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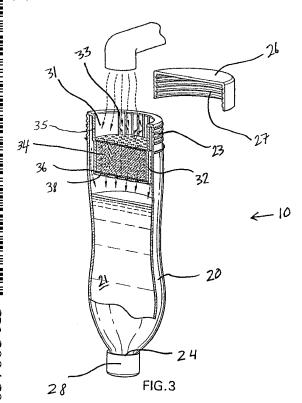
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(57) Abstract: A disposable and recyclable water bottle formed of a non-toxic plastic composition includes a flexible sidewall, a neck with an open top and cap, and an open bottom end. A filter cartridge is received within the open bottom and contains activated carbon sandwiched between 0.7 to 50 microns filtration membranes, all contained between upper and lower perforated plates. A lower portion of the filtration cartridge provides a filling chamber for receiving a flow of unfiltered water on to the lower perforated plates for passage through the filter. An arrangement of slots in the walls of the filling chamber allows a portion of the flowing water to bypass the filter in order to prevent overflow when filling the bottle. A cap containing internal screw threads attaches to the external screw threads of the open bottom end, sealing the interior of the bottle. Once sealed, the contained water is allowed to move around in a fluid motion between the interior of the bottle and the filling chamber.

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A. CLASSIFICATION OF SUBJECT MATTER

A45F 3/16(2006.01)i, B01D 35/00(2006.01)i

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)

A45F 3/16; A45F 5/00; A45F 3/18

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: water bottle, filter, outer shell

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005-0082320 A1 (ROBERT ANUE) 21 April 2005 See abstract; paragragh[0016-0019]; claim 1 and figures 1-3	1–17
A	US 04852781A A (CARL W. SHURNICK et al.) 01 August 1989 See abstract; column 2, line 64 - column 3, line 63; claim 1 and figures 1-4	1-17

See patent family annex.

- * Special categories of cited documents:
- 'A" document defining the general state of the art which is not considered to be of particular relevance
- 'E" earlier application or patent but published on or after the international filing date
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005-0082320 A1	21.04.2005	US 7044343 B2	16.05.2006
US 04852781A A	01.08.1989	None	