

Title (en)
METHODS TO DETERMINE THE PHASE ANGLE OF A FOUR STROKE INTERNAL COMBUSTION ENGINE WITH AN ODD NUMBER OF CYLINDERS

Title (de)
VERFAHREN ZUR BESTIMMUNG DER PHASENLAGE BEI EINER 4-TAKT BRENNKRAFTMASCHINE MIT UNGERADER ZYLINDERZAHL

Title (fr)
PROCEDE PERMETTANT DE DETERMINER L'ANGLE DE PHASE D'UN MOTEUR A COMBUSTION INTERNE A QUATRE TEMPS ET A NOMBRE IMPAIR DE CYLINDRES

Publication
EP 0862692 A1 19980909 (DE)

Application
EP 97938754 A 19970809

Priority

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Abstract (en)
[origin: WO9812432A1] Disclosed are methods to determine the phase angle of a four stroke internal combustion engine with an odd number of cylinders and without a camshaft detector. According to said methods, recognition of phase angle occurs by emission of a first signal from a crankshaft angle sensor presenting a singularity whereby said signal is placed in relation to a second signal, which is for example a speed signal or an output signal of an inlet-manifold air-pressure sensor and the shape of the second signal is evaluated in the range of singularity of the first signal. As this signal shape is variable according to whether the crankshaft is in first or second revolution, the phase angle can be determined precisely.

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IPC 8 full level
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