

Title (en)

EXHAUST GAS PURIFYING SOOT FILTER FOR AN INTERNAL COMBUSTION ENGINE

Publication

**EP 0395840 B1 19921028 (DE)**

Application

**EP 90102261 A 19900206**

Priority

DE 3914758 A 19890505

Abstract (en)

[origin: US5042249A] A soot filter has sets of three to five filter tubes disposed in a circle and axially parallel to one another, through which exhaust flows radially from the outside in during operation, composed of refractory ceramic yarn wound spool-wise to form hollow cylinders. To permit an electrical burn-off of the deposited soot with a relatively low expenditure of energy, the clearance A of all adjacent filter tubes 30 from one another amounts to 2 to 4% of the average filter tube diameter D. In each interstice 36 formed by at least three filter tubes 30 an elongated electrical heating element 37 is disposed which can be turned on if the exhaust gas stream is interrupted by shutting down the internal combustion engine or by diverting the exhaust gas stream away from a set of filter tubes.

IPC 1-7

**F01N 3/02**

IPC 8 full level

**F01N 3/02 (2006.01); F01N 3/021 (2006.01); F01N 3/022 (2006.01); F01N 3/027 (2006.01); F01N 3/30 (2006.01)**

CPC (source: EP US)

**F01N 3/0212 (2013.01 - EP US); F01N 3/0226 (2013.01 - EP US); F01N 3/027 (2013.01 - EP US); F01N 3/30 (2013.01 - EP US); F01N 2330/10 (2013.01 - EP US); F01N 2510/00 (2013.01 - EP US); Y10S 55/30 (2013.01 - EP US)**

Cited by

DE19933442B4; FR2688028A1; EP4089266A1; CN115341977A; EP0616833A1; US5293742A; WO9416204A1; WO9300503A3

Designated contracting state (EPC)

AT DE ES FR GB IT SE

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**EP 0395840 A1 19901107; EP 0395840 B1 19921028; AR 243644 A1 19930831; AT E81888 T1 19921115; BR 9001965 A 19910730; DE 3914758 A1 19901108; DE 3914758 C2 19910912; DE 59000392 D1 19921203; ES 2035659 T3 19930416; US 5042249 A 19910827**

DOCDB simple family (application)

**EP 90102261 A 19900206; AR 31649290 A 19900329; AT 90102261 T 19900206; BR 9001965 A 19900424; DE 3914758 A 19890505; DE 59000392 T 19900206; ES 90102261 T 19900206; US 51675090 A 19900430**