

Title (en)

METHOD AND COMPUTER PROGRAMME FOR OPERATING AN INTERNAL COMBUSTION ENGINE AND AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN UND COMPUTERPROGRAMM ZUM BETREIBEN EINER BRENNKRAFTMASCHINE SOWIE BRENNKRAFTMASCHINE

Title (fr)

PROCEDE ET PROGRAMME INFORMATIQUE POUR LE FONCTIONNEMENT D'UN MOTEUR A COMBUSTION INTERNE ET LEDIT MOTEUR A COMBUSTION INTERNE

Publication

**EP 1325219 A1 20030709 (DE)**

Application

**EP 01974031 A 20010907**

Priority

- DE 0103449 W 20010907
- DE 10048608 A 20000930

Abstract (en)

[origin: WO0229222A1] An internal combustion engine (10) is operated by a method, according to which petrol is directly injected into a combustion chamber (12). The injection takes place at least temporarily in such a way that in association with a corresponding supply of air into the combustion chamber (12), the petrol-air mixture lies in layers in said combustion chamber (12). The aim of the invention is to reduce the petrol consumption of the internal combustion engine (10) by means of an increased compression ratio, without the risk of knocking. To achieve this, the petrol is injected exclusively during the compression phase of the internal combustion engine (12), even at wide-open throttle, by a multihole fuel injection device (22).

IPC 1-7

**F02B 17/00; F02B 1/08; F02B 9/06**

IPC 8 full level

**F02B 37/00** (2006.01); **F02B 1/08** (2006.01); **F02B 17/00** (2006.01); **F02B 23/10** (2006.01); **F02D 23/02** (2006.01); **F02D 41/02** (2006.01); **F02D 41/04** (2006.01); **F02D 41/30** (2006.01); **F02D 43/00** (2006.01); **F02D 45/00** (2006.01); **F02P 5/15** (2006.01); **F02B 75/12** (2006.01)

CPC (source: EP US)

**F02B 1/08** (2013.01 - EP US); **F02B 17/00** (2013.01 - EP US); **F02D 41/3023** (2013.01 - EP US); **F02B 23/101** (2013.01 - EP US); **F02B 2075/125** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US)

Citation (search report)

See references of WO 0229222A1

Designated contracting state (EPC)

**DE ES FR IT**

DOCDB simple family (publication)

**WO 0229222 A1 20020411**; DE 10048608 A1 20020418; DE 10048608 C2 20030403; EP 1325219 A1 20030709; JP 2004510910 A 20040408; US 2004025829 A1 20040212

DOCDB simple family (application)

**DE 0103449 W 20010907**; DE 10048608 A 20000930; EP 01974031 A 20010907; JP 2002532777 A 20010907; US 38193803 A 20030331