Title: FLUID DISPENSER WITH BLADDER INSIDE RIGID VIAL

(57) Abstract: A dispenser (10) for dispensing a fluid includes a rigid vial (52) that has a main fluid chamber (55) containing a fluid, and a pump assembly (50) that is in fluid communication with the main fluid chamber (55) and is configured to dispense a predetermined quantity of fluid from the main fluid chamber (55). A flexible bladder (54) is provided which is located within the main fluid chamber (55) and is configured to expand to fill the vial. The resilient bladder (54) is configured to dispense fluid from the main fluid chamber (55) by the pump assembly (50). The bladder (54) is configured to dispense fluid from the main fluid chamber (55) by the pump assembly (50). The resilient bladder (54) is configured to dispense fluid from the main fluid chamber (55) by the pump assembly (50). 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.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
   IPC(7) : B67D 5/42
   US CL. : 222/386.5

   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. : 222/386.5, 394, 389, 207, 209, 420, 422

   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

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 1,471,091 A (BESSESENG) 16 October 1923 (16.10.1923), lines 63-84.</td>
<td>1, 3, 4, 12, 13, 17-23, and 29</td>
</tr>
<tr>
<td>A</td>
<td></td>
<td>2, 5-11, 14-16, 24-28, and 30-40</td>
</tr>
<tr>
<td>A,E</td>
<td>US 6,343,713 B1 (ABPLANALP) 05 February 2002 (05.02.2002), see entire document.</td>
<td>1-40</td>
</tr>
</tbody>
</table>

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Date of the actual completion of the international search: 15 May 2002 (15.05.2002)

Date of mailing of the international search report: 05 JUN 2002

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Form PCT/ISA/210 (second sheet) (July 1998)