

Title (en)

Fuel pressure control device for high pressure fuel injection system

Title (de)

Kraftstoffdrucksteuervorrichtung für ein Hochdruckkraftstoffeinspritzsystem

Title (fr)

Dispositif de commande de pression pour un system d'injection de carburant à haute pression

Publication

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Application

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Priority

JP 4135899 A 19990219

Abstract (en)

The present invention proposes a fuel pressure control apparatus and method for a high-pressure fuel injection system which sufficiently reduces a fuel pressure in an accumulator line while preventing the high-pressure fuel injection system from being adversely affected. The fuel pressure control apparatus for the high-pressure fuel injection system is equipped with an accumulator line for accumulating fuel supplied from a fuel pump at a high pressure and supplying the fuel to fuel injection valves, and with a relief valve for discharging fuel in the accumulator line. Furthermore, the apparatus is equipped with fuel pressure control means for detecting a fuel pressure in the accumulator line and driving the relief valve so as to reduce the fuel pressure in accordance with a pressure reduction requirement based on a comparison between the detected fuel pressure and a target pressure. The fuel pressure control means controls an opening movement of the relief valve such that the open-valve period of the relief valve does not overlap with an open-valve period of the fuel injection valves, a timing for detecting fuel pressure, a period for force-feeding fuel from the fuel pump or the like. <IMAGE>

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Citation (applicant)

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EP1900930A1; FR2862092A1; CN109113882A; US2012097131A1; US9624867B2; US7216627B2; US7178506B2; US7281517B2; US7637242B2; US7296558B2; WO2005111409A1; WO2020088793A1; US7848868B2; EP1669579A2; EP2640959A1; EP2771557A1

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