

Title (en)  
INJECTOR COMPRISING A DEVICE FOR SEALING AN ACTUATOR UNIT, AND SEALING RING

Title (de)  
INJEKTOR MIT EINER VORRICHTUNG ZUM ABDICHTEN EINER AKTOREINHEIT SOWIE DICHTRING

Title (fr)  
INJECTEUR POURVU D'UN DISPOSITIF DESTINE A ETANCHEIFIER UNE UNITE D'ACTIONNEMENT ET BAGUE D'ETANCHEITE

Publication  
**EP 1573196 A1 20050914 (DE)**

Application  
**EP 03813532 A 20031216**

Priority  

- DE 0304150 W 20031216
- DE 10260289 A 20021220

Abstract (en)  
[origin: WO2004057179A1] Disclosed is an injector for injecting fuel into a combustion engine, in which especially a piezoelectric actuator unit (2) actuates a servo valve or an injector needle by means of a lifting pin (3). The aim of the invention is to seal the actuator unit (2) against the high fuel pressure prevailing in a leakage space (6). Said aim is achieved by a device comprising a sealing ring that is provided with a flexible, fuel-resistant plastic ring (4) which tightly surrounds the lifting pin (3) in a centered and sealing manner against the effective fuel pressure. The plastic ring (4) is also tightly surrounded by a metal ring (5) which prevents axial displacement inside the housing (1). Said arrangement advantageously allows sealing against the fuel pressure as well as precise axial guidance of the actuator unit (2) or the lifting pin (3) without affecting the vertical mobility thereof.

IPC 1-7  
**F02M 61/16; F02M 61/12; F02M 47/02**

IPC 8 full level  
**F02M 47/02** (2006.01); **F02M 61/12** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)  
**F02M 47/027** (2013.01); **F02M 61/12** (2013.01); **F02M 61/166** (2013.01); **F02M 61/168** (2013.01); **F02M 61/188** (2013.01);  
**F02M 2200/21** (2013.01); **F02M 2200/701** (2013.01); **F02M 2200/703** (2013.01); **F02M 2200/9015** (2013.01)

Citation (search report)  
See references of WO 2004057179A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**WO 2004057179 A1 20040708**; DE 10260289 A1 20040708; DE 50309597 D1 20080521; EP 1573196 A1 20050914; EP 1573196 B1 20080409

DOCDB simple family (application)  
**DE 0304150 W 20031216**; DE 10260289 A 20021220; DE 50309597 T 20031216; EP 03813532 A 20031216