

Title (en)

Heat exchanger tube with counter flow channels

Title (de)

Wärmetauscherrohr mit Gegenstromkanälen

Title (fr)

Tube d'échangeur de chaleur à canaux de circulation à contre-courant

Publication

EP 0764823 B1 20000816 (FR)

Application

EP 96114637 A 19960912

Priority

FR 9511046 A 19950920

Abstract (en)

[origin: EP0764823A1] The tube (10) is made from sheet metal cut out and rolled to form two parallel channels (12, 14) which allow a fluid to circulate in two opposite directions. The channels are made by turning in the two edges of the sheet metal to make a partition (26, 28) between them. They are connected at one end (30) to a fluid chamber divided into two compartments, and at the other end (32) they are closed separately by folds (36) in the metal sheet. The fluid flow from one channel to the other has two or more apertures (38, 40, 42) in the partition which are rectangular in shape. The tube has one main flat face (16), two semi-circular edges (18, 20), and a second flat face formed by the two in-turned edges (22, 24) of the metal sheet. Its upper edge has two pairs of opposite tabs (34) for attaching it to slots in the fluid chamber wall.

IPC 1-7

F28D 1/03

IPC 8 full level

F28F 1/02 (2006.01); **F28D 1/03** (2006.01); **F28F 9/18** (2006.01)

CPC (source: EP KR US)

F28D 1/035 (2013.01 - EP US); **F28D 1/0391** (2013.01 - EP KR US); **F28F 1/022** (2013.01 - KR); **F28F 9/182** (2013.01 - EP US); **F28F 9/182** (2013.01 - KR)

Cited by

DE10201511A1; FR2771480A1; FR3008173A1; FR2864610A1

Designated contracting state (EPC)

DE ES GB IT

DOCDB simple family (publication)

EP 0764823 A1 19970326; **EP 0764823 B1 20000816**; DE 69609790 D1 20000921; FR 2738905 A1 19970321; FR 2738905 B1 19971205; JP H09170890 A 19970630; KR 970016518 A 19970428; US 5762133 A 19980609

DOCDB simple family (application)

EP 96114637 A 19960912; DE 69609790 T 19960912; FR 9511046 A 19950920; JP 24965196 A 19960920; KR 19960040792 A 19960919; US 71657496 A 19960919