

Title (en)

DEVICE AND METHOD FOR DETECTING PARTICLES CONTAINED IN THE EXHAUST GASES OF INTERNAL COMBUSTION ENGINES

Title (de)

VORRICHTUNG UND VERFAHREN ZUR DETEKTION VON IN VERBRENNUNGSKRAFTMASCHINENABGASEN ENTHALTENEN PARTIKELN

Title (fr)

DISPOSITIF ET PROCEDE POUR LA DETECTION DE PARTICULES CONTENUES DANS LES GAZ D'ECHAPPEMENT D'UN MOTEUR A COMBUSTION INTERNE

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Application

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Abstract (en)

[origin: WO2005005964A1] The invention relates to a device and a method for detecting particles contained in the exhaust gases of internal combustion engines, in particular ash particles. Said device can be used in particular to detect exhaust gases from reciprocating piston engines, preferably in conjunction with conventional test-bench measuring technology. The aim of the invention is to provide simplified, comparable and reproducible options for the detection of particles contained in the exhaust gases of internal combustion engines. To achieve this, the inventive device is configured in such a way that an exhaust-gas removal probe for removing a partial stream of exhaust gas is located directly in the exhaust system of the internal combustion engine. Said exhaust-gas removal probe enables the exhaust gas to be conducted to a particle collection chamber at a maintained predetermined minimum temperature via a temperature-controlled supply line. The invention also relates to a device for determining the mass flow of the partial exhaust-gas stream that is conducted through the particle collection chamber.

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