

Title (en)
METHOD FOR THE IMPROVEMENT OF THE REGULARITY WITH A PISTON ENGINE AND ENGINE RUNNING ACCORDING TO THIS METHOD

Publication
EP 0254005 B1 19900131 (DE)

Application
EP 87108248 A 19870606

Priority
CH 252486 A 19860623

Abstract (en)
[origin: EP0254005A1] 1. Method of evening out the steady-state running of a reciprocating internal combustion engine having three or more cylinders, wherein the mean indicated pressure of at least one cylinder is varied, characterised in that at least one order of the torsional vibrations of the drive system is minimized by : in a first step of the method : measuring the torsional vibrations at the drive shaft or at a shaft (12, 22) connected kinematically to the drive shaft, by means of a torsional vibration meter (3), in a second step of the method : subjecting the measured torsional vibrations to a Fourier analysis for torsional vibrations, in a third step of the method : determining correction factors for the variation of the mean indicated cylinder pressure of at least two cylinders in a computer from the ascertained amounts and phase positions of the torsional vibration amplitudes and from comparison of predetermined torsional vibrations produced by the individual cylinders (161, 162, 163, 164, 165, 166), in a fourth step of the method ; the correction factors effect a variation of the amount injected per injection step of the injection pump (61, 62, 63, 64, 65, 66) at least one of these two cylinders.

IPC 1-7
F02D 31/00; **F02D 41/14**

IPC 8 full level
F02B 75/06 (2006.01); **F02B 75/20** (2006.01); **F02B 77/00** (2006.01); **F02D 41/14** (2006.01); **F02D 41/36** (2006.01); **F02D 45/00** (2006.01); **F02B 75/18** (2006.01)

CPC (source: EP)
F02B 75/20 (2013.01); **F02D 41/1498** (2013.01); **F02B 2075/1824** (2013.01); **F02D 2041/288** (2013.01); **F02D 2200/1015** (2013.01)

Cited by
KR100940528B1; EP1739296A1; CN115217664A; EP1435446A3; CN1044732C; US7082932B1; CN115031978A; EP0447697A3; EP0710841A3; US7212900B2; WO2005124132A1; WO9429580A1; WO0055484A1

Designated contracting state (EPC)
DE FR GB IT NL

DOCDB simple family (publication)
EP 0254005 A1 19880127; **EP 0254005 B1 19900131**; CH 674398 A5 19900531; DE 3761577 D1 19900308; DK 150087 A 19871224; DK 150087 D0 19870324; DK 162853 B 19911216; DK 162853 C 19951204; FI 871638 A0 19870414; FI 871638 A 19871224; FI 89404 B 19930615; FI 89404 C 19930927; JP 2686261 B2 19971208; JP S6312864 A 19880120

DOCDB simple family (application)
EP 87108248 A 19870606; CH 252486 A 19860623; DE 3761577 T 19870606; DK 150087 A 19870324; FI 871638 A 19870414; JP 15523987 A 19870622