Title (en)

ELECTROSTATIC FILTERING AND PARTICLE CONVERSION IN GASEOUS ENVIRONMENTS

Title (de)

ELEKTROSTATISCHES FILTRIERUNG UND TRANSFORMATION VON TEILCHEN AUS GASFÖRMIGE ME DIEN

Title (fr)

FILTRATION ELECTROSTATIQUE ET TRANSFORMATION DE PARTICULES DES MILIEUX GAZEUX

Publication

EP 1527261 A1 20050504 (FR)

Application

EP 03761629 A 20030624

Priority

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Abstract (en)

[origin: WO2004003352A1] The invention concerns a device comprising at least a plurality of ionizing corona-effect electrostatic precipitators including emissive and collecting electrodes. The number of electrostatic precipitators is defined on the basis of a flux to be treated, considering that the slower the passage, the more efficient the collection is, and the less the electrodes converted into resistors are cooled by the flux. The collecting electrodes, which are smooth and tubular, are alternately collectors and electric resistor, and therefor they are heated over short periods, at a temperature sufficient for incinerating or burning the collected particles. The emissive electrodes are centered in the collecting structures. Said electrodes are axial relative to the direction of the passage of the flux to be treated in the collecting electrodes and can be complementary to other electrodes in the form of beams perpendicular to the direction of the flux, gases and mists to be treated. Other devices can be associated therewith, such as oxidation catalysts, pre-filters, after filters or other devices enabling reduction of gaseous, solid and liquid pollutants and noise attenuation. The inventive device is designed, but not exclusively, for filtering and regenerating engine exhaust gases, oil and water mists, fumes, intake air, extraction or recycling, and generally all pollutants harmful to the environment.

IPC 1-7

F01N 3/01; B03C 3/06; B03C 3/02; B03C 3/45

IPC 8 full level

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Citation (search report)

See references of WO 2004003352A1

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DOCDB simple family (publication)

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