

Title (en)

SELECTIVE AEROSOL PARTICLE COLLECTING METHOD AND DEVICE, ACCORDING TO PARTICLE SIZE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM SELEKTIVEN SAMMELN VON AEROSOLPARTIKELN NACH PARTIKELGRÖSSE

Title (fr)

METHODE ET DISPOSITIF DE COLLECTE DE PARTICULES D'AEROSOLS, A COLLECTE SELECTIVE EN FONCTION DE LA GRANULOMETRIE DES PARTICULES

Publication

**EP 3328548 A1 20180606 (FR)**

Application

**EP 16744761 A 20160728**

Priority

- FR 1557221 A 20150728
- EP 2016067992 W 20160728

Abstract (en)

[origin: WO2017017179A1] The invention relates to a method and device for collecting particles which may be present in an aerosol. The invention consists in electrostatically collecting all the particles in an aerosol, but uncoupling mechanisms of particle charging by unipolar ion diffusion, for charging then collecting the finest particles, from particle charging by a corona effect electrical field, for charging then collecting the biggest particles in a different collection zone from the collection zone for the finest particles. The invention also relates to the use of such a device as ionisation chamber or for evaluating the exposure of workers or consumers to nanoparticles.

IPC 8 full level

**B03C 3/02** (2006.01); **B03C 3/06** (2006.01); **B03C 3/12** (2006.01); **B03C 3/36** (2006.01); **B03C 3/38** (2006.01); **B03C 3/41** (2006.01); **B03C 3/47** (2006.01); **B03C 3/49** (2006.01)

CPC (source: EP US)

**B03C 3/025** (2013.01 - EP US); **B03C 3/06** (2013.01 - EP US); **B03C 3/12** (2013.01 - EP US); **B03C 3/368** (2013.01 - EP US); **B03C 3/41** (2013.01 - EP US); **B03C 3/49** (2013.01 - EP US); **B03C 3/38** (2013.01 - US); **B03C 3/47** (2013.01 - US)

Citation (search report)

See references of WO 2017017179A1

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)

**WO 2017017179 A1 20170202**; CN 107921444 A 20180417; CN 107921444 B 20200728; EP 3328548 A1 20180606; EP 3328548 B1 20191218; FR 3039435 A1 20170203; FR 3039435 B1 20170818; US 10814335 B2 20201027; US 2018200727 A1 20180719

DOCDB simple family (application)

**EP 2016067992 W 20160728**; CN 201680044319 A 20160728; EP 16744761 A 20160728; FR 1557221 A 20150728; US 201615744332 A 20160728