

Title (en)

Injectors fixing structure for engines

Title (de)

Befestigungsstruktur von Einspritzventilen für Brennkraftmaschinen

Title (fr)

Agencement de fixation des injecteurs pour moteurs à combustion interne

Publication

**EP 0775820 A1 19970528 (EN)**

Application

**EP 96308331 A 19961118**

Priority

JP 32792595 A 19951124

Abstract (en)

In this injector fixing structure for engines, injectors 1 provided with fuel supply bosses 16 and fuel return bosses 17 are disposed between two cams 10, 11 or 12, 13 mounted on valve driving cam shafts 8, 9, and are fixed to a cylinder head 2 by clamp members 25. The fuel supply bosses and fuel return bosses have clamping pressure receiving surface portions 20, 21, and the injectors are fixed to the cylinder head by pressing these clamping pressure receiving surface portions by the clamp members. Accordingly, the portions of the injectors clamped are lower, and the height of the injectors as a whole decreases, so that the fixing of the clamp members to the cylinder head is done easily, whereby the injector fixing structure is formed compactly. The injectors are provided with turning stopping portions 39, 40 adapted to be engaged with the clamp members. <IMAGE>

IPC 1-7

**F02M 61/14**

IPC 8 full level

**F02F 1/24** (2006.01); **F02M 61/14** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP)

**F02M 61/14** (2013.01); **F02B 3/06** (2013.01); **F02B 2275/18** (2013.01)

Citation (applicant)

- JP H0317171 U 19910220
- JP H0669359 U 19940930

Citation (search report)

- [X] DE 4205263 A1 19930826 - KLOECKNER HUMBOLDT DEUTZ AG [DE]
- [A] DE 4315233 A1 19940728 - DAIMLER BENZ AG [DE]
- [A] US 3325104 A 19670613 - ROOSA VERNON D
- [PA] EP 0724075 A1 19960731 - TOYOTA MOTOR CO LTD [JP]
- [E] EP 0751290 A1 19970102 - ISUZU MOTORS LTD [JP]

Cited by

EP1001161A3; EP0843091A1; US5878719A; EP2664781A1; US6269798B1; US7412970B2

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