

Title (en)  
Particulate filter system for diesel engine

Title (de)  
Partikelfiltersystem für einen Dieselmotor

Title (fr)  
Système de filtre à particules pour moteur diesel

Publication  
**EP 1126138 A1 20010822 (EN)**

Application  
**EP 00301208 A 20000216**

Priority  
EP 00301208 A 20000216

Abstract (en)  
A particulate filter system for a diesel engine is disclosed in which particulate matter suspended in the exhaust gases is first charged negatively at an upstream metal screen(12) and then trapped on a downstream metal screen(13). Cooling means(3) is located within an exhaust tract(19) through which the exhaust gases from the engine pass. Filter means(1) is arranged immediately downstream of the cooling means(3). The filter means(1) is comprised of a filter medium(11) arranged in a casing(2) to trap the particulate matter contained in the exhaust gases, an upstream metal screen(12) arranged upstream of the filter medium(11) and biased negatively to charge negatively the particulate matter, and a downstream metal screen(13) arranged downstream of the filter medium(11) and biased positively to attract the particulate matter that has been charged negatively. <IMAGE>

IPC 1-7  
**F01N 3/022**; F01N 3/033; F01N 3/08

IPC 8 full level  
**F01N 3/01** (2006.01); **F01N 3/02** (2006.01); **F01N 3/022** (2006.01); **F01N 3/027** (2006.01); **F01N 3/033** (2006.01)

CPC (source: EP)  
**F01N 3/01** (2013.01); **F01N 3/02** (2013.01); **F01N 3/0226** (2013.01); **F01N 3/027** (2013.01); **F01N 3/033** (2013.01); **F01N 2260/022** (2013.01); **F01N 2470/12** (2013.01)

Citation (search report)  
• [X] EP 0346803 A1 19891220 - KRAMB MOTHERMIK GMBH & CO KG [DE]  
• [A] EP 0608783 A1 19940803 - MINNESOTA MINING & MFG [US]  
• [A] EP 0717177 A2 19960619 - ISUZU CERAMICS RES INST [JP]  
• [A] US 5088282 A 19920218 - KRAMB JAN [DE]  
• [A] GB 2264073 A 19930818 - TAYLOR MICHAEL [GB]  
• [A] WO 9956854 A1 19991111 - TOUBORG JOERN [DK]  
• [A] US 4319453 A 19820316 - MANN GAMDUR S  
• [A] DE 3800723 A1 19890727 - DAIMLER BENZ AG [DE]  
• [A] US 5557923 A 19960924 - BOLT HEINZ [DE], et al

Cited by  
FR2877692A1; EP1288456A3

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 1126138 A1 20010822**

DOCDB simple family (application)  
**EP 00301208 A 20000216**