

Title (en)

METHOD FOR ADJUSTING RICHNESS IN A CONTROLLED-IGNITION INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUR EINSTELLUNG DER FETTHEIT IN EINEM VERBRENNUNGSMOTOR MIT KONTROLLIERTER ZÜNDUNG

Title (fr)

PROCÉDÉ DE RÉGLAGE DE LA RICHESSE DANS UN MOTEUR À COMBUSTION INTERNE À ALLUMAGE COMMANDÉ

Publication

**EP 3596326 B1 20220817 (FR)**

Application

**EP 18713325 A 20180309**

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Abstract (en)

[origin: WO2018167406A1] The invention proposes a method for adjusting richness (r) in a controlled-ignition internal combustion engine, capable of limiting the temperature of the parts constituting the exhaust circuit during operation at high load. During operation at close to full load, the richness is adjusted to a first richness value (r1) in order to pre-cool the exhaust gases. When the temperature of the exhaust gases ( $\theta_{ech}$ ) reaches a first temperature threshold ( $\theta_1$ ), which is lower than a second temperature threshold ( $\theta_2$ ) corresponding to a reliability limit of the parts, the richness value is gradually increased, for example linearly, from the first richness value (r1) to, at a maximum, a second richness value (r2), at which the temperature of the exhaust gases is equal to the second temperature threshold ( $\theta_2$ ). If the temperature of the exhaust gases ( $\theta_{ech}$ ) reaches said second threshold ( $\theta_2$ ) before the richness has reached the second richness value (r2), the richness is immediately adjusted to said second richness value (r2).

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