

Title (en)  
FUEL INJECTION PUMP

Publication  
**EP 0339290 A3 19900711 (DE)**

Application  
**EP 89105697 A 19890331**

Priority  
DE 3813880 A 19880425

Abstract (en)  
[origin: EP0339290A2] A valve insert (12) comprises a valve cylinder (13) in which a valve body (21) loaded by a compression spring is arranged. The valve body (21) has a sealing face which closes a pressure relief line (7). The diameter (17) of the pressure relief line is smaller than the valve cylinder diameter (18). The diameter (17) of the pressure relief line (7) is selected so that the inlet chamber pressure acting on the sealing face moves the valve body (21) from the valve seat (20) against the force of the compression spring (26) acting on the valve body (21) and opens an extended pressure relief line (37). Once the valve body (21) has been lifted off the pressure relief line (7), the inlet chamber pressure acts on the entire cross-section of the valve body (21) and the force now formed from the cross-section of the valve body (21) and the inlet chamber pressure set up at idling speed attains a value compared to the force of the compression spring (26) which holds the valve body (21) off the pressure relief line (7). <?>This ensures that the cold start acceleration only functions when initially running up the internal combustion engine. A rapid cold start acceleration is advantageously achieved and only a brief high engine noise is audible. <IMAGE>

IPC 1-7  
**F02M 59/46; F02M 59/42; F02D 1/18**

IPC 8 full level  
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Citation (search report)  
• [X] DE 3148215 A1 19830609 - BOSCH GMBH ROBERT [DE]  
• [A] DE 3142145 A1 19830721 - BAYERISCHE MOTOREN WERKE AG [DE]  
• [A] GB 2055489 A 19810304 - BOSCH GMBH ROBERT

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