

Title (en)
HEAT EXCHANGER STRUCTURE

Title (de)
WÄRMETAUSCHERSTRUKTUR

Title (fr)
STRUCTURE D'UN ECHANGEUR DE CHALEUR

Publication
EP 2008048 B1 20130306 (EN)

Application
EP 07736701 A 20070316

Priority
• IT 2007000196 W 20070316
• IT MN20060020 A 20060317

Abstract (en)
[origin: WO2007108033A2] The invention relates to a heat exchanger structure that is substantially composed of a frame (2) inside which is arranged, parallel with each other, a plurality of radiating components (3) in which each radiating component (3) is composed of a pair of basic components (3a and 3b) coupled with each other symmetrically. The frame (2) is provided with at least one first cold liquid inlet duct (5) positioned below the base of the frame itself and at least one second hot liquid outlet duct (6) positioned above the top of the structure. In particular, each basic component (3a or 3b) is composed of a plate (30) with, on its inner side, a plurality of primary wings (31) spaced equally from each other and positioned orthogonally to the plate itself and on the outer side a series of secondary wings (32) which are also positioned orthogonally to the plate (30) and spaced equally from each other but closer to each other with respect to the primary wings (31). Besides, the plate (30) is equipped with two projections (30a and 30b) forming an arch, opposite each other and designed to couple with the corresponding projection present in the other basic component forming a channel (350).

IPC 8 full level
F28D 9/00 (2006.01); **F28D 1/03** (2006.01); **F28F 3/04** (2006.01)

CPC (source: EP US)
F28D 9/0037 (2013.01 - EP US); **F28F 3/048** (2013.01 - EP US); **F28F 9/00** (2013.01 - EP US); **F24D 3/087** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
HR

DOCDB simple family (publication)
WO 2007108033 A2 20070927; WO 2007108033 A3 20071122; CA 2658682 A1 20070927; DK 2008048 T3 20130617;
EP 2008048 A2 20081231; EP 2008048 B1 20130306; ES 2416341 T3 20130731; IT MN20060020 A1 20070918; PL 2008048 T3 20130930;
US 2009178791 A1 20090716

DOCDB simple family (application)
IT 2007000196 W 20070316; CA 2658682 A 20070316; DK 07736701 T 20070316; EP 07736701 A 20070316; ES 07736701 T 20070316;
IT MN20060020 A 20060317; PL 07736701 T 20070316; US 22676107 A 20070316