

Title (en)

Method for detecting the working stroke of a single-cylinder four-cycle engine

Title (de)

Verfahren zur Erkennung des Verbrennungstaktes bei einem Einzylinder-Viertaktmotor

Title (fr)

Procédé pour la détection du temps moteur d'un moteur à quatre temps monocylindrique

Publication

EP 1138899 A3 20030723 (DE)

Application

EP 01102656 A 20010207

Priority

DE 10015595 A 20000329

Abstract (en)

[origin: EP1138899A2] The method determines position and angular speed of the crankshaft. The period from the upper dead center to a set rotary angle of the crankshaft, or lower dead center, is measured, and the measured periods of two subsequent rotation of the crankshaft are measured. The combustion stroke takes place during the crankshaft rotation with the shorter period. Measuring of the periods is filtered, and a different filter time constant is used during starting and during normal engine operation.

IPC 1-7

F02D 41/06; **F02B 75/16**; **F02D 41/22**; **F02D 41/34**

IPC 8 full level

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CPC (source: EP US)

F02B 75/16 (2013.01 - EP US); **F02D 41/009** (2013.01 - EP US); **F02B 2075/027** (2013.01 - EP US); **F02D 41/0097** (2013.01 - EP US)

Citation (search report)

- [X] US 5562082 A 19961008 - NORPPA ERIC M [US], et al
- [A] GB 2337123 A 19991110 - ROVER GROUP [GB]
- [A] US 4870587 A 19890926 - KUMAGAI CHIAKI [JP]
- [A] US 4889094 A 19891226 - BEYER HANS-ERNST [DE], et al

Cited by

CN111601960A; WO2019137688A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

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EP 1138899 A2 20011004; **EP 1138899 A3 20030723**; DE 10015595 A1 20011004; JP 2001289109 A 20011019; US 2001025625 A1 20011004; US 6550452 B2 20030422

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