

Title (en)
TWO-STEP AIR FILTER HAVING EFFECTIVE IONISATION

Title (de)
ZWEI-STUFEN LUFTFILTER MIT IONIZATION HÖHER LEISTUNG

Title (fr)
FILTRE A AIR A DEUX ETAGES ASSURANT UNE IONISATION EFFICACE

Publication
EP 0784510 A1 19970723 (EN)

Application
EP 95934379 A 19951003

Priority

- SE 9501126 W 19951003
- SE 9403369 A 19941005

Abstract (en)
[origin: WO9611060A1] A device for air cleaning, preferably from suspended particles, so-called aerosols, including a so-called ion chamber (10; 10'), i.e. a space where charging of aerosols takes place, and a so-called precipitator (12; 12') for separation of charged aerosols from the air by-passing the device. The air transport through the device can be effected with the aid of a fan (26; 26'), by natural draught or in another way. The air first passes through the ion chamber (10; 10') where an ionizing source (14; 14') is located, and then passes between the electrode elements of the precipitator (12; 12'), said elements being provided at a distance from each other and applied to a voltage in such a way that a strong electrostatic field is present between adjacent electrode elements. At least the repelling electrode elements (R) of the precipitator (12; 12') are manufactured of a high-resistive material that preferably is coated with an insulating layer. The ionizing source (14; 14') could be in the shape of a so-called corona electrode that in a suitable way is connected to one terminal of a high voltage source (18; 18') whereby ions of suitable polarity are generated around said corona electrode or generated in another way, e.g. via UV-light. The dimensions and design of the ion chamber (10; 10') as well as the location of the ionizing source (14; 14') inside the ion chamber (10; 10') are such that the migration and propagation of the ions in the ion chamber (10; 10') are mostly controlled partly by the repelling forces in the ion cloud and partly by the movement of the air through the chamber (10; 10').

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