

Title (en)

AIR PURIFICATION UNIT AND METHOD FOR COATING AN ELECTRODE OF AN AIR PURIFICATION UNIT

Title (de)

LUFTREINIGUNGSEINHEIT UND VERFAHREN ZUR BESCHICHTUNG EINER ELEKTRODE EINER LUFTREINIGUNGSEINHEIT

Title (fr)

UNITÉ DE PURIFICATION D'AIR ET PROCÉDÉ POUR MUNIR D'UN REVÊTEMENT UNE ÉLECTRODE D'UNE UNITÉ DE PURIFICATION D'AIR

Publication

EP 4200058 A2 20230628 (DE)

Application

EP 21752621 A 20210806

Priority

- DE 102020121872 A 20200820
- DE 102020121987 A 20200821
- EP 2021072053 W 20210806

Abstract (en)

[origin: WO2022037973A2] An air purification unit having at least one electric filter module (2, 102) through which air to be purified can flow, which electric filter module has at least one first electrode (22, 122) and at least one second electrode (24, 124) between which the air to be purified flows and between which, by application of an high electrical voltage provided by a power supply module (7, 107), a first electrical field can be generated, wherein the at least one first electrode (22, 122) and the at least one second electrode (24, 124) form an ioniser (20) and wherein a mechanical filter module (3, 103) having at least one mechanical filter element (30, 103') is arranged downstream of the electric filter module (2, 102) in the flow direction (V) of the air to be purified, is characterised in that at least one third electrode (26, 126) is provided in the mechanical filter element (30, 103') or in the mechanical filter module (3, 103) behind the mechanical filter element (30, 103'), wherein a second electrical field can be generated between the at least one second electrode (24, 124) and the at least one third electrode (26, 126) by application of an electrical voltage.

IPC 8 full level

B01D 46/50 (2006.01); **B03C 3/06** (2006.01); **B03C 3/08** (2006.01); **B03C 3/12** (2006.01); **B03C 3/155** (2006.01); **B03C 3/41** (2006.01);
B03C 3/47 (2006.01); **B03C 3/49** (2006.01); **B03C 3/60** (2006.01); **B03C 3/68** (2006.01); **B03C 3/86** (2006.01)

CPC (source: EP US)

B01D 46/0032 (2013.01 - US); **B01D 46/10** (2013.01 - EP); **B01D 46/24** (2013.01 - US); **B01D 46/50** (2013.01 - EP); **B01D 53/885** (2013.01 - US);
B03C 3/011 (2013.01 - EP); **B03C 3/019** (2013.01 - EP US); **B03C 3/06** (2013.01 - EP); **B03C 3/08** (2013.01 - EP US);
B03C 3/12 (2013.01 - EP); **B03C 3/155** (2013.01 - EP); **B03C 3/368** (2013.01 - EP); **B03C 3/41** (2013.01 - EP); **B03C 3/47** (2013.01 - EP);
B03C 3/49 (2013.01 - EP); **B03C 3/60** (2013.01 - EP US); **B03C 3/68** (2013.01 - EP US); **B03C 3/82** (2013.01 - US); **B03C 3/86** (2013.01 - EP);
B01D 2255/20707 (2013.01 - US); **B01D 2257/708** (2013.01 - US); **B01D 2259/4575** (2013.01 - US); **B01D 2279/50** (2013.01 - US);
B03C 2201/10 (2013.01 - EP)

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)

WO 2022037973 A2 20220224; WO 2022037973 A3 20220421; CA 3187629 A1 20220224; CN 115942984 A 20230407;
EP 4200058 A2 20230628; US 2023249195 A1 20230810

DOCDB simple family (application)

EP 2021072053 W 20210806; CA 3187629 A 20210806; CN 202180050901 A 20210806; EP 21752621 A 20210806;
US 202318102745 A 20230129