

Title (en)

Connection device between a tube end plate and a header box of a heat exchanger, and method therefor.

Title (de)

Verbindungs Vorrichtung zwischen einer Rohrplatte und einem Vorratsbehälter eines Wärmetauschers und Verfahren zu deren Ausführung.

Title (fr)

Dispositif de liaison entre une plaque collectrice et une boîte à eau d'un échangeur de chaleur et procédé pour sa mise en oeuvre.

Publication

EP 0133401 A1 19850220 (FR)

Application

EP 84401573 A 19840726

Priority

FR 8312857 A 19830804

Abstract (en)

[origin: ES8603065A1] The tubes (2) of the heat exchanger are mounted in a header plate (1) which is attached to a header tank (5). The edge of the header plate is pressed to a U-section which receives a sealing strip (4). The U-section is pressed over the edge (5a) of the header tank wall and is secured by hooks (7). - The hooks are made from a U-section with notches (12) cut in the upper flange to form a series of tabs (9). The U-section is pressed sideways of the edge (1a) of the header plate, and lugs (11) projecting from its lower flange are bent upwards by a tool (20) to make a permanent joint.

[origin: ES8603065A1] The tubes (2) of the heat exchanger are mounted in a header plate (1) which is attached to a header tank (5). The edge of the header plate is pressed to a U-section which receives a sealing strip (4). The U-section is pressed over the edge (5a) of the header tank wall and is secured by hooks (7). - The hooks are made from a U-section with notches (12) cut in the upper flange to form a series of tabs (9). The U-section is pressed sideways of the edge (1a) of the header plate, and lugs (11) projecting from its lower flange are bent upwards by a tool (20) to make a permanent joint.

Abstract (fr)

Dispositif de liaison entre une plaque collectrice 1 et une boîte à eau 5 d'un échangeur de chaleur comportant, au moins, une agrafe 7 prenant appui en dessous du fond 1a d'une gorge périphérique de la plaque collectrice 1, et sur le dessus d'une portée d'appui périphérique 6 de la boîte à eau au moyen de pattes séparées par des encoches, dans lequel l'agrafe est préformée pour délimiter des pattes supérieures et inférieures 11 distantes d'une mesure pour laquelle un joint d'étanchéité 4 interposé entre la plaque collectrice et la boîte à eau est déformé d'une manière régulière.

IPC 1-7

F28F 9/02

IPC 8 full level

F28F 9/02 (2006.01)

CPC (source: EP US)

F28F 9/0226 (2013.01 - EP US); **F28F 2275/08** (2013.01 - EP US); **F28F 2275/122** (2013.01 - EP US); **Y10T 24/44983** (2015.01 - EP US); **Y10T 24/49** (2015.01 - EP US); **Y10T 29/49373** (2015.01 - EP US); **Y10T 29/49863** (2015.01 - EP US); **Y10T 29/49915** (2015.01 - EP US); **Y10T 29/49922** (2015.01 - EP US); **Y10T 29/49945** (2015.01 - EP US); **Y10T 29/49954** (2015.01 - EP US); **Y10T 29/53709** (2015.01 - EP US); **Y10T 29/53996** (2015.01 - EP US)

Citation (search report)

- [X] FR 2475712 A1 19810814 - BORG WARNER [US]
- [A] GB 2108648 A 19830518 - NIPPON DENSO CO
- [A] FR 2443602 A1 19800704 - SUEDDEUTSCHE KUEHLER BEHR [DE]
- [A] GB 2070223 A 19810903 - COVRAD LTD
- [A] US 2539701 A 19510130 - STANISLAUS PRZYBOROWSKI

Cited by

CN108534580A; GB2344643A; GB2344643B; GB2328990A; GB2328990B; US6223812B1

Designated contracting state (EPC)

BE DE GB IT

DOCDB simple family (publication)

EP 0133401 A1 19850220; EP 0133401 B1 19870930; BR 8403910 A 19850709; DE 133401 T1 19850829; DE 3466591 D1 19871105; ES 534763 A0 19851201; ES 8603065 A1 19851201; FR 2550328 A1 19850208; FR 2550328 B1 19890113; JP S6057197 A 19850402; US 4707905 A 19871124

DOCDB simple family (application)

EP 84401573 A 19840726; BR 8403910 A 19840803; DE 3466591 T 19840726; DE 84401573 T 19840726; ES 534763 A 19840731; FR 8312857 A 19830804; JP 16300284 A 19840803; US 91588686 A 19861002