

Title (en)  
Heat Exchanger and Micro-Channel Tube Thereof

Title (de)  
Wärmetauscher und zugehöriges Mikrokanalrohr

Title (fr)  
Échangeur de chaleur et son tuyau à microcanaux

Publication  
**EP 2447660 A3 20150304 (EN)**

Application  
**EP 11187111 A 20111028**

Priority  
KR 20100106369 A 20101028

Abstract (en)  
[origin: EP2447660A2] A heat exchanger having a structure in which micro-channel tubes are respectively fitted into both sides of corresponding flat fins for heat exchange, thereby achieving enhancements in drainage and heat transfer performance. The heat exchanger includes a first header extending vertically and connected with an inflow tube and an outflow tube, a second header spaced apart from the first header by a desired distance and arranged parallel to the first header, and a plurality of flat micro-channel tubes arranged horizontally while being vertically spaced apart from one another by a desired clearance and arranged in a front row and a rear row between the first header and the second header. Micro-channels are formed in each of the micro-channel tubes.

IPC 8 full level  
**F28F 1/32** (2006.01); **F28D 1/053** (2006.01)

CPC (source: EP US)  
**F28D 1/05391** (2013.01 - EP US); **F28F 1/32** (2013.01 - EP US); **F28F 2215/12** (2013.01 - EP US)

Citation (search report)

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CN105241285A

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 2447660 A2 20120502; EP 2447660 A3 20150304**; CN 102563980 A 20120711; KR 20120044848 A 20120508; US 2012103582 A1 20120503

DOCDB simple family (application)  
**EP 11187111 A 20111028**; CN 201110341723 A 20111028; KR 20100106369 A 20101028; US 201113317736 A 20111027