



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**03.02.1999 Bulletin 1999/05**

(51) Int Cl.<sup>6</sup>: **F02D 41/14, F02D 41/04**

(43) Date of publication A2:  
**03.07.1996 Bulletin 1996/27**

(21) Application number: **96300007.0**

(22) Date of filing: **02.01.1996**

(84) Designated Contracting States:  
**DE FR GB**

(30) Priority: **30.12.1994 JP 340033/94**

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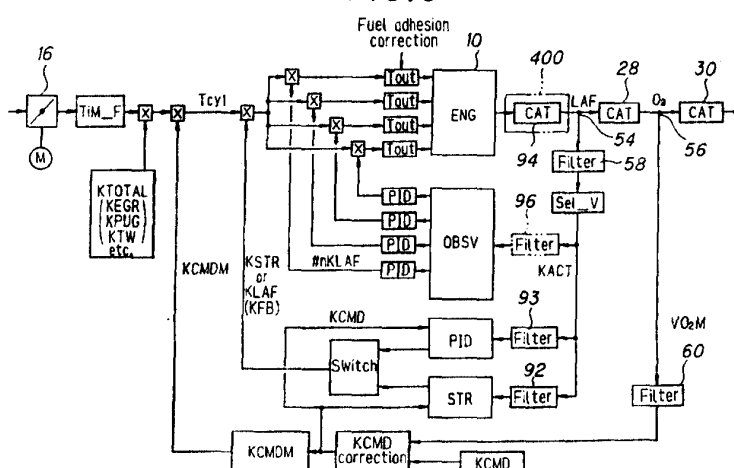
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(54) **Fuel metering control system for internal combustion engine**

(57) A fuel metering control system for an internal combustion engine having a plurality of cylinders. The system includes an air/fuel ratio sensor and engine operating condition detecting means for detecting engine operating conditions at least including engine speed and engine load. The basic quantity of fuel injection is determined by retrieving mapped data according to the engine speed and engine load. An adaptive controller is provided to calculate a first feedback correction coefficient

such that the detected air/fuel ratio is brought to a desired air/fuel ratio. The desired air/fuel ratio is corrected by a second air/fuel ratio sensor installed downstream of a catalytic converter. A PID controller is added to calculate a second feedback correction coefficient to correct the quantity of basic fuel injection such that variance between the individual cylinder air/fuel ratios is decreased. The quantity of fuel injection is further corrected by fuel adhered on an intake manifold wall.

**FIG. 8**





European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 96 30 0007

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
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P,A	EP 0 643 212 A (HONDA MOTOR CO LTD) 15 March 1995 * page 5, line 47 - page 12, line 48 * -----		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 14 December 1998	Examiner Moualed, R
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			

EPO FORM 1503 03.82 (P04C01)

**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.  
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