

Title (en)
FLOW GUIDING APPARATUS

Title (de)
STRÖMUNGSLEITVORRICHTUNG

Title (fr)
APPAREIL DE GUIDAGE D'ÉCOULEMENT

Publication
EP 4253864 A1 20231004 (EN)

Application
EP 22166331 A 20220401

Priority
EP 22166331 A 20220401

Abstract (en)
Flow guiding apparatus (1) for a heating device (2), in particular an air-source heat pump water heater using a flammable refrigerant, the heating device (2) including at least a heat exchanger (8), a compressor element (15), an expansion valve (28) and a temperature sensor (29) connectable to the expansion valve (28) for monitoring the temperature of the refrigerant flowing out the heat exchanger (8), the apparatus (1) comprising a housing (3) couplable to a casing of the heating device (2) and comprising an air inlet (4) and an air outlet (5), the housing (3) defining an air flow region (7), wherein the housing (3) is configured so that the heat exchanger (8) is arranged inside the air flow region (7) for exchanging heat in said air flow region (7), and so that air is guided to flow from the air inlet (4) to the heat exchanger (8) and from the heat exchanger (8) to the air outlet (5), the air being confined in the air flow region (7) and being prevented from being in contact with the compressor element (15) and the expansion valve (28) that are arranged outside the air flow region (7), and wherein the housing (3) is shaped to place in the air flow region (7) the temperature sensor (29) connectable to the expansion valve (29).

IPC 8 full level
F24H 4/04 (2006.01); **F24H 9/02** (2006.01); **F24H 9/20** (2022.01); **F24H 15/12** (2022.01); **F25B 49/02** (2006.01)

CPC (source: EP)
F24H 4/04 (2013.01); **F24H 9/02** (2013.01); **F24H 9/2021** (2013.01); **F24H 15/12** (2022.01); **F25B 30/02** (2013.01); **F25B 2339/047** (2013.01); **F25B 2400/12** (2013.01); **F25B 2700/21175** (2013.01)

Citation (search report)
• [X] CN 104266354 A 20150107 - GUANDONG MIDEA HVAC EQUIPMENT, et al
• [X] EP 3199883 A1 20170802 - MITSUBISHI ELECTRIC CORP [JP]
• [X] DE 19702903 A1 19980730 - STIEBEL ELTRON GMBH & CO KG [DE]

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)
EP 4253864 A1 20231004

DOCDB simple family (application)
EP 22166331 A 20220401