

Title (en)

Method and system to calculate the mass of air intake in a cylinder of an internal combustion engine.

Title (de)

Verfahren und System um die Luftmenge in einem Zylinder einer Brennkraftmaschine zuzurechnen.

Title (fr)

Procédé et système de calcul de la masse d'air frais dans un cylindre de moteur à combustion interne.

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Application

EP 92401750 A 19920623

Priority

FR 9108246 A 19910702

Abstract (en)

[origin: EP0522908A1] The invention relates to internal combustion engines and, more particularly, to a method and a system for calculating the mass of fresh air m_{af} present in the cylinder before combustion. For this purpose, each cylinder (C1 to C4) comprises a pressure sensor (CP1 to CP4) which provides a voltage U proportional to the pressure of the mixture contained in the cylinder. The relative pressure in each cylinder is measured at two different angular positions θ_1 and θ_2 which precede combustion after closure of the exhaust valve and these measurements make it possible to calculate the absolute pressure of the cylinder, which absolute pressure then makes it possible to calculate the mass of fresh air with the aid of a computer 27. The invention applies to motor vehicles. <IMAGE>

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Cited by

KR100826691B1; EP1443199A4; ES2446191A1; FR2897653A1; FR2893675A1; FR2835281A1; FR2876739A1; US6990957B2; WO2004090313A1; WO2007085849A3; WO2015082731A1; WO2007060349A1; EP1662121A1; WO03033897A1; EP1705359A1; EP1705359B1

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