

Title (en)

Heat Exchanger with louvered transversal fins

Title (de)

Wärmetauscher mit transversalen geschlitzten Rippen

Title (fr)

Échangeur de chaleur avec des ailettes transversales à persiennes

Publication

**EP 2447656 A3 20150225 (EN)**

Application

**EP 11185348 A 20111017**

Priority

KR 20100106371 A 20101028

Abstract (en)

[origin: EP2447656A2] A heat exchanger includes a refrigerant pipe in which a refrigerant flows and a heat exchanger fin coupled to the outer circumference of the refrigerant pipe. The heat exchanger fin includes a plate, a protrusion protruding from the plate, slits disposed at opposite sides of the protrusion to guide air to the protrusion, and a louver unit provided at the protrusion to perform heat exchange with the air having passed through the slits.

IPC 8 full level

**F28D 1/047** (2006.01); **F24F 1/18** (2011.01); **F25B 39/02** (2006.01); **F28F 1/32** (2006.01)

CPC (source: EP KR US)

**F24F 1/18** (2013.01 - EP KR US); **F25B 39/02** (2013.01 - KR); **F28D 1/02** (2013.01 - KR); **F28D 1/047** (2013.01 - KR); **F28D 1/0477** (2013.01 - EP KR US); **F28F 1/02** (2013.01 - KR); **F28F 1/10** (2013.01 - KR); **F28F 1/32** (2013.01 - KR); **F28F 1/325** (2013.01 - EP KR US); **F25B 39/02** (2013.01 - EP US); **F28F 2215/04** (2013.01 - EP KR US); **F28F 2215/08** (2013.01 - EP KR US)

Citation (search report)

- [Y] US 4705105 A 19871110 - CUR OEMER N [US]
- [Y] US 4676304 A 19870630 - KOISUKA MIKIO [JP], et al
- [A] US 2002003035 A1 20020110 - OH SAI KEE [KR], et al
- [A] US 2001004012 A1 20010621 - JIN DAE HYUN [KR], et al
- [A] US 2005077036 A1 20050414 - ANTONIJEVIC DRAGI [DE]

Cited by

FR3038977A1; CN108369076A; EP3574277A4; US10914530B2; WO2017012867A1; WO2018143619A1; US11079180B2

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 2447656 A2 20120502; EP 2447656 A3 20150225; EP 2447656 B1 20161221**; CN 102455089 A 20120516; CN 102455089 B 20151125; KR 20120044850 A 20120508; US 2012103587 A1 20120503

DOCDB simple family (application)

**EP 11185348 A 20111017**; CN 201110342838 A 20111027; KR 20100106371 A 20101028; US 201113317602 A 20111024