Title (en)

DEVICE FOR THE STABILIZATION OF THE LOOPS OF A HEAT EXCHANGER ELEMENT CONSISTING OF TUBES IN WHICH A FLUID CIRCULATES

Publication

EP 0276791 B1 19910123 (FR)

Application

EP 88101020 A 19880125

Priority

FR 8701007 A 19870128

Abstract (en)

[origin: US4825943A] A device for fixing loops in a component (1) of a heat exchanger constituted by tubes (10) in which a fluid flows, the loops being situated in the plane of the heat exchanger and being formed by bends and by mutually parallel vertical lengths (11), at least one tube forms an additional loop (12, 14) leaving the plane of the heat exchanger component and surrounding the vertical lengths (11), the device being characterized in that a notched flat (2) is installed level with the additional loop, said flat being provided with semicircular openings each of which receives a vertical length.

IPC 1-7

F22B 37/20; F28F 9/00

IPC 8 full level

F22B 37/20 (2006.01); F28D 7/06 (2006.01); F28D 7/08 (2006.01); F28F 9/00 (2006.01); F28F 9/013 (2006.01)

CPC (source: EP KR US)

F22B 37/20 (2013.01 - KR); F22B 37/202 (2013.01 - EP US); F28D 7/06 (2013.01 - EP US); F28D 7/08 (2013.01 - EP US); F28F 9/00 (2013.01 - KR); F28F 9/013 (2013.01 - EP US); Y10S 165/416 (2013.01 - EP US)

Cited by

EP3056846A1; US11150037B2; WO2013158399A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI SE

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