

Title (en)

DEVICE FOR EXTRACTING AND FILTERING AIR LADEN WITH FINE DUST

Title (de)

VORRICHTUNG ZUM ABSAUGEN UND FILTERN VON FEINSTAUB BELASTETER LUFT

Title (fr)

DISPOSITIF D'ASPIRATION ET DE FILTRATION D'AIR CHARGÉ DE POUSSIÈRES FINES

Publication

EP 2981345 A1 20160210 (DE)

Application

EP 14739680 A 20140710

Priority

- DE 102013011758 A 20130713
- EP 2014001896 W 20140710

Abstract (en)

[origin: WO2015007376A1] The invention relates to a device for extracting and filtering air laden with fine dust, having at least one filter cartridge which is arranged in a filter chamber and which has an in particular cylindrical, vertical filter wall surrounding an internal cartridge hollow chamber, which filter wall is impinged on by the laden air from the outside such that the fine dust is deposited on the outer surface of the filter wall, and having compressed-air nozzles which are arranged in the cartridge hollow chamber and by means of which the deposited fine dust is blown off the filter wall outer surface, such that the blown-off fine dust passes downward into at least one fine-dust collecting chamber in order to be removed from there, wherein there is connected to the fine-dust collecting chamber a dust line which serves for the discharge of the fine dust and which leads to a fine-dust separator by means of which the fine dust is removed from the air, and wherein a return line leads from the fine dust separator to the fine-dust collecting chamber or to the untreated-air side of the filter chamber, through which return line the air that has had the fine dust substantially removed from it passes back, in a circuit, to the fine-dust collecting chamber or to the untreated-air side of the filter chamber.

IPC 8 full level

B01D 46/24 (2006.01); **B01D 45/12** (2006.01); **B01D 46/00** (2006.01); **B01D 46/52** (2006.01); **B01D 50/00** (2006.01)

CPC (source: EP US)

B01D 45/12 (2013.01 - EP US); **B01D 46/2411** (2013.01 - EP US); **B01D 46/71** (2022.01 - EP US); **B01D 50/20** (2022.01 - EP US); **B01D 46/521** (2013.01 - EP US)

Citation (search report)

See references of WO 2015007376A1

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 102013011758 A1 20150115; DE 202014011244 U1 20181015; EP 2981345 A1 20160210; US 2016114279 A1 20160428; US 9687767 B2 20170627; WO 2015007376 A1 20150122

DOCDB simple family (application)

DE 102013011758 A 20130713; DE 202014011244 U 20140710; EP 14739680 A 20140710; EP 2014001896 W 20140710; US 201314785561 A 20130710; US 201414785561 A 20140710