

Title (en)

HEAT PUMP WATER HEATER AND AIR SUPPLY STRUCTURE THEREOF

Title (de)

WÄRMEPUMPENWASSERERHITZER UND LUFTVERSORGUNGSSTRUKTUR DAFÜR

Title (fr)

CHAUFFE-EAU À POMPE À CHALEUR ET SA STRUCTURE D'ALIMENTATION EN AIR

Publication

**EP 3974742 A1 20220330 (EN)**

Application

**EP 20215242 A 20201217**

Priority

CN 202011011360 A 20200923

Abstract (en)

The present disclosure discloses an air supply structure of a heat pump water heater. The air supply structure includes a fan and a casing. The casing includes a first housing provided with a first cavity and a second housing provided with a second cavity. The casing is internally provided with a chamber formed by first cavity and the second cavity. The first housing is matched with the second housing to clamp the fan in the chamber. The first housing and the second housing are separately formed by foaming a thermoplastic foamed material. According to the present disclosure, the casing of the air supply structure is set to be formed by combining two housings which are formed by foaming the thermoplastic foamed material, thus the air supply structure is simplified, and connection and disconnection between the fan and the casing are facilitated. The difficulty of the installation process of the fan is reduced, and the production efficiency of the casing is additionally improved. The weight of the casing is reduced, and the heat insulation and noise reduction effects of the casing are improved.

IPC 8 full level

**F24H 4/04** (2006.01); **F24H 9/00** (2022.01)

CPC (source: CN EP)

**F24H 4/02** (2013.01 - CN); **F24H 4/04** (2013.01 - EP); **F24H 9/0005** (2013.01 - CN); **F24H 9/001** (2013.01 - EP)

Citation (applicant)

CN 201811608629 A 20181227

Citation (search report)

- [X] EP 2354709 A2 20110810 - STIEBEL ELTRON GMBH & CO KG [DE]
- [XI] DE 202016003295 U1 20160622 - KERMI GMBH [DE]
- [A] EP 3611440 A1 20200219 - BOSCH GMBH ROBERT [DE]
- [A] EP 3128252 A1 20170208 - VAILLANT GMBH [DE]
- [A] EP 2775227 A1 20140910 - VIESSMANN WERKE KG [DE]

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

**EP 3974742 A1 20220330**; **EP 3974742 B1 20240717**; CN 112833544 A 20210525; CN 112833544 B 20221213

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