

Title (en)

Process for regulating the fuel to air ratio of an air/fuel mixture feeding an internal-combustion engine, of the closed-loop type and without the working of a physical fuel to air ratio measurement.

Title (de)

Verfahren zum Regeln des Kraftstoff/Luft-Verhältnisses eines einem Verbrennungsmotor zugeführten Gemisches ohne physikalische Messung des Kraftstoff/Luft-Verhältnisses.

Title (fr)

Procédé de régulation de la richesse d'un mélange air-carburant d'alimentation d'un moteur à combustion interne, du type boucle fermée, sans exploitation de mesure physique de richesse.

Publication

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Application

**EP 89113602 A 19890724**

Priority

FR 8810114 A 19880727

Abstract (en)

The process involves determining an injection time  $t_i$  for the control of the opening of a fuel injector, by adding to a static component  $t_{is}$  of this time a sampled dynamic correction  $\Delta t_{i,n}$ , the measurement of which is given by a linear combination of at least one of the values  $\Delta t_{i,n-k}$  of the dynamic corrections made at the immediately preceding moments of sampling and of the estimated fuel to air ratio differences  $\hat{e}_{n-k}$  in relation to a nominal fuel to air ratio  $R_c$ , which are measured at the current moment and at at least one immediately preceding moment of sampling. The invention is used for regulating the fuel to air ratio of an air/fuel mixture in the event of the failure of an oxygen sensor placed in the exhaust gases of the engine.

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IPC 8 full level

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CPC (source: EP)

**F02D 41/1401** (2013.01); **F02D 41/1458** (2013.01); **F02D 2041/1433** (2013.01)

Citation (search report)

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