

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 A1 19971210 (FR)

Application

EP 97108742 A 19970602

Priority

FR 9606932 A 19960605

Abstract (en)

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.

Abstract (fr)

L'entretoise de renforcement est formée par un repli (4), pénétrant à l'intérieur du tube, de la bande de tôle servant à réaliser celui-ci. Les régions (7, 8) de la bande adjacentes au repli forment une première paroi principale du tube, et les deux régions marginales (13, 14), pliées à 180° vers l'intérieur du tube par rapport aux régions adjacentes (11, 12), qui constituent la seconde paroi principale du tube, sont liées au repli de façon étanche par brasage. Les dimensions extérieures du tube en section transversale, et la qualité du brasage, ne sont pas tributaires de la largeur exacte de la bande. Application au radiateur de refroidissement du moteur d'entraînement d'un véhicule automobile. <IMAGE>

IPC 1-7

F28D 1/03

IPC 8 full level

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Citation (search report)

- [A] EP 0302232 A1 19890208 - SUEDEDEUTSCHE KUEHLER BEHR [DE]
- [A] FR 2261819 A1 19750919 - GRAENGES ESSEM AB [SE]

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