

Title (en)  
MOTOR-FAN GROUP

Title (de)  
MOTORGEBLÄSEGRUPPE

Title (fr)  
GROUPE MOTO-VENTILATEUR

Publication  
**EP 4130482 A1 20230208 (EN)**

Application  
**EP 22188355 A 20220802**

Priority  
IT 202100004088 U 20210806

Abstract (en)  
A motor-fan assembly (1) for a heat pump comprises an electric motor (2) having a peripheral connection wall (5), and defining a rotation axis (6), a fan impeller (7) made of polymer material, having a hub wall (8) connected to the connection wall (5) of the motor by inserting one onto the other, a plurality of keys (10) radially protruding from one of said connection (5) and hub (8) walls, a plurality of key seats (11) formed in the other of said connection (5) and hub (8) walls to accommodate the keys (10) upon the insertion of the hub wall (8) onto the connection wall (5) in an axial insertion direction (12), one or more first stop surfaces (13) formed in one of said connection (5) and hub (8) walls and configured to abut against one or more corresponding second stop surfaces (14) formed in the other of said connection (5) and hub (8) walls, upon reaching an axial insertion end-of-stroke between the hub wall (8) and the connection wall (5), one or more first side surfaces (15) formed by each of the keys (10) and engaging corresponding second side surfaces (16) of the key seats (11), so as to achieve an anti-rotation coupling between the hub wall (8) and the connection wall (5) about the rotation axis (6).

IPC 8 full level  
**F04D 25/06** (2006.01); **F04D 29/28** (2006.01); **F04D 29/62** (2006.01)

CPC (source: EP)  
**F04D 25/0606** (2013.01); **F04D 29/281** (2013.01); **F04D 29/626** (2013.01)

Citation (search report)  
• [XII] US 2015125326 A1 20150507 - LEVASSEUR ANTOINE [FR]  
• [Y] US 2015176587 A1 20150625 - TAMAOKA TAKEHITO [JP], et al  
• [XYII] DE 19829070 A1 20000105 - ATLAS COPCO ELECTRIC TOOLS [DE]  
• [Y] CN 205744589 U 20161130 - NINGBO FOTILE KITCHEN WARE CO

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 4130482 A1 20230208**; IT 202100004088 U1 20230206

DOCDB simple family (application)  
**EP 22188355 A 20220802**; IT 202100004088 U 20210806