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(72) Inventors:
• **Sugiyama, Tatsumasa**
Toyota-shi, Aichi-ken, 471-8571 (JP)
• **Katou, Yuuichirou**
Toyota-shi, Aichi-ken, 471-8571 (JP)

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(74) Representative: **KUHNEN & WACKER**
Patent- und Rechtsanwaltsbüro
Postfach 19 64
85319 Freising (DE)

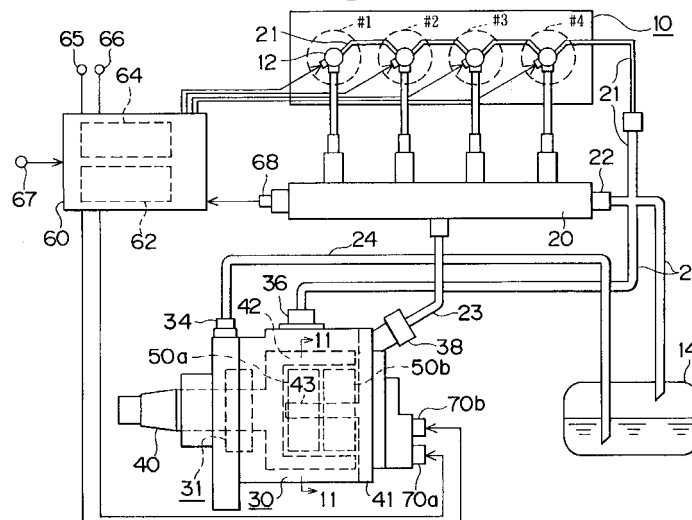
(71) Applicant: **TOYOTA JIDOSHA KABUSHIKI
KAISHA**
Toyota-shi, Aichi-ken 471-8571 (JP)

(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 (#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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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 8 April 2005	Examiner Trotureau, D
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