

Title (en)

HEAT EXCHANGER WITH FLUID EXPANSION IN HEADER

Title (de)

WÄRMETAUSCHER MIT FLUIDEXPANSION IN DER ENDKAMMER

Title (fr)

ÉCHANGEUR DE CHALEUR À DÉTENTE DU FLUIDE DANS LE COLLECTEUR

Publication

**EP 1844288 A4 20100721 (EN)**

Application

**EP 05855856 A 20051228**

Priority

- US 2005047363 W 20051228
- US 64926905 P 20050202

Abstract (en)

[origin: WO2006083449A2] A heat exchanger includes a plurality of flat, multi-channel heat exchange tubes extending between spaced headers. Each heat exchange tube has a plurality of flow channels extending longitudinally in parallel relationship from its inlet end to its outlet end. A plurality of connectors are positioned between the inlet header and the heat transfer tubes such that the connector inlet ends are in fluid flow communication with the header through a relatively small cross-sectional flow area openings and the connector outlet ends are adapted to receive the inlet end of a heat exchanger tube. The connector defines a fluid flow pathway from the relatively small cross-sectional flow area opening in the inlet end of the connector to an outlet opening in the outlet end of the connector that opens to the flow channels of the heat exchange tube received in the outlet end of the connector.

IPC 8 full level

**F28F 9/02** (2006.01)

CPC (source: EP KR US)

**F25B 39/028** (2013.01 - EP US); **F25B 41/385** (2021.01 - EP KR US); **F25B 41/39** (2021.01 - EP KR US); **F28F 9/00** (2013.01 - KR);  
**F28F 9/02** (2013.01 - KR); **F28F 9/0224** (2013.01 - EP US); **F28F 9/028** (2013.01 - EP US); **F28F 9/0282** (2013.01 - EP US);  
**F28F 9/185** (2013.01 - EP US)

Citation (search report)

- [X] DE 7427716 U
- [A] GB 2168135 A 19860611 - WESTINGHOUSE ELECTRIC CORP
- [A] DE 4439801 A1 19960509 - GEA POWER COOLING SYSTEMS INC [US]
- See references of WO 2006083449A2

Cited by

US11713931B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2006083449 A2 20060810; WO 2006083449 A3 20070322;** AT E529717 T1 20111115; AU 2005326654 A1 20060810;  
AU 2005326654 B2 20100812; BR PI0519933 A2 20090818; CA 2596573 A1 20060810; CN 101120225 A 20080206;  
CN 101120225 B 20101215; EP 1844288 A2 20071017; EP 1844288 A4 20100721; EP 1844288 B1 20111019; ES 2373964 T3 20120210;  
HK 1118331 A1 20090206; JP 2008528943 A 20080731; KR 20070091201 A 20070907; MX 2007009245 A 20070823;  
US 2008092587 A1 20080424

DOCDB simple family (application)

**US 2005047363 W 20051228;** AT 05855856 T 20051228; AU 2005326654 A 20051228; BR PI0519933 A 20051228; CA 2596573 A 20051228;  
CN 200580047530 A 20051228; EP 05855856 A 20051228; ES 05855856 T 20051228; HK 08108262 A 20080725; JP 2007554092 A 20051228;  
KR 20077016474 A 20070719; MX 2007009245 A 20051228; US 79388005 A 20051228