

Title (en)  
Cross-flow heat exchanger

Title (de)  
Kreuzstromwärmetauscher

Title (fr)  
Echangeur de chaleur du type à croisement orthogonal de deux fluides

Publication  
**EP 0908691 B1 20030219 (FR)**

Application  
**EP 98401974 A 19980803**

Priority  
FR 9712712 A 19971010

Abstract (en)  
[origin: EP0908691A1] Space between the heat exchanger casing and a series of flat parallel tubes containing high temperature fluid is used to circulate lower temperature fluid. The heat exchanger has a first series of flow channels for a first high temperature fluid, made from thermally conducting material and a second series of flow channels for a second fluid at a lower temperature, also made from a thermally conducting material. These channels intercept perpendicularly so as to ensure heat transfer between the first and second fluids. Each channel is of oblong shape and is divided by insertion of a thermally conducting material fixed to the long internal channel faces on a number of internal channels. The first series of channels are formed from flat parallel tubes (7) juxtaposed in the direction perpendicular to the large axis of their transversal section at pre-set distances between two exterior lateral plates (8). These plates are parallel to the tubes in a casing (9) which is open other lateral faces and is maintained at the top and bottom by input and output collector plates (13, 14) of collector inputs (2) and outputs (3), in which the tubes (7) terminate. The channels of the second series are formed in the spaces between the exterior of the tubes (7) and the plates of the casing (9).

IPC 1-7  
**F28D 9/00**; **F28F 9/00**; **F28F 9/02**

IPC 8 full level  
**F28D 9/00** (2006.01); **F28F 9/00** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP)  
**F28D 9/0081** (2013.01); **F28F 9/001** (2013.01); **F28F 9/0241** (2013.01); **F28F 2250/102** (2013.01)

Cited by  
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