

Title (en)  
HEAT EXCHANGER AND OUTDOOR UNIT

Title (de)  
WÄRMETAUSCHER UND AUSSENEINHEIT

Title (fr)  
ÉCHANGEUR DE CHALEUR ET UNITÉ EXTÉRIEURE

Publication  
**EP 4354069 A1 20240417 (EN)**

Application  
**EP 21944969 A 20210607**

Priority  
JP 2021021489 W 20210607

Abstract (en)  
A heat exchanger includes: a first heat transfer tube that has a flow passage through which refrigerant flows, the flow passage being located in the first heat transfer tube; a second heat transfer tube that has a flow passage through which refrigerant flows, the flow passage being located in the second heat transfer tube; and a header connected to an end of the first heat transfer tube in a tube axial direction and an end of the second heat transfer tube in the tube axial direction. The header includes a main body that allows refrigerant to flow between the first heat transfer tube and a refrigerant pipe through which refrigerant flows and between the second heat transfer tube and the refrigerant pipe, and an insertion portion shaped in a plate and that has a first opening. The first heat transfer tube and the second heat transfer tube are inserted in the first opening.

IPC 8 full level  
**F28F 1/02** (2006.01); **F28F 9/013** (2006.01)

CPC (source: EP)  
**F28D 1/05383** (2013.01); **F28F 1/022** (2013.01); **F28F 1/025** (2013.01); **F28F 9/0221** (2013.01); **F28F 9/16** (2013.01); **F28D 2021/007** (2013.01)

Citation (search report)  
See references of WO 2022259288A1

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)  
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