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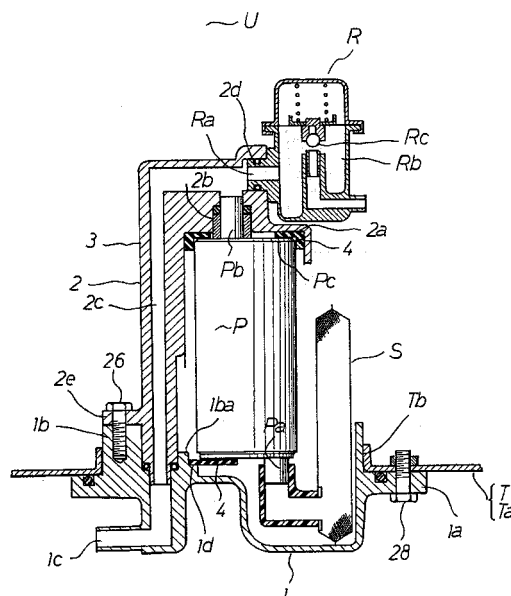
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(54) **Fuel pump unit apparatus**

(57) To reduce manufacturing cost of a fuel pump unit apparatus, a collar portion (1a), an insertion tube portion (1b) protruding upward from the collar portion (1a) and an external fuel discharge path (1c) are formed in a closing member (1), an internal fuel discharge path (2c) is provided in a holder member (2), and a regulator fuel insertion hole (2d) and a pump discharge path insertion hole (2b) are open toward the internal fuel discharge path (2c), the closing member (1) and the holder member (2) are screwed with each other, whereby a support member (3) is formed, a fuel pump (P) with a strainer (S) is pinched by the closing member (1) and the holder member (2), a pressure regulator (R) is attached to the holder member (2), and the internal fuel discharge path (2c) is connected to the external fuel discharge path (1c).

**FIG. 1**





## EUROPEAN SEARCH REPORT

Application Number  
EP 05 07 7581

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	JP 2001 050129 A (KEIHIN CORP) 23 February 2001 (2001-02-23) * figure 4 *	1	INV. B60K15/077 F02M37/10
X	JP 9 112374 A (KURATA KK) 28 April 1997 (1997-04-28) * abstract; figures 2,3 *	1	
A	EP 1 467 083 A1 (MITSUBISHI ELECTRIC CORP [JP]) 13 October 2004 (2004-10-13) * paragraphs [0013] - [0015]; figure 1 *	1	
A	EP 1 160 446 A2 (MITSUBA CORP [JP]) 5 December 2001 (2001-12-05) * paragraphs [0021], [0023], [0024], [0025], [0037]; figures *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			F02M
Place of search Munich		Date of completion of the search 1 June 2011	Examiner Vermeulen, Tom
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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 &amp; : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 07 7581

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The members are as contained in the European Patent Office EDP file on  
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01-06-2011

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 2001050129	A	23-02-2001	JP 4042267 B2	06-02-2008
JP 9112374	A	28-04-1997	JP 3611380 B2	19-01-2005
EP 1467083	A1	13-10-2004	CN 1486398 A	31-03-2004
			WO 03044357 A1	30-05-2003
			TW 579347 B	11-03-2004
			US 2005201877 A1	15-09-2005
EP 1160446	A2	05-12-2001	CN 1327124 A	19-12-2001
			JP 4410384 B2	03-02-2010
			JP 2001336461 A	07-12-2001