

Title (en)
Process and apparatus for controlling a particulate filter

Title (de)
Verfahren und Vorrichtung zur Kontrolle eines Partikelfilters

Title (fr)
Procédé et dispositif de controle d'un filtre à particules

Publication
EP 0829622 A1 19980318 (FR)

Application
EP 97402056 A 19970903

Priority
FR 9611292 A 19960913

Abstract (en)
Process for controlling a filter for catching particles placed in the exhaust from a diesel engine with the intention of post treating the particles, using a minimum amount of energy, by adapting the geometry of a filter (1) placed in the exhaust as a function of predetermined aims linked to the performance of the motor and by adapting the volume in which the exhaust gases are filtered to the volume flow of gas entering the filter. The process limits the mean back-pressure and therefore the degradation of the motor performance. Also claimed is a device for controlling the regeneration of particles deposited on a filter in a diesel exhaust comprising a filter divided into zones and valves connected to at least one zone allowing the gas flow to be directed into different zones; at least one pressure detector upstream of the filter; at least one means of measuring the gas volume flow through the filter, and means of controlling the valves.

Abstract (fr)
L'invention concerne un procédé de contrôle d'un filtre à particules placé à l'échappement d'un moteur Diesel en vue d'un post traitement des particules et nécessitant un minimum d'énergie. Le procédé selon l'invention consiste à adapter la géométrie d'un moyen de filtration (1) placé à l'échappement en fonction de stratégies prédéterminées liées au fonctionnement dudit moteur, ledit procédé étant tel qu'il permet de limiter la contre-pression moyenne et donc la dégradation du rendement moteur. Selon l'un des modes de réalisation de l'invention, le procédé consiste à adapter le volume dans lequel les gaz d'échappement sont filtrés au débit volumique des gaz qui entrent dans le moyen de filtration (1). L'invention concerne en outre le dispositif destiné à la mise en oeuvre du procédé. <IMAGE>

IPC 1-7
F01N 3/02; B01D 46/44; B01D 46/46

IPC 8 full level
F01N 3/023 (2006.01); **B01D 46/42** (2006.01); **B01D 46/44** (2006.01); **B01D 46/46** (2006.01); **F01N 3/023** (2006.01); **F01N 3/031** (2006.01); **F01N 3/032** (2006.01); **F01N 13/04** (2010.01)

CPC (source: EP US)
F01N 3/023 (2013.01 - EP US); **F01N 3/0235** (2013.01 - EP US); **F01N 3/031** (2013.01 - EP US); **F01N 3/032** (2013.01 - EP US); **F01N 13/011** (2014.06 - EP US); **F01N 2260/14** (2013.01 - EP US); **F01N 2410/10** (2013.01 - EP US); **F01N 2410/14** (2013.01 - EP US); **F01N 2430/04** (2013.01 - EP US)

Citation (search report)
• [XY] EP 0690210 A1 19960103 - PATTAS KONSTANTIN N [GR]
• [Y] US 4502874 A 19850305 - LEVIE LEWIS A [US], et al

Cited by
FR2880914A1; FR2944555A1; EP0953737A1; FR2778118A1; EP2392790A1; US6176896B1; US8015806B2; WO2007020025A1

Designated contracting state (EPC)
AT BE CH DE ES GB GR IT LI NL SE

DOCDB simple family (publication)
EP 0829622 A1 19980318; **EP 0829622 B1 20021211**; AT E229613 T1 20021215; DE 69717743 D1 20030123; DE 69717743 T2 20030528; ES 2188878 T3 20030701; FR 2753393 A1 19980320; FR 2753393 B1 19981030; JP 4008075 B2 20071114; JP H1089049 A 19980407; US 5956944 A 19990928

DOCDB simple family (application)
EP 97402056 A 19970903; AT 97402056 T 19970903; DE 69717743 T 19970903; ES 97402056 T 19970903; FR 9611292 A 19960913; JP 24815397 A 19970912; US 92843797 A 19970912