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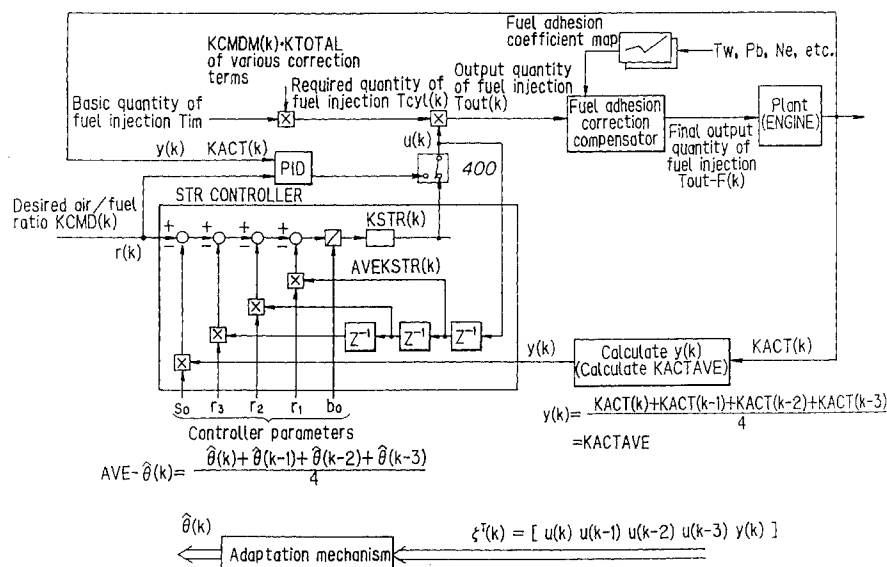
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(54) Fuel metering control system for internal combustion engine

(57) A fuel metering control system for an internal combustion engine including a feedback loop having an adaptive controller and an adaptation mechanism that estimates controller parameters $\hat{\theta}$. The adaptive controller corrects the quantity of fuel injection to bring a controlled variable obtained at least based on an output of

said air/fuel ratio sensor, to a desired value. The adaptation mechanism is input with the controlled variable once per prescribed crank angle such as a TDC of a certain cylinder and estimates the controller parameters. Using the controller parameters, it is discriminated whether system operates stably.

FIG. 7





European Patent
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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP 0 330 934 A (HITACHI LTD) 6 September 1989 * column 5, line 19 - column 10, line 40 * ---	1	F02D41/14 F02D41/04 G05B13/02
A	EP 0 553 570 A (HONDA MOTOR CO LTD) 4 August 1993 * page 4, line 19 - page 9, line 36 * ---	1	
A	EP 0 582 085 A (HONDA MOTOR CO LTD) 9 February 1994 * the whole document * ---		
A	EP 0 312 835 A (NIPPON DENSO CO) 26 April 1989 * the whole document * ---	1	
A	US 5 363 648 A (KOMORIYA ISAO ET AL) 15 November 1994 * the whole document * -----	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			G05B F02D
Place of search	Date of completion of the search	Examiner	
THE HAGUE	26 October 1998	Kelperis, K	
CATEGORY OF CITED DOCUMENTS		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	
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		& : member of the same patent family, corresponding document	

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