

Title (en)

Injection quantity control apparatus of diesel engine and method

Title (de)

Verfahren und Vorrichtung zur Steuerung der Einspritzmenge einer Dieselmotormaschine

Title (fr)

Dispositif et méthode de commande de la quantité d'injection d'un moteur diesel

Publication

EP 0922845 A3 20001018 (EN)

Application

EP 98123369 A 19981208

Priority

JP 33884797 A 19971209

Abstract (en)

[origin: EP0922845A2] In fuel injection quantity control of a diesel engine, to suppress deterioration of drivability caused by smoothing processing during increase in the fuel injection for acceleration, a road load injection quantity lower limit is set as a basic fuel injection quantity QBASE at start of the smoothing processing for acceleration. This road load injection quantity lower limit is the one corresponding to a minimum friction allowed in the diesel engine. Thus, if a diesel engine to be controlled has a friction smaller than the average friction, the fuel injection quantity can be prevented from being increased sharply far beyond an actual road load injection quantity, thus suppressing the acceleration shock to prevent deterioration of drivability. Further, the stepwise increase in the fuel injection quantity for acceleration at the start of smoothing processing is maintained, thus satisfying the acceleration performance. <IMAGE>

IPC 1-7

F02D 41/10; **F02D 41/38**

IPC 8 full level

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Citation (search report)

- [A] EP 0535671 A2 19930407 - HONDA MOTOR CO LTD [JP]
- [A] US 5465700 A 19951114 - NISHIMOTO KOJI [JP]
- [PA] EP 0839998 A2 19980506 - DAIMLER BENZ AG [DE]
- [A] EP 0449160 A2 19911002 - NIPPON DENSO CO [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 322 (M - 440) 18 December 1985 (1985-12-18)
- [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 107 (M - 0942) 27 February 1990 (1990-02-27)

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