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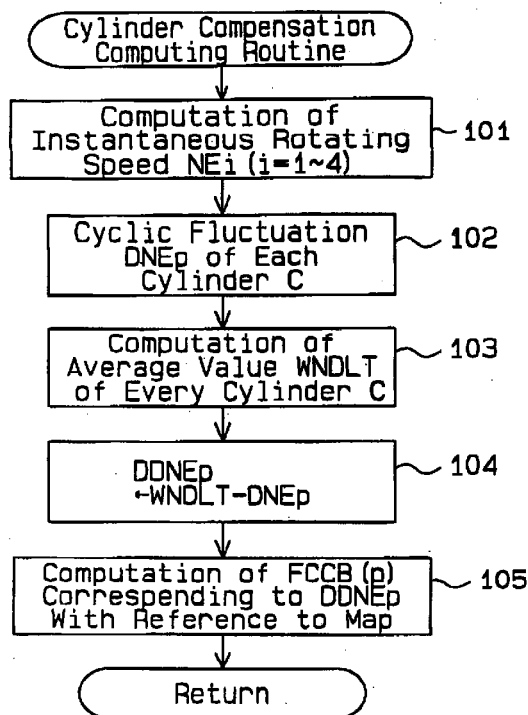
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(54) **Apparatus for determining malfunctioning of fuel injection control system**

(57) A system for detecting malfunctions in an apparatus for controlling a fuel injection mechanism of a diesel engine (2) provided with a plurality of cylinders (C) is disclosed. Each cylinder (C) accommodates a piston (42) for producing rotation of a crankshaft (40) and a nozzle (4) for performing fuel injection during each reciprocation cycle of the piston (42). Injection amount of the fuel is altered based on a compensation value computed for each cylinder (C) so as to minimize a value indicating cyclic rotating speed fluctuation of the crankshaft (40) produced by each cylinder (C). The system is characterized by memory means for storing an initial data indicative of the compensation value of each cylinder (C) computed during an initial injection stage of each nozzle (4), comparing means for comparing a malfunction judgement value with a magnitude obtained by computing the difference or ratio between an actual compensation value and the initial data, and determining means for determining the malfunctioning of the apparatus when the computed magnitude exceeds the predetermined range.

Fig.3





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EUROPEAN SEARCH REPORT

Application Number
EP 96 12 0868

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A	US 5 213 081 A (FUJIMOTO TAKANORI) 25 May 1993 * abstract * * figures 1,3,4 * * column 1, line 25 - column 2, line 31 * * column 4, line 60 - column 6, line 68 *	1-4,6,7	TECHNICAL FIELDS SEARCHED (Int.Cl.6) F02D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 13 April 1999	Examiner Trotureau, D
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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