

Title (en)

Use of organometallic additives for improving soot burning in diesel fuels.

Title (de)

Verwendung von metallorganischen Additiven zur Verbesserung der Russverbrennung in Dieseldieselkraftstoffen.

Title (fr)

Utilisation d'additifs organométalliques pour améliorer la combustion de la suie d'huiles pour Diesel.

Publication

EP 0492101 B1 19950906 (DE)

Application

EP 91119110 A 19911109

Priority

DE 4041127 A 19901221

Abstract (en)

[origin: US5522905A] A diesel fuel containing an additive which improves the combustion of soot, for reducing the pollutant emission in the combustion exhaust gases from diesel engines by discontinuous burning-off of soot which has been precipitated in the exhaust gas filter, is described. For this purpose, a lithium, sodium or potassium salt of an aliphatic or aromatic alcohol, of a phenol, of an aliphatic acid or of a naphthoic acid, phenylacetic acid or cinnamic acid is added, singly or as a mixture, to the diesel fuel before the combustion of the latter in the internal combustion engine. As a result of the addition of the alkali metal salts, the ignition temperature of the soot precipitated in the particle filter is reduced, and the soot is oxidized at a temperature which is considerably lower than the normal ignition temperature. The regeneration range for the particle filter is therefore reached much more frequently in real running practice. This avoids a critical filter loading with soot, which can lead to filter damage during burning off. A further advantage of the process described is that, according to present knowledge, no additional substances with a health risk are emitted during running as a result of the addition of these alkali metal salts to the diesel fuel.

IPC 1-7

C10L 1/18; **C10L 10/02**

IPC 8 full level

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CPC (source: EP US)

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Cited by

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US 5522905 A 19960604; AT E127510 T1 19950915; DE 4041127 A1 19920220; DE 4041127 C2 19920716; EP 0492101 A1 19920701; EP 0492101 B1 19950906

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