

Title (en)  
AIR CONDITIONER

Title (de)  
KLIMAANLAGE

Title (fr)  
APPAREIL DE CONDITIONNEMENT D'AIR

Publication  
**EP 3760957 B1 20221130 (EN)**

Application  
**EP 19761287 A 20190222**

Priority  
• JP 2019006840 W 20190222  
• JP 2018036981 A 20180301

Abstract (en)  
[origin: EP3760957A1] A heat exchanger (10) includes heat transfer units (30) in each of which a plurality of heat transfer channel portions (31) and a plurality of auxiliary heat transfer portions (32), each of which extends in a first direction (D1), are formed so as to be arranged in a second direction (D2) that is diagonal or perpendicular to the first direction (D1). Here, the heat transfer units (30) are arranged in a third direction (D3) that is different from either of the first direction (D1) and the second direction (D2), and form a heat transfer unit group (15). In the heat exchanger (10), the heat transfer units (30) are each partitioned into an airflow-upstream region (WU) and an airflow-downstream region (WL) in the second direction (D2). When used as an evaporator, the heat exchanger (10) causes a refrigerant (F) to flow into a heat transfer channel portion (31U) disposed in the airflow-upstream region (WU), and then causes the refrigerant (F) to flow out to a heat transfer channel portion (31L) disposed in the airflow-downstream region (WL).

IPC 8 full level  
**F28D 1/053** (2006.01); **F28F 1/16** (2006.01); **F28F 1/22** (2006.01); **F28F 3/12** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP US)  
**F28D 1/0246** (2013.01 - EP); **F28D 1/05341** (2013.01 - EP); **F28D 1/05391** (2013.01 - EP); **F28F 1/16** (2013.01 - EP); **F28F 1/22** (2013.01 - EP); **F28F 1/26** (2013.01 - US); **F28D 2021/0068** (2013.01 - EP); **F28F 3/12** (2013.01 - EP); **F28F 9/0204** (2013.01 - EP); **F28F 2270/00** (2013.01 - EP)

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 3760957 A1 20210106**; **EP 3760957 A4 20210421**; **EP 3760957 B1 20221130**; CN 111801541 A 20201020; JP 2019152362 A 20190912; JP 7406297 B2 20231227; US 2021003350 A1 20210107; WO 2019167839 A1 20190906

DOCDB simple family (application)  
**EP 19761287 A 20190222**; CN 201980016308 A 20190222; JP 2018036981 A 20180301; JP 2019006840 W 20190222; US 201916977284 A 20190222