

Title (en)  
FLUID INJECTOR

Title (de)  
FLUIDINJEKTOR

Title (fr)  
INJECTEUR DE FLUIDE

Publication  
**EP 2872768 B1 20160928 (DE)**

Application  
**EP 13736849 A 20130704**

Priority  
• DE 102012212266 A 20120713  
• EP 2013064106 W 20130704

Abstract (en)  
[origin: WO2014009237A1] A fluid injector has a solid state actuator and an injector body. A control piston unit is arranged in a control piston unit recess of the injector body. A transmission pin (15) is arranged in such a way that it penetrates a transmission pin recess in the injector body and couples the solid state actuator mechanically to the control piston unit. A first control chamber (17) is delimited by the control piston unit and the injector body, which first control chamber (17) is coupled hydraulically to a second control chamber. The control piston unit has a control piston (23) which has an end surface (25) at an axial end which faces the transmission pin (15), which end surface (25) is coupled to the transmission pin (15) and delimits the first control chamber (17). Furthermore, the control piston unit has a control sleeve which is arranged coaxially with respect to the control piston (23) and has a radially inwardly directed projection (35), via which driving coupling takes place between the control piston (23) and the control sleeve after overcoming a predefined first control piston stroke of the control piston (23) caused by an elongation of the solid state actuator (7) which is induced by the supply of electrical energy. The control sleeve is arranged and configured in such a way that, during an axial movement of the control piston (23) with existing driving coupling, it influences a free volume of the first control chamber (17).

IPC 8 full level  
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CPC (source: EP US)  
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