

Title (en)  
Fuel injection apparatus

Title (de)  
Kraftstoffeinspritzvorrichtung

Title (fr)  
Dispositif d'injection de combustible

Publication  
**EP 1162364 B1 20020925 (EN)**

Application  
**EP 01113920 A 20010607**

Priority  
JP 2000177171 A 20000608

Abstract (en)  
[origin: EP1162364A1] Orifice pieces (100) are disposed in connecting portions between a common rail (3) and high-pressure fuel pipes (11) that supply high-pressure fuel to fuel injection valves (10a-10d). Each orifice piece (100) has, in its interior, a fuel passage that is formed by an inlet-side taper portion (111), a small-diameter constricted portion (113), and an outlet-side taper portion (115). The inclination angle of a wall surface of the outlet-side taper portion (115) is set smaller than the inclination angle of a wall surface of the inlet-side portion (111). The provision of the outlet-side taper portion (115) with a small inclination angle prevents an increase in the resistance of flow of fuel in the direction from the common rail (3) toward a corresponding one of the fuel injection valves (10a-10d). The provision of the inlet-side taper portion (111) with a great inclination angle increases the fuel flow resistance due to pressure pulsation from the corresponding one of the fuel injection valves (10a-10d) toward the common rail. <IMAGE>

IPC 1-7  
**F02M 55/02**

IPC 8 full level  
**F02M 55/00** (2006.01); **F02M 55/02** (2006.01); **F02M 55/04** (2006.01); **F02M 63/00** (2006.01)

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Cited by  
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