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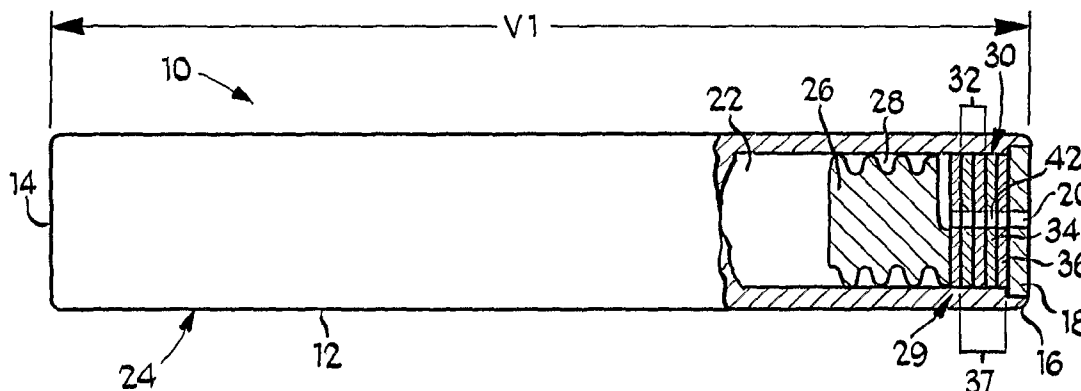
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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(54) Title: FLUID DELIVERY DEVICE HAVING A THERMAL EQUILIBRATING ELEMENT



(57) Abstract: An implantable fluid-dispensing device having an improved fluid-retainment portion is disclosed as having a housing having a first end and a second end, wherein at least a portion of one of the first end and second end comprises an expandable material, and a thermally activated component associated with the elastic material within the housing wherein the thermally activated component prevents unwanted fluid flow when the housing is exposed to a temperature increase. The thermally activated component can be a shaped single or bimaterial member that expands upon exposure to a temperature increase, or a valve apparatus that halts fluid delivery. Additionally, the entire device can be made from a thermally activated material such that fluid expansion is accommodated. A method for the prevention of the inadvertent release of fluid from a fluid delivery device that is exposed to a temperature increase is also disclosed.



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# INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**

IPC: **B05B 1/30**( 2006.01);**A61K 9/22**( 2006.01)

USPC: 239/533.13;604/891.1

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 239/75,76,397.5,533.13,547; 604/890.1,891.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3,200,585 A (CLIMENT et al) 17 August 1965 (17.08.1965), see entire document.	1-9, 11-13, 15, 18
X	US 5,984,209 A (WETH) 16 November 1999 (16.11.1999), see entire document.	1-4, 13, 15, 18
A	US 5,167,625 A (JACOBSEN et al) 01 December 1992 (01.12.1992), see entire document.	19-21

Further documents are listed in the continuation of Box C.

See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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