Title (en)

Common-rail fuel-injection system

Title (de)

Common-Rail-Kraftstoffeinspritzsystem

Title (fr)

Système d'injection de combustible à rampe commune

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Application

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Priority

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Abstract (en)

A common-rail fuel-injection system is disclosed, in which varying the effective stroke of an actuator-operated valve (42) results in adjusting an amount of fuel leaking out of a pressure-control chamber (40), thereby controlling the fuel injection in compliance with the engine operating conditions. When the lift of the valve (42) is small and therefore the opening area of the valve (42) is less than the cross-sectioned area of a fuel leakage path (41), the leakage of high-pressure fuel out of the pressure is defined by the lift of the valve (42). According to the pressure fall in the pressure-control chamber (40), the lift of a needle valve (24) is regulated to thereby control the fuel-injection rating, namely, the quantity of fuel injected and the rate of change of the fuel-injection rating. An exciting signal applied to the actuator (65) to operate the its associated valve is determined in accordance with a desired fuel-injection rating or the like, which is found in compliance with the engine operating conditions. <IMAGE>

IPC 1-7 (main, further and additional classification)

F02M 47/02; F02D 41/38

IPC 8 full level (invention and additional information)

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CPC (invention and additional information)

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