

Title (en)  
DECOUPLING ELEMENT FOR A FUEL INJECTION DEVICE

Title (de)  
ENTKOPPLUNGSELEMENT FÜR EINE BRENNSTOFFEINSPRITZVORRICHTUNG

Title (fr)  
ÉLÉMENT DE DÉCOUPLAGE POUR UN DISPOSITIF D'INJECTION DE CARBURANT

Publication  
**EP 2376765 B1 20150805 (DE)**

Application  
**EP 09771734 A 20091126**

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Abstract (en)  
[origin: WO2010066586A1] The decoupling element according to the invention for a fuel injection device is particularly characterized in that a low-noise design is realized. The fuel injection device comprises at least one fuel injection valve (1) and a receiving bore (20) in a cylinder head (9) for the fuel injection valve (1) and the decoupling element (240) between a valve housing (22) of the fuel injection valve (1) and a wall of the receiving bore (20). The spring stiffness of the decoupling element (240) is so low and the decoupling element (240) is placed between the valve housing (22) of the fuel injection valve (1) and the wall of the receiving bore (20) in such a way that the decoupling resonance  $f_R$  lies in the frequency range below 2.5 kHz. The fuel injection device is particularly suitable for directly injecting fuel into a combustion chamber of a mixture-compressing spark-ignited internal combustion engine.

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