

Title (en)  
Injection device

Title (de)  
Einspritzvorrichtung

Title (fr)  
Dispositif d'injection

Publication  
**EP 1111232 A3 20030827 (DE)**

Application  
**EP 00128437 A 20001222**

Priority  
DE 19963134 A 19991224

Abstract (en)  
[origin: EP1111232A2] The device has a pressure line, at least one device for measuring/regulating the pressure in the pressure line with a housing connected to the line and in communication with the line via a housing opening and a piezoelectric element facing the housing opening at one end and supported on the housing at the other. The piezoelectric element has connections for picking up pressure-induced voltages and/or applying voltages to produce dimension changes. The device has a pressure line (12) and at least one device for measuring and/or regulating the pressure in the pressure line, whereby the measurement/regulating device (14) has a housing (16) connected to the pressure line and that communicates with the pressure line via a housing opening (18) and a piezoelectric element (22) facing the housing opening at one end and supported on the housing at the other end. The piezoelectric element has connections via which pressure-induced electrical voltages can be picked up and/or electrical voltages can be applied to produce dimensional changes. Independent claims are also included for the following: a device for measuring and/or regulating the pressure in a pressure line and a method of pressure regulation in a pressure line.

IPC 1-7  
**F02M 63/02**; **F02M 65/00**; **F02M 59/46**; **G01L 23/10**; **G01L 9/00**

IPC 8 full level  
**F02D 41/24** (2006.01); **F02M 59/46** (2006.01); **F02M 63/02** (2006.01); **F02M 65/00** (2006.01); **G01L 9/00** (2006.01); **G01L 23/10** (2006.01); **F02D 41/38** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)  
**F02D 41/28** (2013.01); **F02M 63/0026** (2013.01); **F02M 63/004** (2013.01); **F02M 63/0225** (2013.01); **F02M 63/025** (2013.01); **F02M 65/003** (2013.01); **F02D 41/3809** (2013.01); **F02D 2041/389** (2013.01); **F02D 2250/31** (2013.01); **F02M 2200/24** (2013.01)

Citation (search report)  
• [X] DE 1808506 U 19600324 - BECK WALTHER [DE], et al  
• [A] DE 19753072 A1 19990602 - BOSCH GMBH ROBERT [DE]

Cited by  
WO2009037489A3; US8805607B2; US9506441B2

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**EP 1111232 A2 20010627**; **EP 1111232 A3 20030827**; **EP 1111232 B1 20050309**; DE 19963134 A1 20010628; DE 50009718 D1 20050414

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**EP 00128437 A 20001222**; DE 19963134 A 19991224; DE 50009718 T 20001222