

Title (en)
Fuel injector fixing structure of a fuel injection valve of a common rail of a vehicle

Title (de)
Befestigungsstruktur einer Kraftstoffeinspritzdüse einer Fahrzeugkraftstoffleiste

Title (fr)
Structure de fixation d'injecteur de carburant sur la rampe de carburant d'un véhicule

Publication
EP 2492489 A1 20120829 (EN)

Application
EP 12156854 A 20120224

Priority
KR 20110017424 A 20110225

Abstract (en)
A fuel injector fixing structure of a fuel rail of a vehicle includes a main pipe having two ends connected to a plug and an end cap; a plurality of injector holders fixed onto an outer surface of the main pipe at predetermined intervals; a mounting lug disposed adjacent to the injector holder; a fuel injector detachably fixed into the injector holder; a damping member detachably attached to the fuel injector and elastically supporting the fuel injector with respect to the injector holder; and a fixing member for detachably fixing the fuel injector on to the injector holder. Accordingly, since a fuel injector is elastically supported by a damping member and is fixed by an additional fixing member, a high pressure applied to the fuel injector when the fuel injector injects fuel may be absorbed and departure of the fuel injector when a fuel rail is transferred, assembled, removed, or replaced may be prevented while the role and function of the damping member is maintained.

IPC 8 full level
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Citation (search report)
• [X] EP 1892408 A1 20080227 - SIEMENS AG [DE]
• [A] WO 03038267 A1 20030508 - BOSCH GMBH ROBERT [DE], et al
• [A] EP 2221469 A1 20100825 - CONTINENTAL AUTOMOTIVE GMBH [DE]
• [A] US 6276339 B1 20010821 - SHEBERT JR LEONARD LEE [US], et al

Cited by
JP2015034533A; US2013220277A1; US9212641B2; US2013220276A1; US9032934B2; CN107965407A; US2018128223A1; US10145344B2; EP2896817A1; US2014123952A1; US9435303B2; US10047712B2; US9938948B2

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