DE CHALEUR À MICRO-CANAUX À PLUSIEURS CIRCUITS INTÉGRÉS

Publication

**EP 2313733 A4 20140226 (EN)**

Application

**EP 09798567 A 20090707**

Priority

- US 2009049736 W 20090707
- US 8078008 P 20080715

Abstract (en)

[origin: WO2010008960A2] A microchannel heat exchanger has at least two manifolds, with the at least two manifolds communicating with a respective one of a first and second plurality of heat exchange tube banks. The first and second plurality of heat exchange tube banks are intertwined within a single microchannel heat exchanger core.

IPC 8 full level

**F28F 9/013** (2006.01); **F28F 1/32** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP US)

**F28D 1/0426** (2013.01 - EP US); **F28D 1/05391** (2013.01 - EP US); **F28F 9/0275** (2013.01 - EP US); **F28F 2009/0297** (2013.01 - EP US); **F28F 2260/02** (2013.01 - EP US)

Citation (search report)

- [X] US 2007267186 A1 20071122 - HECKT ROMAN [DE], et al
- [X] WO 2007122685 A1 20071101 - MITSUBISHI ELECTRIC CORP [JP], et al & EP 2009380 A1 20081231 - MITSUBISHI ELECTRIC CORP [JP]
- [X] JP H05272882 A 19931022
- [X] US 2179702 A 19391114 - SAUNDERS LAURENCE P
- [X] JP 2002243374 A 20020828 - MITSUBISHI HEAVY IND LTD

Citation (examination)

- US 6386277 B1 20020514 - WATTELET JONATHAN P [US], et al
- US 3047274 A 19620731 - WILSON WARREN M
- See also references of WO 2010008960A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

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DOCDB simple family (application)

**US 2009049736 W 20090707**; CN 200980127426 A 20090707; EP 09798567 A 20090707; US 99086209 A 20090707