

Title (en)

HEADER FOR USE IN HEAT EXCHANGERS, HEAT EXCHANGER AND METHOD FOR MANUFACTURING THE SAME

Title (de)

ENDKAMMER ZUR VERWENDUNG IN WÄRMETAUSCHERN, WÄRMETAUSCHER UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

COLLECTEUR POUR ECHANGEURS THERMIQUES, ECHANGEUR THERMIQUE ET SON PROCEDE DE FABRICATION

Publication

EP 1485665 A4 20080625 (EN)

Application

EP 02708722 A 20020328

Priority

- JP 0203154 W 20020328
- JP 2001095242 A 20010329
- US 30269101 P 20010705

Abstract (en)

[origin: WO02079708A2] A header for use in heat exchanger includes a base wall (20) with a plurality of tube insertion apertures (23), an opposite wall (30) opposed to the base wall (20), a pair of side walls (40a and 40b) disposed at both lateral sides of the base wall (20) and the opposite wall (30) and connecting the lateral sides and are infacing walls (50a and 50b) disposed between the base wall (20) and the opposite wall (30) along a longitudinal direction thereof and connecting the base wall (20) with the opposite wall (30). The side walls (40a and 40b) are integrally formed at both lateral sides of the base wall (20) by bending processing. A first half (30a) of the opposite wall (30) is integrally formed at a side of one of the side walls (40a) by bending processing, and a second half (30b) of the opposite wall (30) is integrally formed at a side of the other of the side walls (40b) by bending processing. Reinforcing walls (50a and 50b) are integrally formed at sides of the first half (30a) and the second half (30b) of the opposite wall (30) by bending processing. With this header for use in heat exchanger, high pressure resistance can be obtained, and the number of parts and the manufacturing cost can be decreased.

IPC 1-7

F28F 1/00

IPC 8 full level

F28D 1/053 (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP KR US)

F28D 1/05383 (2013.01 - EP US); **F28F 9/02** (2013.01 - KR); **F28F 9/0214** (2013.01 - EP US); **F28F 2225/08** (2013.01 - EP US)

Citation (search report)

- [X] EP 1065453 A2 20010103 - DENSO CORP [JP]
- [X] US 5174373 A 19921229 - SHINMURA TOSHIHARU [JP]

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 02079708 A2 20021010; WO 02079708 A3 20041007; CN 1599859 A 20050323; CZ 20032624 A3 20040818; EP 1485665 A2 20041215; EP 1485665 A4 20080625; KR 20040005902 A 20040116; TW 534974 B 20030601; US 2004182558 A1 20040923

DOCDB simple family (application)

JP 0203154 W 20020328; CN 02807024 A 20020328; CZ 20032624 A 20020328; EP 02708722 A 20020328; KR 20037012649 A 20030927; TW 91106360 A 20020329; US 47248604 A 20040218