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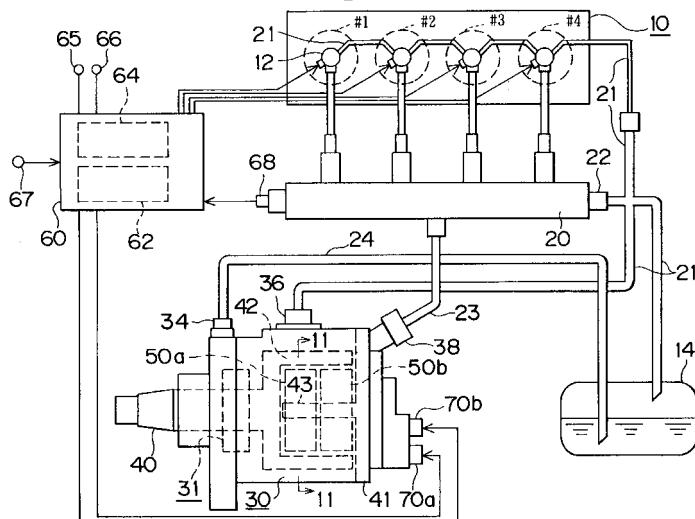
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(54) Fuel pressure control device and method for high pressure fuel injection system

(57) A fuel pressure control device and method for a high pressure fuel injection system serve to ensure good control and response characteristics irrespective of a transition state or a stationary state. Injectors (12) injecting a fuel into combustion chambers of cylinders (#1 to #4) of an engine (10) are connected to a common rail (20) and supplied with a high pressure fuel from the common rail (20). A fuel pump (30) pressurizes fuel in a fuel tank (14) to high pressure and force-feeds to the

common rail (20). An ECU (60) sets closing timings of regulation valves (70a, 70b) of a fuel pump (30) based on predetermined control gains, thereby changing fuel force feed quantity and controlling fuel pressure within the common rail (20) to coincide with target fuel pressure. The ECU (60) variably sets the control gains based on the bulk modulus of the fuel calculated based on the pressure and temperature of the fuel within the common rail (20).

FIG. 1





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4	The present search report has been drawn up for all claims		
	Place of search	Date of completion of the search	Examiner
	The Hague	8 April 2005	Trottereau, D
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 ----- & : member of the same patent family, corresponding document	
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EUROPEAN SEARCH REPORT

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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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