

Title (en)

Method and system for estimating pressure in the intake manifold of an internal combustion engine

Title (de)

Verfahren und System zum Schätzen des Druckes im Ansaugkrümmer einer Verbrennungskraftmaschine

Title (fr)

Procédé et dispositif pour estimer la pression dans le collecteur d'admission d'un moteur à combustion interne

Publication

EP 1777397 B1 20081203 (FR)

Application

EP 06301084 A 20061024

Priority

FR 0510824 A 20051024

Abstract (en)

[origin: EP1777397A1] The method involves taking a value of pressure in a combustion chamber (3) of a cylinder (1) of an engine, based on an angular position of a crankshaft (5), at an instant of an engine cycle close to an instant of closing of an inlet valve (6a) of the cylinder. A ratio between a value (p col) of a pressure to be obtained and the value (p cyl rfa) of the taken pressure is modeled. The pressure in an intake manifold (6) is calculated for each taken value. The value of the pressure to be obtained and taken pressure value are related by an equation $P_{col} = A \cdot p_{cyl\ rfa} + B$, where A, B are constants. An independent claim is also included for a device for estimating pressure in an intake manifold.

IPC 8 full level

F02D 35/02 (2006.01)

CPC (source: EP)

F02D 35/023 (2013.01); **F02D 2200/0408** (2013.01)

Cited by

WO2010124758A1; GB2469826A; GB2469826B; DE112010002283T5

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1777397 A1 20070425; **EP 1777397 B1 20081203**; AT E416304 T1 20081215; DE 602006003982 D1 20090115; FR 2892453 A1 20070427; FR 2892453 B1 20101217

DOCDB simple family (application)

EP 06301084 A 20061024; AT 06301084 T 20061024; DE 602006003982 T 20061024; FR 0510824 A 20051024