

Title (en)

HEAT EXCHANGER, AND REFRIGERATION CYCLE DEVICE PROVIDED WITH HEAT EXCHANGER

Title (de)

WÄRMETAUSCHER UND KÄLTEKREISLAUFVORRICHTUNG MIT DEM WÄRMETAUSCHER

Title (fr)

ÉCHANGEUR DE CHALEUR ET DISPOSITIF À CYCLE DE RÉFRIGÉRATION POURVU DUDIT ÉCHANGEUR

Publication

EP 3144624 A4 20180214 (EN)

Application

EP 14892097 A 20140515

Priority

JP 2014063003 W 20140515

Abstract (en)

[origin: EP3144624A1] Fins 1 have a region L not provided with a heat transfer promoting portion 3 and a region other than the region L provided with the heat transfer promoting portion 3, and the region L is set to a region between a lower end portion of a heat transfer tube 2A and an upper end portion of a heat transfer tube 2B.

IPC 8 full level

F28F 1/32 (2006.01)

CPC (source: EP US)

F24F 1/18 (2013.01 - EP); **F25B 30/02** (2013.01 - US); **F25B 39/00** (2013.01 - EP US); **F25B 47/006** (2013.01 - US); **F28D 1/024** (2013.01 - EP); **F28D 1/0435** (2013.01 - EP); **F28D 1/047** (2013.01 - EP); **F28D 1/0477** (2013.01 - EP); **F28F 1/32** (2013.01 - EP US); **F28F 1/325** (2013.01 - EP); **F25B 13/00** (2013.01 - EP); **F25B 39/02** (2013.01 - US); **F28D 2021/0061** (2013.01 - EP); **F28F 2250/08** (2013.01 - EP)

Citation (search report)

- [X] JP 2013139978 A 20130718 - MITSUBISHI HEAVY IND LTD
- [X] JP 2008215670 A 20080918 - MATSUSHITA ELECTRIC IND CO LTD
- See references of WO 2015173938A1

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 3144624 A1 20170322; **EP 3144624 A4 20180214**; CN 106461350 A 20170222; CN 114440328 A 20220506; JP 5864030 B1 20160217; JP WO2015173938 A1 20170420; US 2017074564 A1 20170316; WO 2015173938 A1 20151119

DOCDB simple family (application)

EP 14892097 A 20140515; CN 201480078695 A 20140515; CN 202210159443 A 20140515; JP 2014063003 W 20140515; JP 2015518668 A 20140515; US 201415308389 A 20140515