



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
31.08.2005 Bulletin 2005/35

(43) Date of publication A2:
11.05.2005 Bulletin 2005/19

(21) Application number: **04026231.3**

(22) Date of filing: **04.11.2004**

(51) Int Cl.7: **F02D 41/38**, F02D 41/14,
F02D 41/24, F02D 41/30,
F02M 63/02, F02M 59/20,
F02M 59/46

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR**
Designated Extension States:
AL HR LT LV MK YU

(30) Priority: **05.11.2003 JP 2003376085**

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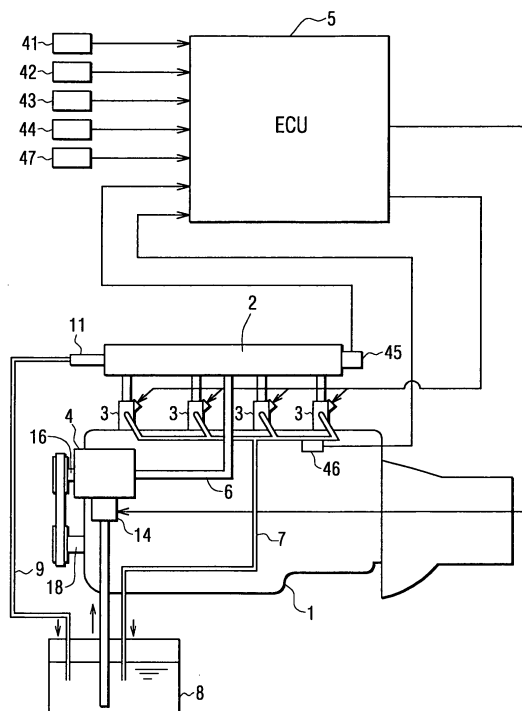
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(54) **Common rail fuel injection apparatus**

(57) A common rail fuel injection apparatus includes a common rail (2), an injector (3), a supply pump (4), an inlet amount control valve (14), feedback control means, correction means, storage means, and a control device (5). The common rail (2) accumulates high-pressure fuel. The injector (3) injects the high-pressure fuel. The supply pump (4) sucks and pressurizes fuel to be supplied to the common rail (2). The inlet amount control valve (14) controls a flow amount of fuel sucked into the supply pump (4). The feedback control means obtains a proportional correction value and an integral correction value based on a pressure difference (ΔPC) between a target rail pressure and an actual rail pressure of the common rail (2) and obtains a driving current value or a pump discharge amount of the supply pump (4). The correction means obtains a correction value to correct a variation of the pump discharge amount. The storage means stores the correction value obtained by the correction means as a learned value when a condition has been satisfied. The control device corrects the driving current value or the pump discharge amount based on the learned value stored in the storage means.

FIG. 5





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Application Number
EP 04 02 6231

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EPO FORM 1503 03.82 (P04C01)



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**ANNEX TO THE EUROPEAN SEARCH REPORT
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