

Title (en)  
Piezo-actuator-unit for an injector

Title (de)  
Piezoaktoreinheit für ein Einspritzventil

Title (fr)  
Unité d'actionnement piezo pour un injecteur

Publication  
**EP 1884654 A1 20080206 (EN)**

Application  
**EP 06015489 A 20060725**

Priority  
EP 06015489 A 20060725

Abstract (en)  
A piezo-actuator-unit (6) for an injector comprises a piezo-element (26) and a tube-shaped housing (20) which takes in the piezo-element (26). A top portion (24) of the tube-shaped housing (20) is coupled to a first axial end of the piezo-element (26). A bottom portion (22) of the tube-shaped housing (20) has a needle recess (23) and is coupled to a second axial end of the piezo-element (26). A needle body (8) protrudes from the needle recess (23) and is axially coupled to the piezo-element (26). An actuator spring (28) is axially coupled to the piezo-element (26) and the bottom portion (22) of the tube-shaped housing (20) for forcing the piezo-element (26) away from the bottom portion (22) of the tube-shaped housing (20).

IPC 8 full level  
**F02M 51/06** (2006.01)

CPC (source: EP)  
**F02M 51/005** (2013.01); **F02M 51/0603** (2013.01); **F02M 61/167** (2013.01); **F02M 63/0031** (2013.01)

Citation (search report)

- [DX] US 6969009 B2 20051129 - BACHMAIER GEORG [DE], et al
- [XY] WO 03040545 A1 20030515 - BOSCH GMBH ROBERT [DE], et al
- [XY] US 6474565 B1 20021105 - RUEHLE WOLFGANG [DE], et al
- [Y] US 6467460 B1 20021022 - STIER HUBERT [DE]

Designated contracting state (EPC)  
DE FR IT

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**EP 1884654 A1 20080206; EP 1884654 B1 20090318**; DE 602006005809 D1 20090430

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