Title (en)

Estimation method using a non-linear adaptive filter of air-fuel mixture richness in a cylinder of a combustion engine

Title (de)

Verfahren zur Abschätzung mit einem nichtlinearen adaptiven Filter des Luft/Kraftstoffverhältnisses in einem Zylinder einer Brennkraftmaschine

Title (fr)

Méthode d'estimation par un filtre non-linéaire adaptatif de la richesse dans un cylindre d'un moteur à combustion

Publication

EP 1729001 B1 20080326 (FR)

Application

EP 06290558 A 20060403

Priority

FR 0505442 A 20050530

Abstract (en)

[origin: EP1729001A1] The method, using a sensor (SR) after the engine's exhaust manifold (CE), consists of establishing a physical model representing the real time ejection of gases from each of the cylinders and their passage through the exhaust circuit as far as the sensor and defining an estimation of the richness measured by the sensor from at least one variable of the model. The model is connected to a non-linear adaptive estimator which takes account of the estimated richness and produces a real-time estimation of the fuel mixture richness in each of the cylinders.

IPC 8 full level

F02D 41/14 (2006.01); **F02D 41/34** (2006.01)

CPC (source: EP US)

F02D 41/008 (2013.01 - EP US); **F02D 41/1458** (2013.01 - EP US); F02D 41/1402 (2013.01 - EP US); F02D 41/1454 (2013.01 - EP US); F02D 2041/1416 (2013.01 - EP US); F02D 2041/143 (2013.01 - EP US); F02D 2041/1431 (2013.01 - EP US); F02D 2041/1433 (2013.01 - EP US)

Cited by

FR2929650A1; EP2687709A4; US8050852B2; US8364377B2; WO2009011191A1; WO2008135312A1

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DOCDB simple family (application)

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