

Title (en)

Flat tube with median spacer for heat exchanger

Title (de)

Flachrohr mit einem in der Mitte befindlichen Distanzhalter für Wärmetauscher

Title (fr)

Tube plat à entretoise médiane pour échangeur de chaleur

Publication

**EP 0811820 B1 20001206 (FR)**

Application

**EP 97108742 A 19970602**

Priority

FR 9606932 A 19960605

Abstract (en)

[origin: EP0811820A1] The tube (1) is formed by folding longitudinally a sheet steel strip whose face forming the tube external surface is coated with a brazing material (3). The tube has first (7,8) and second (11,12) opposite main walls connected by two complementary walls (9,10). The first main wall is formed from two zones of the median region of the strip width either side a fold (4) turned towards the tube interior. The second main wall is formed from two intermediate regions and two end regions (13,14) of the strip. The fold has a transverse U section whose side by side branches (5,6) extend perpendicularly to the main walls and form a reinforcing strut. The end regions support the bottom of the U. Each end region is folded into a U relative to the adjacent intermediate region and is supported by the bottom (15,16) of its U on the fold.

IPC 1-7

**F28D 1/03**

IPC 8 full level

**F28D 1/03** (2006.01)

CPC (source: EP KR US)

**B21D 5/02** (2013.01 - KR); **B21D 53/06** (2013.01 - KR); **F28D 1/0391** (2013.01 - EP US); **F28F 21/08** (2013.01 - EP US);  
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Cited by

DE102008007597A1; FR2780153A1; FR2986313A1; FR2810729A1; DE102006054036A1; FR2786559A1; DE102008007601A1; US9975168B2;  
DE102008007610A1; DE102008007612A1; DE102008007600A1; WO2013113700A1; DE102007039292A1; EP2028431A2; DE102008007587A1;  
DE102008007611A1; US6494254B2

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**EP 0811820 A1 19971210; EP 0811820 B1 20001206;** AR 007390 A1 19991027; BR 9703474 A 19980901; CN 1176376 A 19980318;  
DE 69703638 D1 20010111; DE 69703638 T2 20010510; FR 2749648 A1 19971212; FR 2749648 B1 19980904; KR 980000694 A 19980330;  
MX 9704142 A 19980628; US 5765634 A 19980616

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FR 9606932 A 19960605; KR 19970023030 A 19970604; MX 9704142 A 19970604; US 86981497 A 19970605