

Title (en)

Heat exchanger, more particularly for cooling an air flow with high temperature

Title (de)

Wärmetauscher, insbesondere für die Kühlung eines Luftstromes mit hoher Temperatur

Title (fr)

Echangeur de chaleur utile notamment pour le refroidissement d'un flux d'air à haute température

Publication

**EP 0686823 B1 20010725 (FR)**

Application

**EP 95108599 A 19950606**

Priority

FR 9407026 A 19940608

Abstract (en)

[origin: EP0686823A1] The heat exchanger consists of a series of tubes (20) between two manifold housings, each made from a series of shells (24) assembled in pairs. Each shell has a closed side wall, connected at one end to a flat outer flange (32), and at the other to a flat inner flange (38) which lies parallel to the outer flange and has an axial aperture (40). The side wall of each shell also forms part of a lateral aperture (50) to receive one of the tubes, and the shells are joined together in pairs facing alternately in opposite directions. Each of the tubes has an elongated rectangular cross-section with two long walls and two short ones, and each shell aperture has a flanged edge of the same dimensions as a tube. The shells also have a system of tongues and apertures to ensure that they are correctly aligned on assembly, e.g. by brazing. <IMAGE>

IPC 1-7

**F28F 9/02**; **F28D 1/053**

IPC 8 full level

**F28D 1/053** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP US)

**F28D 1/05358** (2013.01 - EP US); **F28F 9/0221** (2013.01 - EP US); **F28F 2280/04** (2013.01 - EP US); **Y10T 29/49389** (2015.01 - EP US)

Cited by

FR2947045A1; FR2834336A1; WO2010149452A1; WO03056268A1

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**EP 0686823 A1 19951213**; **EP 0686823 B1 20010725**; DE 69521843 D1 20010830; DE 69521843 T2 20020404; FR 2721099 A1 19951215; FR 2721099 B1 19960719; US 5634519 A 19970603

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