

Title (en)  
EXHAUST GAS CLEANING SYSTEM FOR DIESEL ENGINES.

Title (de)  
VORRICHTUNG ZUM REINIGEN DER AUSPUFFGASE EINES DIESELMOTORS.

Title (fr)  
DISPOSITIF DE PURIFICATION DES GAZ D'ECHAPPEMENT D'UN MOTEUR DIESEL.

Publication  
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Application  
**EP 79900882 A 19800311**

Priority  
• JP 3580179 A 19790326  
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Abstract (en)  
This device for purifying the exhaust gas of a diesel engine incorporates heat resisting filters (6, 7) provided at the upstream side of a catalytic layer (9) to completely remove black smoke particles in the exhaust gas by means of the filtering operation of the filters (6, 7) to thereby prevent the adverse effect caused by the particles adhered onto the catalytic layer (9). The heat resisting filters (6, 7) can be easily recovered by burning and removing the adhered black smoke particles. Further, this device also incorporates a heat resisting filter (24) and a catalytic layer (26) formed in hollow cylindrical shape and laminated together. A high pressure burner (28) or a negative pressure generator (33) are provided for blowing hot gas into the filter (24) when recovering the filters. The heat resisting filter (24) and the catalytic layer (26) are contained within a case (21) in a compact manner.

Abstract (fr)  
Ce dispositif de purification des gaz d'echappement d'un moteur diesel comprend des filtres resistants a la chaleur (6, 7) montes cote amont d'une couche catalytique (9) pour enlever completement les particules de fumee noire dans les gaz d'echappement par filtrage a l'aide des filtres (6, 7) pour empecher l'effet defavorable cause par les particules collees sur la couche catalytique (9). Les filtres a resistance thermique (6, 7) peuvent etre facilement recuperes en brulant et enlevant les particules de fumee noire collees. En outre, ce dispositif comprend egalement un filtre resistant a la chaleur (24) et une couche catalytique (26) ayant une forme cylindrique creuse et lamines l'un sur l'autre. Un bruleur a haute pression (28) ou un generateur de pression negative (33) sont prevus pour envoyer du gaz chaud dans le filtre (24) lors de la recuperation des filtres. Le filtre resistant a la chaleur (24) et la couche catalytique (26) sont contenus dans une enveloppe (21) de facon compacte.

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Cited by  
DE10211565A1; EP0112634A1; EP0151558A1; EP2166203A1; EP1101907A1; EP0216729A1; DE3121274A1; DE19737824B4; DE3721725A1; EP0292688A3; US4945722A; DE3725587A1; CN108816044A; EP0976915A3; CN110652778A; EP0412345A1; US5052178A; DE3609848A1; EP0382700A3; DE3729126A1; EP0114696A3; US6233927B1; WO0043646A1; WO2021018128A1; WO9218226A1

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