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(54) Title: ANTI-SIPHON DEVICE FOR A FLUSH VALVE

(57) Abstract: An anti-siphon device for a flush valve comprises an air-inlet sealing diaphragm (2), a diaphragm bracket (3) with an air inlet (8), a flex sleeve (4), a venting bracket (5), and an offsetting spring (6). The deformation power of the air-inlet sealing diaphragm is comparatively small. When compared with existing anti-siphon reflux devices, this anti-siphon device has a very low current pressure loss and can prevent leaking. When the anti-siphon device is applied in heating and plumbing devices, such as a flush valve, the current pressure can be retained and thus satisfactory flush effect is achieved.



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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB2007/001460

A. CLASSIFICATION OF SUBJECT MATTER		
See extra sheet		
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)		
IPC: E03, F16K, F16L		
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)		
EPODOC, WPI, PAJ, CNPAT valve, siphon, siphon, backflow, non-return, vacuum break+, membrane, diaphragm, film, spring		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CN1749493A(AUCLLEN (SHANGHAI) LIMITED) 22 MAR.2006(22.03.2006) P.2 L.18 to P.3 L.21, Fig. 1	1-5
A	US4669497A(CONBRACO INDUSTRIES INC.) 2 JUN.1987(02.06.1987) the whole document	1-5
A	US3818929A(BRAUKMANN, Heinz Werner) 25 JUN.1974(25.06.1974) the whole document	1-5
A	US6648003B(DEMA ENGINEERING CO.) 18 NOV.2003(18.11.2003) the whole document	1-5
A	CN1761792A(KAERCHER GMBH & CO KG ALFRED)19 APR.2006(19.04.2006) the whole document	1-5
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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**INTERNATIONAL SEARCH REPORT**  
**Information on patent family members**

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