

Title (en)  
EVAPORATOR AND REFRIGERATION CYCLE DEVICE EQUIPPED WITH SAME

Title (de)  
VERDAMPFER UND KÄLTEKREISLAUFVORRICHTUNG DAMIT

Title (fr)  
ÉVAPORATEUR ET DISPOSITIF À CYCLE FRIGORIFIQUE DOTÉ DUDIT ÉVAPORATEUR

Publication  
**EP 4040084 A4 20221116 (EN)**

Application  
**EP 20871516 A 20200929**

Priority  
• JP 2019180813 A 20190930  
• JP 2020036920 W 20200929

Abstract (en)  
[origin: US2022214085A1] An evaporator includes: fins disposed at a predetermined interval in a fin thickness direction; heat transfer tubes extending through the fins in the fin thickness direction; and a first heat exchange section in which, when the heat transfer tubes are viewed in the fin thickness direction, a center of distribution of the heat transfer tubes in an airflow direction is disposed on a leeward side of a center of the fins in the airflow direction. The evaporator is disposed in a refrigeration cycle apparatus in which a non-azeotropic refrigerant mixture is enclosed.

IPC 8 full level  
**F25B 39/02** (2006.01); **F25B 1/00** (2006.01); **F28D 5/00** (2006.01); **F28F 1/32** (2006.01)

CPC (source: CN EP US)  
**F25B 13/00** (2013.01 - CN); **F25B 39/00** (2013.01 - US); **F25B 39/02** (2013.01 - CN EP); **F28D 1/05333** (2013.01 - EP); **F28D 1/05383** (2013.01 - EP); **F28F 1/022** (2013.01 - CN); **F28F 1/32** (2013.01 - CN EP); **F28F 1/325** (2013.01 - US); **F25B 9/008** (2013.01 - EP); **F25B 13/00** (2013.01 - EP); **F25B 39/02** (2013.01 - US); **F25B 2313/02741** (2013.01 - CN); **F25B 2339/02** (2013.01 - CN); **F25B 2400/121** (2013.01 - EP); **F28D 2021/0071** (2013.01 - EP); **F28F 2215/12** (2013.01 - EP)

Citation (search report)  
• [XYI] EP 3534103 A1 20190904 - MITSUBISHI ELECTRIC CORP [JP]  
• [XI] WO 2019004139 A1 20190103 - DAIKIN IND LTD [JP]  
• [Y] JP H0854149 A 19960227 - MATSUSHITA ELECTRIC IND CO LTD  
• See also references of WO 2021065913A1

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**US 2022214085 A1 20220707**; CN 114450546 A 20220506; CN 114450546 B 20240116; EP 4040084 A1 20220810; EP 4040084 A4 20221116; JP 2021055957 A 20210408; JP 7425282 B2 20240131; WO 2021065913 A1 20210408

DOCDB simple family (application)  
**US 202217705356 A 20220327**; CN 202080067949 A 20200929; EP 20871516 A 20200929; JP 2019180813 A 20190930; JP 2020036920 W 20200929