Title (en)
METHOD FOR OPERATING AN INTERNAL COMBUSTION ENGINE

Title (de)
VERFAHREN ZUM BETREIBEN EINER BRENNKRAFTMASCHINE

Title (fr)
PROCEDE DE FONCTIONNEMENT D'UN MOTEUR A COMBUSTION INTERNE

Publication
EP 0995026 A1 20000426 (DE)

Application
EP 99922072 A 19990324

Priority
• DE 9900871 W 19990324
• DE 19813382 A 19980326

Abstract (en)
[origin: DE19813382A1] The invention relates to an internal combustion engine (1), especially for a motor vehicle. The international combustion engine (1) has an injection valve (8) by means of which fuel can be injected directly into a combustion chamber (4) either in a first operating mode during a compression stage or in a second operating mode during a suction stage. The invention also provides for a control device (16) for switching between the two operating modes and for carrying out a control and/or adjustment, which is different in each operating mode, of the operating variables influencing the actual torque of the internal combustion engine (1) in accordance with a set-point torque. A change in the actual torque occurring during switching is detected by the control device (16) and at least one of the operating parameters is influenced by the control device (16) in accordance with said change.

IPC 1-7
F02D 41/30; F02D 41/14

IPC 8 full level
F02B 17/00 (2006.01); **F02D 41/02** (2006.01); **F02D 41/14** (2006.01); **F02D 41/30** (2006.01)

CPC (source: EP US)
F02B 17/005 (2013.01 - EP US); **F02D 41/1498** (2013.01 - EP US); **F02D 41/307** (2013.01 - EP US); F02D 41/1402 (2013.01 - EP US);
F02D 41/3029 (2013.01 - EP US); F02D 2041/389 (2013.01 - EP US); F02D 2250/18 (2013.01 - EP US); F02D 2250/21 (2013.01 - EP US)

Citation (search report)
See references of WO 9949199A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 19813382 A1 19991007; DE 59906656 D1 20030925; EP 0995026 A1 20000426; EP 0995026 B1 20030820; JP 2002500724 A 20020108;
US 6446596 B1 20020910; WO 9949199 A1 19990930

DOCDB simple family (application)
DE 19813382 A 19980326; DE 59906656 T 19990324; DE 9900871 W 19990324; EP 99922072 A 19990324; JP 54759599 A 19990324;
US 42460800 A 20000223