

Title (en)
HEAT EXCHANGER AND AIR CONDITIONER

Title (de)
WÄRMETAUSCHER UND KLIMAANLAGE

Title (fr)
ÉCHANGEUR DE CHALEUR ET CLIMATISEUR

Publication
EP 3276289 A1 20180131 (EN)

Application
EP 16786110 A 20160408

Priority
• JP 2015089967 A 20150427
• JP 2016001959 W 20160408

Abstract (en)
Disclosed herein is a heat exchanger including: a plurality of banks (30, 40), each of which includes a plurality of flat tubes (31, 41), arranged in an air flow direction. The refrigerants in the plurality of banks (30, 40) flow in parallel with each other, and each of the flat tubes (31, 41) in the plurality of banks (30, 40) has one or more bent portions (33a, 33b, 33c) which are bent in a width direction of the flat tubes (31, 41) such that the flat tubes (31, 41) of a pair of the banks (30, 40) adjacent to each other in the air flow direction extend along with each other.

IPC 8 full level
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CPC (source: EP US)
F24F 5/00 (2013.01 - EP US); **F25B 13/00** (2013.01 - US); **F25B 39/00** (2013.01 - EP US); **F28D 1/0435** (2013.01 - EP US); **F28D 1/047** (2013.01 - US); **F28D 1/0471** (2013.01 - EP US); **F28D 1/05391** (2013.01 - EP US); **F28F 1/02** (2013.01 - US); **F28F 1/32** (2013.01 - US); **F28F 9/02** (2013.01 - US); **F28F 9/0202** (2013.01 - EP US); **F28F 9/0275** (2013.01 - EP US); **F28F 9/26** (2013.01 - US); **F25B 39/02** (2013.01 - US); **F25B 39/04** (2013.01 - US); **F28D 2021/0068** (2013.01 - EP US); **F28F 1/022** (2013.01 - EP US); **F28F 1/325** (2013.01 - EP US); **F28F 2215/12** (2013.01 - EP US)

Cited by
US11415371B2; EP3859265A4

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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 3276289 A1 20180131; **EP 3276289 A4 20181205**; **EP 3276289 B1 20240306**; CN 107429975 A 20171201; CN 107429975 B 20200424; JP 2016205744 A 20161208; JP 6641721 B2 20200205; US 2018135900 A1 20180517; WO 2016174830 A1 20161103

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