

Title (en)
FUEL-INJECTION CONTROLLER FOR ENGINE

Title (de)
KRAFTSTOFFEINSPRITZUNGSSTEUERUNG FÜR EINEN MOTOR

Title (fr)
ORGANE DE COMMANDE D'INJECTION DE CARBURANT POUR MOTEUR

Publication
EP 2896814 A4 20160615 (EN)

Application
EP 13837383 A 20130321

Priority
• JP 2012200378 A 20120912
• JP 2013058065 W 20130321

Abstract (en)
[origin: EP2896814A1] There is provided a fuel-injection controller for an engine (1) that includes an air intake passage fuel injection valve (10) for injecting fuel to an intake port (4), and an inside cylinder fuel injection valve (11) for injecting fuel pressurized by a high pressure pump (20) into a combustion chamber (3). The high pressure pump (20) includes a plunger that reciprocates four times in a compressing chamber per one rotation of a drive shaft driven by the engine (1) to pressurize fuel in the compressing chamber, and a spill valve that opens and closes a supply passage of fuel to the compressing chamber. In addition, the fuel-injection controller for an engine includes a control unit (32) that controls driving of the spill valve. When the inside cylinder fuel injection valve (11) injects fuel, the control unit (32) changes the control of the spill valve to be driven twice per one rotation of the drive shaft during middle load driving with a load lower than a load during high load driving from four times per one rotation of the drive shaft during the high load driving.

IPC 8 full level
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CPC (source: EP)
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Citation (search report)
• [XYI] US 2006272618 A1 20061207 - IWAHASHI TAKESHI [JP]
• [IY] EP 1531262 A2 20050518 - TOYOTA MOTOR CO LTD [JP]
• [Y] WO 2006011537 A1 20060202 - TOYOTA MOTOR CO LTD [JP], et al
• See references of WO 2014041831A1

Cited by
CN107044355A

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EP 2896814 A1 20150722; EP 2896814 A4 20160615; EP 2896814 B1 20181107; JP 2014055539 A 20140327; JP 6024882 B2 20161116; WO 2014041831 A1 20140320

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