

Title (en)

VENTILATION DEVICE FOR FILTERING AIR AND FOR SEPARATING WATER AEROSOLS OUT OF THE AIR

Title (de)

BELÜFTUNGSEINRICHTUNG ZUM FILTERN VON LUFT UND ZUM ABSCHIEDEN VON WASSERAEROSOLEN AUS LUFT

Title (fr)

DISPOSITIF D'AÉRATION POUR FILTRER L'AIR ET SÉPARER LES AÉROSOLS D'EAU DE L'AIR

Publication

EP 3773983 A1 20210217 (DE)

Application

EP 19702220 A 20190123

Priority

- DE 102018204632 A 20180327
- EP 2019051657 W 20190123

Abstract (en)

[origin: WO2019185212A1] The invention relates to a ventilation device (1) for filtering air and for separating water aerosols out of the air. The ventilation device (1) has at least one filter element (3), at least one housing (4), at least one fan (5), and at least one flow adapter (11). The at least one filter element (3) is secured in the at least one housing (4) such that air can flow through the filter element from an inlet opening (8) to an outlet opening (9) of the at least one housing (4) in a flow direction (10). In the flow direction (10), the at least one fan (5) is secured to the outlet opening (9) downstream of the at least one housing (4) and the at least one flow adapter (11) is secured to the inlet opening (8) upstream of the at least one housing (4). A coupling frame (14) is secured in an airtight manner between the at least one housing (4) and the at least one flow adapter (11) transversely to the flow direction (10). According to the invention, the at least one filter element (3) has a circumferential seal edge (23), wherein the seal edge (23) rests against a seal surface (24) of the at least one housing (4) on one side, said seal surface bordering the inlet opening (8), and against the coupling frame (14) on the other side and seals the at least one housing (4) to the coupling frame (14) around the inlet opening (8) transversely to the flow direction (10).

IPC 8 full level

B01D 46/00 (2006.01); **F02C 7/00** (2006.01)

CPC (source: EP US)

B01D 46/0005 (2013.01 - EP US); **B01D 46/0031** (2013.01 - US); **B01D 46/444** (2013.01 - US); **B01D 46/446** (2013.01 - US); **B01D 46/58** (2022.01 - EP US); **F02C 7/00** (2013.01 - EP); **F04D 29/701** (2013.01 - US); **B01D 2201/304** (2013.01 - EP); **B01D 2201/34** (2013.01 - EP); **B01D 2265/028** (2013.01 - US); **B01D 2267/30** (2013.01 - US); **B01D 2267/60** (2013.01 - US); **B01D 2271/02** (2013.01 - US)

Citation (search report)

See references of WO 2019185212A1

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

DOCDB simple family (publication)

DE 102018204632 A1 20191002; **DE 102018204632 B4 20230727**; CN 112088040 A 20201215; EP 3773983 A1 20210217; US 2021039027 A1 20210211; WO 2019185212 A1 20191003

DOCDB simple family (application)

DE 102018204632 A 20180327; CN 201980021796 A 20190123; EP 19702220 A 20190123; EP 2019051657 W 20190123; US 201917041441 A 20190123