

Title (en)  
Engine assembly method and injection system

Title (de)  
Verfahren zur Montage eines Motors und Einspritzzusammenbau

Title (fr)  
Procédé d'assemblage d'un moteur et système d'injection

Publication  
**EP 1152146 A3 20040128 (DE)**

Application  
**EP 01109829 A 20010421**

Priority  
US 56369100 A 20000503

Abstract (en)  
[origin: EP1152146A2] A method for assembling a fuel injection IC engine has each cylinder fitted with an injector fed by an individual fuel pump. The pump, injector and connecting pipe are pre-assembled and fitted as a module, after leak checking. The fuel pump (12) is fitted with a cam follower (14) and is secured into a recess (58) in the engine block by a fastener (68). The injector (18) is secured into a recess (56) in the cylinder block by a second fastener (62). The recesses have parallel bores for a simple assembly process.

IPC 1-7  
**F02M 61/14**; **F02M 39/00**; **F02M 59/48**

IPC 8 full level  
**F02F 1/24** (2006.01); **F02M 39/00** (2006.01); **F02M 59/48** (2006.01); **F02M 61/14** (2006.01)

CPC (source: EP US)  
**F02F 1/242** (2013.01 - EP US); **F02M 39/00** (2013.01 - EP US); **F02M 59/48** (2013.01 - EP US); **F02M 61/14** (2013.01 - EP US)

Citation (search report)

- [XA] EP 0543301 A1 19930526 - KLOECKNER HUMBOLDT DEUTZ AG [DE]
- [PX] WO 0114728 A1 20010301 - STANADYNE AUTOMOTIVE CORP [US]
- [A] DE 19517374 A1 19951116 - CATERPILLAR INC [US]

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1152146 A2 20011107**; **EP 1152146 A3 20040128**; **EP 1152146 B1 20050831**; AT E303510 T1 20050915; AU 3897401 A 20011108; AU 775218 B2 20040722; BR 0101666 A 20011226; CA 2342821 A1 20011103; CA 2342821 C 20041012; DE 50107247 D1 20051006; JP 2001355532 A 20011226; US 6321724 B1 20011127

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