

Title (en)

Heat exchanger with several parallel exchange tubes.

Title (de)

Wärmetauscher aus mehreren parallel zueinander angeordneten Austauscherrohren.

Title (fr)

Echangeur de chaleur avec plusieurs tubes d'échange en parallèle.

Publication

EP 0633444 A3 19950426 (DE)

Application

EP 94110457 A 19940705

Priority

- DE 4322405 A 19930706
- DE 9310827 U 19930720

Abstract (en)

[origin: US5429185A] A heat exchanger has a plurality of parallel heat exchanger tubes with two plane sides and two narrow sides. The heat exchanger tube has a contour with a width and a height in a direction of flow of a first heat-exchanging medium such that the width is much greater than the height. Ribs are connected to the plane sides of the heat exchanger tubes. The ribs are made of a rib band folded to a meander-shape with bent portions. Adjacent ones of the ribs form a flow cross-section for a second heat-exchanging medium. The ribs have a plurality of openings wherein the size of the opening is at least equal in size to the size of the flow cross-section between adjacent ribs.

IPC 1-7

F28F 3/02; **F28D 1/03**

IPC 8 full level

F28F 1/02 (2006.01); **B21D 53/00** (2006.01); **F28D 1/03** (2006.01); **F28D 1/04** (2006.01); **F28D 1/053** (2006.01); **F28F 1/12** (2006.01); **F28F 1/30** (2006.01); **F28F 3/02** (2006.01)

CPC (source: EP KR US)

F28D 1/0535 (2013.01 - EP KR US); **F28F 1/128** (2013.01 - EP KR US); **F28F 2215/08** (2013.01 - KR)

Citation (search report)

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Designated contracting state (EPC)

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US 27127994 A 19940706; AT 94110457 T 19940705; AU 6601494 A 19940629; BR 9402643 A 19940705; CA 2127413 A 19940705; CN 94108286 A 19940705; DE 59405984 T 19940705; DE 9310827 U 19930720; EP 94110457 A 19940705; IL 11014894 A 19940628; IN 831DE1994 A 19940701; JP 18269994 A 19940701; KR 19940015979 A 19940705; RU 94023243 A 19940705; TW 83106325 A 19940712