

Title (en)  
FUEL-INJECTION SYSTEM FOR INTERNAL COMBUSTION ENGINES

Title (de)  
KRAFTSTOFFEINSPRITZSYSTEM FÜR BRENNKRAFTMASCHINEN

Title (fr)  
SYSTEME D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE

Publication  
**EP 1339977 A1 20030903 (DE)**

Application  
**EP 01997639 A 20011117**

Priority  
• DE 0104337 W 20011117  
• DE 10058130 A 20001122

Abstract (en)  
[origin: DE10058130A1] The fuel injection system for an internal combustion engine has a high pressure collection chamber (7), in which fuel is held under high pressure and at least one fuel injection valve (15) connected to the high pressure collection chamber and through which pressurized fuel can be injected via injection apertures which form an injection cross-section into the combustion chamber of the engine. A control chamber (62) is provided, which is limited by a longitudinally displaceable piston (60) and is effectively connected with the fuel injection valve, so that the injection cross-section of the injection valve is controlled dependent upon the hydraulic pressure in the control chamber. In a low pressure collection chamber (72) connected to the control chamber a predetermined fuel pressure is maintained, which is lower than that in the high pressure chamber, i.e. to the extent of less than one fifth of it.

IPC 1-7  
**F02M 63/00**; F02M 61/16; F02M 61/20; F02M 45/08; F02M 47/04

IPC 8 full level  
**F02M 55/02** (2006.01); **F02M 45/08** (2006.01); **F02M 47/00** (2006.01); **F02M 47/02** (2006.01); **F02M 47/04** (2006.01); **F02M 61/10** (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR US)  
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Cited by  
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**DE 10058130 A1 20020523**; CZ 20022393 A3 20031217; DE 50105731 D1 20050428; EP 1339977 A1 20030903; EP 1339977 B1 20050323; JP 2004514826 A 20040520; KR 20020069263 A 20020829; PL 355416 A1 20040419; US 2003075154 A1 20030424; US 6925988 B2 20050809; WO 0242637 A1 20020530

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