

Title (en)

HEAT EXCHANGE MEMBER AND HEAT EXCHANGER

Title (de)

WÄRMETAUSCHERELEMENT UND WÄRMETAUSCHER

Title (fr)

ÉLÉMENT D'ÉCHANGE DE CHALEUR ET ÉCHANGEUR DE CHALEUR

Publication

EP 2693153 A4 20141022 (EN)

Application

EP 12764522 A 20120327

Priority

- JP 2011072255 A 20110329
- JP 2012057928 W 20120327

Abstract (en)

[origin: EP2693153A1] There is provided a heat exchanger element and a heat exchanger which are smaller, lighter in weight, and lower in cost than conventional heat exchange bodies, heat exchangers and the like. In the honeycomb structure (1), $t \neq 0.2$, $A > 100$, $20 \leq t \leq 250$, and $10,000 \leq A$ are satisfied when thermal conductivity of a material for the partition walls (4) is taken as » [W/K·m], and, regarding a cell structure of the honeycomb structure (1), a wall thickness of the partition walls (4) is taken as t [mm], and a cell density is taken as A [cells/sq.in.]

IPC 8 full level

F28F 21/04 (2006.01); **F28D 7/10** (2006.01)

CPC (source: EP US)

F01N 3/2828 (2013.01 - EP US); **F01N 3/2889** (2013.01 - EP US); **F28D 7/0033** (2013.01 - EP US); **F28D 7/106** (2013.01 - EP US); **F28D 21/0003** (2013.01 - EP US); **F28F 1/02** (2013.01 - EP US); **F28F 7/02** (2013.01 - EP US); **F28F 21/04** (2013.01 - EP US)

Citation (search report)

- [I] EP 2293002 A2 20110309 - NGK INSULATORS LTD [JP]
- [I] JP H09327627 A 19971222 - MATSUSHITA ELECTRIC IND CO LTD
- [I] JP S629183 A 19870117 - KYOCERA CORP
- [A] US 2002192426 A1 20021219 - ICHIKAWA YUKIHITO [JP], et al
- See references of WO 2012133405A1

Cited by

WO2020211412A1

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

DOCDB simple family (publication)

EP 2693153 A1 20140205; **EP 2693153 A4 20141022**; **EP 2693153 B1 20190220**; CN 103443574 A 20131211; CN 103443574 B 20161109; JP 5797740 B2 20151021; JP WO2012133405 A1 20140728; US 2014020877 A1 20140123; WO 2012133405 A1 20121004

DOCDB simple family (application)

EP 12764522 A 20120327; CN 201280015319 A 20120327; JP 2012057928 W 20120327; JP 2013507611 A 20120327; US 201314036379 A 20130925