

Title (en)

Common rail fuel injection apparatus

Title (de)

Common Rail Einspritzvorrichtung

Title (fr)

Dispositif d'injection common rail

Publication

EP 1529940 A3 20050831 (EN)

Application

EP 04026231 A 20041104

Priority

JP 2003376085 A 20031105

Abstract (en)

[origin: EP1529940A2] 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 (DELTA PC) 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. <IMAGE>

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