

Title (en)

METHOD AND DEVICE FOR FILTRATION OF EXHAUST GASES FOR A DIESEL ENGINE WITH A FILTRATION SURFACE WHICH IS VARIABLE BY MEANS OF CONTROLLED OBSTRUCTION

Title (de)

VERFAHREN UND VORRICHTUNG ZUM FILTERN VON ABGASEN FÜR EINEN DIESELMOTOR MIT EINER DURCH GESTEUERTE BLOCKIERUNG VERÄNDERBARE FILTRATIONSFLÄCHE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE FILTRATION DES GAZ D'ÉCHAPPEMENT POUR MOTEUR DIESEL À SURFACE DE FILTRATION VARIABLE PAR OBSTRUCTION COMMANDÉE

Publication

EP 1573181 A2 20050914 (FR)

Application

EP 03756052 A 20030603

Priority

- FR 0350004 W 20030603
- FR 0206835 A 20020604

Abstract (en)

[origin: WO03102389A2] The invention relates to particle filters for the exhaust gases of diesel engines. The aim of the invention is to optimise the process of filtration, particularly in terms of the regeneration of the filtration means, such as to provide a satisfactory solution to the problem of clogging of said filtration means by carbon particles. According to the invention, said aim is achieved with a method whereby all or some of the particles contained in the exhaust gases are retained on the filtration means and burnt due to the action of a combustion catalyst, characterised in obstructing at least a part of the filtration means when the temperature θ_g of the exhaust gases for filtration is equal to or less than a threshold temperature θ_s , such as to limit or avoid the cooling of the obstructed part of the filtration means and to maintain the same at a temperature θ_a greater than or equal to θ_s up until the time when θ_g becomes greater than θ_s again and thus permits an accelerated regeneration of the obstructed part of the filtration means. The invention further relates to an exhaust gas filtration device which permits the carrying out of said method for filtration with continuous and regular regeneration of the filtration means.

IPC 1-7

F01N 3/035

IPC 8 full level

F01N 3/021 (2006.01); **F01N 3/035** (2006.01); **F01N 3/20** (2006.01); **F01N 13/04** (2010.01)

CPC (source: EP US)

F01N 3/0214 (2013.01 - EP US); **F01N 3/035** (2013.01 - EP US); **F01N 13/017** (2014.06 - EP US); **F01N 3/206** (2013.01 - EP US); **F01N 2250/02** (2013.01 - EP US); **F01N 2410/03** (2013.01 - EP US); **Y10S 55/10** (2013.01 - EP US); **Y10S 55/30** (2013.01 - EP US)

Citation (search report)

See references of WO 03102389A2

Citation (examination)

CH 663253 A5 19871130 - BBC BROWN BOVERI & CIE

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 03102389 A2 20031211; **WO 03102389 A9 20040219**; AU 2003253083 A1 20031219; CA 2487942 A1 20031211; CN 101405486 A 20090408; EP 1573181 A2 20050914; FR 2840354 A1 20031205; JP 2006515395 A 20060525; MX PA04012166 A 20050921; US 2005257518 A1 20051124; US 7314501 B2 20080101

DOCDB simple family (application)

FR 0350004 W 20030603; AU 2003253083 A 20030603; CA 2487942 A 20030603; CN 03815532 A 20030603; EP 03756052 A 20030603; FR 0206835 A 20020604; JP 2004509250 A 20030603; MX PA04012166 A 20030603; US 51636904 A 20041215