

Title (en)

Fuel pressure control apparatus

Title (de)

Einrichtung zur Brennstoffdrucksteuerung

Title (fr)

Dispositif de commande de pression de combustible

Publication

EP 1304471 A2 20030423 (EN)

Application

EP 03001464 A 20000203

Priority

- EP 00102392 A 20000203
- JP 4135899 A 19990219

Abstract (en)

The present invention proposes a fuel pressure control apparatus for a high-pressure fuel injection system which sufficiently reduces a fuel pressure in an accumulator line (20) 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 (20) for accumulating fuel supplied from a fuel pump (30) at a high pressure and supplying the fuel to fuel injection valves (12), and with a relief valve (22) for discharging fuel in the accumulator line (20). Furthermore, the apparatus is equipped with fuel pressure control means (68) for detecting a fuel pressure in the accumulator line (20) and driving the relief valve (22) 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. An electronic control unit (60) determines a detection timing of the fuel pressure in such a manner as to prevent a period during which the fuel pump (30) force-feeds fuel from overlapping with the detection timing of the fuel pressure by detection means (68). <IMAGE>

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Citation (applicant)

- JP H09209870 A 19970812 - ZEXEL CORP
- US 5727525 A 19980317 - TSUZUKI YOSHIHIRO [JP]
- JP H1054318 A 19980224 - DENSO CORP

Cited by

EP2085596A3

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EP 1030048 A2 20000823; **EP 1030048 A3 20020327**; **EP 1030048 B1 20041229**; DE 60016989 D1 20050203; DE 60016989 T2 20050609; DE 60022233 D1 20050929; DE 60022233 T2 20060309; EP 1304470 A2 20030423; EP 1304470 A3 20040519; EP 1304470 B1 20050824; EP 1304471 A2 20030423; EP 1304471 A3 20040519; ES 2232336 T3 20050601; ES 2243809 T3 20051201; JP 2000240494 A 20000905; JP 4023020 B2 20071219

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