

Title (en)

METHOD FOR DETERMINING THE RATE OF RECIRCULATED EXHAUST GAS AT THE INLET OF A CYLINDER OF AN INTERNAL COMBUSTION ENGINE, AND ENGINE IMPLEMENTING SUCH A METHOD

Title (de)

VERFAHREN ZUR BESTIMMUNG DER RATE VON REZIRKULIERTEM ABLAS AM EINLASS EINES ZYLINDERS EINER VERBRENNUNGSMOTORS UND MOTOR MIT EINEM DERARTIGEN VERFAHREN

Title (fr)

PROCEDE DE DETERMINATION D'UN TAUX DE GAZ D'ECHAPPEMENT RECIRCULES A L'ENTREE D'UN CYLINDRE D'UN MOTEUR A COMBUSTION INTERNE ET MOTEUR METTANT EN UVRE UN TEL PROCEDE

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Application

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Abstract (en)

[origin: WO2012045947A1] The invention relates to a method for determining the rate of recirculated exhaust gas, referred to as the EGR rate, at the inlet of a cylinder (10) of an internal combustion engine at a moment t, said exhaust gas being conveyed in a recirculation duct (14) connecting an exhaust line (200) of the engine to an intake line (100), and said EGR rate being equal to the ratio between the flow rate of the recirculated gas and the total gas flow rate in the intake line at the location of the intake line in question and at the moment in question, wherein said method comprises: a) determining at which moment t_{intro} preceding the moment t the gas, having arrived at the inlet of the cylinder at moment t, was fed into the intake line; b) determining the EGR rate at the outlet of the recirculation line to the intake line (100) at the moment t_{intro} ; and c) determining the EGR rate at the inlet to the cylinder at moment t on the basis of the EGR rate at the outlet of the recirculation line to the intake line at moment t_{intro} , as determined in step b). The invention also relates to an engine comprising an electronic control unit (30) programmed to determine a rate of recirculated exhaust gas at the inlet to the cylinder at a moment t in accordance with said method.

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Citation (search report)

See references of WO 2012045947A1

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