

Title (en)

METHOD FOR OPERATING AN INTERNAL COMBUSTION ENGINE MAINLY INTENDED FOR A MOTOR VEHICLE

Title (de)

VERFAHREN ZUM BETREIBEN EINER BRENNKRAFTMASCHINE INSBESONDERE EINES KRAFTFAHRZEUGS

Title (fr)

PROCEDE DE FONCTIONNEMENT D'UN MOTEUR A COMBUSTION INTERNE NOTAMMENT POUR UN VEHICULE A MOTEUR

Publication

EP 0995025 A1 20000426 (DE)

Application

EP 99922056 A 19990322

Priority

- DE 9900822 W 19990322
- DE 19813381 A 19980326

Abstract (en)

[origin: DE19813381A1] The present invention relates to an internal combustion engine (1) which is mainly intended for a motor vehicle. The engine comprises an injection valve (8) for directly injecting fuel into a combustion chamber (4) either during an inlet phase according to a first operation mode or during a compression phase according to a second operation mode. A regulation device (16) is also provided for determining the amount of air (rl) supplied to the combustion chamber (4) and for controlling and/or adjusting the amount of fuel injected into said combustion chamber (4) in a different manner for each operation mode. The regulation device (16) ensures the transition from the first operation mode to the second operation mode according to the amount of air (rl) supplied into the combustion chamber (4).

IPC 1-7

F02D 41/30

IPC 8 full level

F02D 41/02 (2006.01); **F02D 41/04** (2006.01); **F02D 41/30** (2006.01)

CPC (source: EP KR US)

F02D 41/30 (2013.01 - KR); **F02D 41/3064** (2013.01 - EP US); **F02D 41/307** (2013.01 - EP US); **F02D 41/3029** (2013.01 - EP US)

Citation (search report)

See references of WO 9949197A1

Cited by

US6425398B1

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

DE 19813381 A1 19991007; DE 59906342 D1 20030828; EP 0995025 A1 20000426; EP 0995025 B1 20030723; JP 2002500722 A 20020108; KR 100616269 B1 20060828; KR 20010020197 A 20010315; US 6240895 B1 20010605; WO 9949197 A1 19990930

DOCDB simple family (application)

DE 19813381 A 19980326; DE 59906342 T 19990322; DE 9900822 W 19990322; EP 99922056 A 19990322; JP 54758699 A 19990322; KR 19997009775 A 19991022; US 42447900 A 20000217