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Publication number:

0 503 757 A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: **92300881.7**

(51) Int. Cl.⁵: **F02M 61/16, F02M 61/18,
F02M 61/04**

(22) Date of filing: **03.02.92**

(30) Priority: **08.03.91 US 666764**

(43) Date of publication of application:
16.09.92 Bulletin 92/38

(84) Designated Contracting States:
DE FR GB

(88) Date of deferred publication of the search report:
03.03.93 Bulletin 93/09

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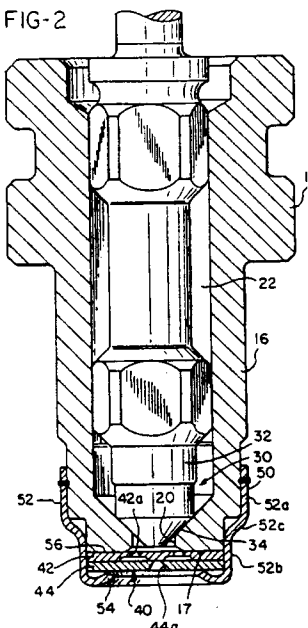
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(54) **Fuel injector with a silicon nozzle.**

(57) A fuel injector for use in an internal combustion engine is provided and comprises an injector body (12) having a first portion (14) with an inlet (18) for communicating with a fuel source, a second portion (16) having an outlet (20) for ejecting fuel from the body, and an inner passageway (22) which communicates with the inlet and the outlet. A fuel valve (30) is located within the inner passageway (22) for controlling fuel ejection from the outlet. A silicon nozzle (40) is positioned adjacent to the second portion (16) for metering and dispersing fuel as it is ejected from the outlet. A retainer (50) is connected to the injector body (12) for retaining the nozzle (40) against the second portion (16). The retainer (50) includes a side portion (52) and a base portion (54) extending at an angle relative to the side portion (52) for applying a spring-biased force against the nozzle (40) to retain the nozzle (40) against the second portion (16), thereby substantially sealing the interface between the nozzle (40) and the second portion (16) from fuel leakage.

FIG-2



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EUROPEAN SEARCH REPORT

Application Number

EP 92 30 0881

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	WO-A-9 102 898 (BOSCH) * page 4, paragraph 2; claim 1; figures 1,2 *	1,2,10	F02M61/16 F02M61/18 F02M61/04
A	----- PATENT ABSTRACTS OF JAPAN vol. 10, no. 286 (M-521)(2342) 27 September 1986 & JP-A-61 104 156 (NIPPON DENSO) 22 May 1986 * abstract *	1	
A	----- DE-U-8 802 464 (BOSCH) * claim 1; figure 1 *	1	
A	----- DE-A-3 147 219 (BOSCH) * page 8, paragraph 2; figure 1 *	1	
A	----- DE-A-3 911 910 (BOSCH) * column 2, line 66 - column 3, line 8; figure 1 *	1	
A	----- US-A-4 628 576 (JOSEPH M. GIACHINO)		TECHNICAL FIELDS SEARCHED (Int. Cl.5)
A	----- EP-A-0 208 386 (FORD)		F02M

The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 17 NOVEMBER 1992	Examiner THOMAS C.
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			