

Title (en)
HEAT EXCHANGER

Title (de)
WÄRMETAUSCHER

Title (fr)
ÉCHANGEUR DE CHALEUR

Publication
EP 2878911 A4 20160601 (EN)

Application
EP 13806526 A 20130612

Priority
• JP 2012065505 W 20120618
• JP 2013066215 W 20130612

Abstract (en)
[origin: EP2878911A1] Provided is a heat exchanger capable of distributing a fluid evenly into a plurality of channels under various conditions of the flow rate of the fluid. The heat exchanger includes: a channel forming section (51) having a plurality of arrayed fluid channels; a distribution path forming section (53) having a distribution path (57) to which inlets (55) of the plurality of arrayed fluid channels communicate; and a cylindrical partition wall (59) provided in the distribution path forming section, for defining an introduction path (63) on an inner side of the cylindrical partition wall, the distribution path being positioned on an outer side of an outer periphery of the cylindrical partition wall. The cylindrical partition wall has a plurality of distribution holes (65). The following expression is satisfied: $L/d' \times (d/2)^2 > \sum A^2/S$, where S represents a channel sectional area of the introduction path, d represents a channel diameter of the introduction path, $\sum A$ represents a sum of areas (A) of the plurality of distribution holes, L represents a length of array of the plurality of distribution holes, and d' represents a diameter of each of the plurality of distribution holes.

IPC 8 full level
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CPC (source: EP US)
F28D 9/005 (2013.01 - EP US); **F28F 3/08** (2013.01 - US); **F28F 9/0273** (2013.01 - EP US); **F28F 3/046** (2013.01 - EP US)

Citation (search report)
• [I] WO 2010005676 A2 20100114 - CARRIER CORP [US], et al
• [I] US 2005132744 A1 20050623 - ROHRER CLAY A [US], et al
• [I] JP 2002062082 A 20020228 - DAIKIN IND LTD
• [A] JP H0486492 A 19920319 - HISAKA WORKS LTD
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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

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DOCDB simple family (application)
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