

Title (en)

Device for separating soot particles from exhaust gases of internal combustion engines

Title (de)

Vorrichtung zum Abscheiden von Russpartikeln aus den Abgasen von Brennkraftmaschinen

Title (fr)

Dispositif pour séparer de particules de suie contenues dans le gaz d'échappement d'un moteur à combustion interne

Publication

**EP 0658685 B1 19971022 (DE)**

Application

**EP 94890211 A 19941214**

Priority

AT 256293 A 19931217

Abstract (en)

[origin: EP0658685A2] Device for separating soot particles (particulates) from the exhaust gases of internal combustion engines, with an electrostatic filter which is arranged in the exhaust line and in which at least one electrically insulating layer is arranged between at least two electrically conductive layers serving as electrodes and in which a flow passage for the exhaust gas is kept free between at least two layers and the electric field runs perpendicular to the direction of flow of the exhaust gases. In order to permit a simple construction, the filter comprises regularly stacked or wound layers (1, 4, 5) of conductive and ceramic materials which are spaced apart by electrically insulating spacers (3), and each flow passage (2) is bounded on at least one side by a ceramic layer, a field strength of at least 100V/mm, preferably at least 300V/mm, prevailing in the free cross-section of flow, and the more negative boundary through which the electric field passes in each flow passage (2) having a ceramic surface. <IMAGE>

IPC 1-7

**F01N 3/02**; **B03C 3/62**; **B03C 3/08**

IPC 8 full level

**B03C 3/08** (2006.01); **B03C 3/62** (2006.01); **F01N 3/01** (2006.01); **F01N 3/022** (2006.01); **F01N 3/027** (2006.01)

CPC (source: EP)

**B03C 3/08** (2013.01); **B03C 3/62** (2013.01); **F01N 3/01** (2013.01); **F01N 3/0222** (2013.01); **F01N 3/027** (2013.01); **F01N 3/0275** (2013.01); **F01N 2330/06** (2013.01)

Cited by

FR2822893A1; CN112502816A; CN110461477A; EP4067758A4; WO0161161A1; WO9702410A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**EP 0658685 A2 19950621**; **EP 0658685 A3 19951220**; **EP 0658685 B1 19971022**; AT A256293 A 19981015; DE 59404421 D1 19971127

DOCDB simple family (application)

**EP 94890211 A 19941214**; AT 256293 A 19931217; DE 59404421 T 19941214