

Title (en)

Method for controlling the lubricating oil dilution of an internal combustion engine and device for monitoring and reducing this oil dilution

Title (de)

Verfahren und Vorrichtung zur Regelung der Ölverdünnung in einer Brennkraftmaschine

Title (fr)

Dispositif et méthode pour contrôler la dilution de l'huile dans un moteur à combustion interne

Publication

**EP 1586752 A1 20051019 (EN)**

Application

**EP 04101510 A 20040414**

Priority

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Abstract (en)

The present invention relates to a method for controlling the lubricating oil dilution - in volume percent - of an internal combustion engine. Furthermore the invention relates to a device for monitoring and reducing this oil dilution. <??>It is an object of the present invention to provide a method, which enables technologies aiming at reduction of soot and NOx emissions, namely control strategies making use of in-cylinder post injection(s) required for vehicles equipped with particulates filter or lean NOx trap. <??>Another object of the present invention is to provide a device for monitoring and reducing the oil dilution. <??>According to the present invention and with respect to the first object a method is provided comprising the following steps (a) monitoring the oil dilution ratio by calculating and/or estimating the so-called oil dilution state from measured operating parameters, and (b) reducing the oil dilution ratio by promoting the evaporation of the liquid contaminants - such as water, glycol and in particular the light hydrocarbon fuel components mixed with the lubricating oil - by elevating the temperature of the diluted lubricating oil, and/or promoting the partial combustion of the diluted lubricating oil by increasing blow-by gas flow from crankcase to engine cylinder during fuel cut off in deceleration. <IMAGE>

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Citation (search report)

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