

Title (en)

COPPER POROUS BODY FOR VAPORIZATION MEMBERS, EVAPORATIVE COOLER AND HEAT PIPE

Title (de)

PORÖSER KUPFERKÖRPER FÜR VERDAMPFUNGSELEMENTE, VERDAMPFUNGSKÜHLER UND WÄRMEROHR

Title (fr)

CORPS POREUX EN CUIVRE POUR ÉLÉMENTS DE VAPORISATION, REFRIGÉREUR PAR ÉVAPORATION ET CALODUC

Publication

**EP 3708941 A4 20210811 (EN)**

Application

**EP 18877002 A 20181003**

Priority

- JP 2017216634 A 20171109
- JP 2018037085 W 20181003

Abstract (en)

[origin: US2020224976A1] This copper porous body for vaporization members is a copper porous body for vaporization members used as a vaporization member which vaporizes a liquid phase medium that comes into contact with the vaporization member, the copper body is composed of a sintered body of a plurality of copper fibers, and has a stem having a three-dimensional network structure. A porosity is in a range of 65% or more and 95% or less, an opening diameter is in a range of 100  $\mu\text{m}$  or more and 2,000  $\mu\text{m}$  or less, and a standardized specific surface area  $SD=S \times R$  defined as a product of a specific surface area  $S$  ( $\text{m}^2/\text{g}$ ) and a diameter  $R$  (m) of the copper fiber is in a range of 0.001 or more and 0.25 or less.

IPC 8 full level

**F28D 15/04** (2006.01); **F28D 15/02** (2006.01); **F28F 21/08** (2006.01)

CPC (source: EP US)

**B22F 3/002** (2013.01 - EP US); **B22F 3/1103** (2013.01 - EP); **F28D 15/046** (2013.01 - EP US); **F28F 21/085** (2013.01 - EP US); **B22F 2301/10** (2013.01 - US); **F28F 2255/18** (2013.01 - EP)

Citation (search report)

- [X] JP 2017197811 A 20171102 - MITSUBISHI MATERIALS CORP
- [X] JP 2017002374 A 20170105 - MITSUBISHI MATERIALS CORP
- [A] EP 3165864 A1 20170510 - MITSUBISHI MATERIALS CORP [JP]
- [AD] JP 2013243249 A 20131205 - DENSO CORP
- See references of WO 2019093028A1

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)

**US 2020224976 A1 20200716**; CN 111566431 A 20200821; EP 3708941 A1 20200916; EP 3708941 A4 20210811; JP 2019086259 A 20190606; TW 201924003 A 20190616; WO 2019093028 A1 20190516

DOCDB simple family (application)

**US 201816647720 A 20181003**; CN 201880067853 A 20181003; EP 18877002 A 20181003; JP 2017216634 A 20171109; JP 2018037085 W 20181003; TW 107135499 A 20181009