

Title (en)  
Injection pump system

Title (de)  
Einspritzpumpensystem

Title (fr)  
Système de pompe à injection

Publication  
**EP 2647824 A1 20131009 (EN)**

Application  
**EP 12163322 A 20120405**

Priority  
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Abstract (en)  
The present invention relates to an injection pump system (1). An injection pump (3) is provided for supplying high pressure fuel. A low pressure fuel line (5) is provided in fluid communication with an inlet of the injection pump (3). A high pressure fuel line (7) is provided in fluid communication with an outlet of the injection pump (3) and a fuel rail. A control valve (27) is provided for controlling filling of the injection pump (3). The injection pump system is provided with a control unit for controlling operation of the control valve (27). The control unit is configured to close the control valve (27) to inhibit the supply of fuel to the injection pump when the rail pressure is within a target pressure range. The invention also relates to a method of operating an injection pump system. An aspect of the invention also relates to a fuel injection system.

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Citation (applicant)  
• EP 2287462 A1 20110223 - DELPHI TECHNOLOGIES HOLDING [LU]  
• EP 2302194 A1 20110330 - DELPHI TECHNOLOGIES HOLDING [LU]

Citation (search report)  
• [X] EP 2042720 A1 20090401 - MAGNETI MARELLI POWERTRAIN SPA [IT]  
• [X] EP 1923565 A1 20080521 - FIAT RICERCHE [IT]  
• [X] EP 1469190 A1 20041020 - DENSO CORP [JP]

Cited by  
US9587578B2; US9353699B2; EP3438445A1; GB2565093A; GB2565093B; US9874185B2; US10161346B2; US9243598B2; US9458806B2

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