

Title (en)
Cross-flow micro heat exchanger

Title (de)
Kreuzstrom-Mikrowärmeübertrager

Title (fr)
Micro-échangeur de chaleur à flux croisé

Publication
EP 2431700 A3 20140430 (DE)

Application
EP 11007158 A 20110903

Priority
DE 102010045905 A 20100917

Abstract (en)
[origin: EP2431700A2] The heat exchanger has a micro channel group (3) with micro channels (2) for flow of fluid to be tempered, and another micro channel group (5) with micro channels for flow of heat carrier fluid to temper the fluid to be tempered. Width and cross-section of each channel of the former group are increased in an upward direction of the latter group. Bars are arranged between the channels and have constant width, where the channels have constant distance to each other. The channels are formed as grooves in plates or films (1), where the films are joined together to form a film stack.

IPC 8 full level
F28D 9/00 (2006.01)

CPC (source: EP)
F28D 9/0037 (2013.01); **F28F 3/048** (2013.01); **F28F 2260/02** (2013.01)

Citation (search report)

- [YD] DE 3709278 C2 19890302
- [Y] DE 19844930 A1 19990930 - SAMSUNG ELECTRONICS CO LTD [KR]
- [A] US 2002066554 A1 20020606 - OH SAI KEE [KR], et al
- [A] EP 0930123 A2 19990721 - DBB FUEL CELL ENGINES GMBH [DE]

Cited by
CN113546590A; FR2995073A1; CN109000488A; US10197340B2; WO2014037656A3

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2431700 A2 20120321; EP 2431700 A3 20140430; EP 2431700 B1 20160323; DE 102010045905 B3 20120329

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EP 11007158 A 20110903; DE 102010045905 A 20100917