



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**25.01.2017 Bulletin 2017/04**

(51) Int Cl.:  
**F02M 63/00 (2006.01)**

(43) Date of publication A2:  
**11.01.2017 Bulletin 2017/02**

(21) Application number: **16177766.9**

(22) Date of filing: **04.07.2016**

(84) Designated Contracting States:  
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR**  
Designated Extension States:  
**BA ME**  
Designated Validation States:  
**MA MD**

(71) Applicant: **ROBERT BOSCH GMBH**  
**70442 Stuttgart (DE)**

(72) Inventor: **Chen, Yanlin**  
**Wuxi, Jiang Su, 214028 (CN)**

(30) Priority: **08.07.2015 CN 201520490076 U**

(54) **A CONTROL VALVE FOR FUEL INJECTOR AND A FUEL INJECTOR**

(57) A fuel injector and a control valve used in it are disclosed. The control valve comprises: a valve seat (1) defining a valve seating surface (3) and a fuel passage (2) extending through the valve seating surface (3), the fuel passage (2) being in communication with an injection valve of the fuel injector and forming a pressure releasing path which is provided for controlling the operation of the injection valve; and a valve element (4) moveable in a

longitudinal direction and configured to cooperate with the valve seat (1) to open and close the fuel passage (2); wherein the fuel passage (2) comprises a first passage (2a) and a second passage (2b), both extending in the longitudinal direction, and an a turn-back passage (2d,2e,2f) continuously joined between the first (2a) and second (2b) passages. Erosion of the valve element (4) can be suppressed.

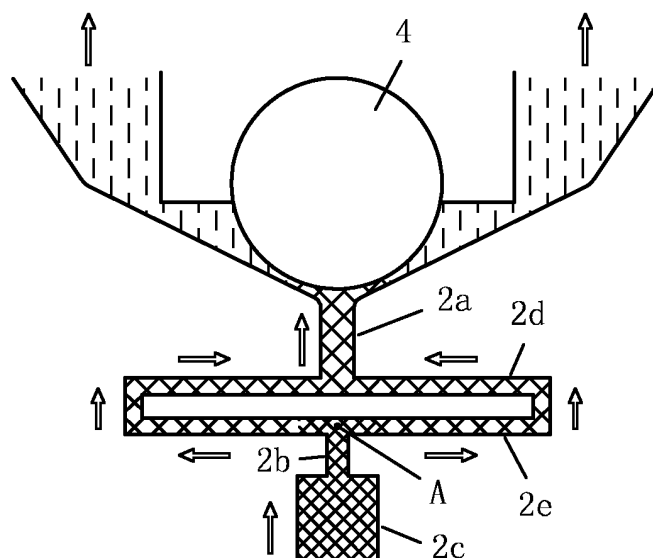


Figure 7



## EUROPEAN SEARCH REPORT

 Application Number  
 EP 16 17 7766

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			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search <b>Munich</b>		Date of completion of the search <b>13 December 2016</b>	Examiner <b>Landriscina, V</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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 EPO FORM 1503 03.02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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