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[Continued on next page]

(54) Title: GRADUAL -RELEASE DOSING DEVICE AND SEAL OF A DOMESTIC-USE APPARATUS

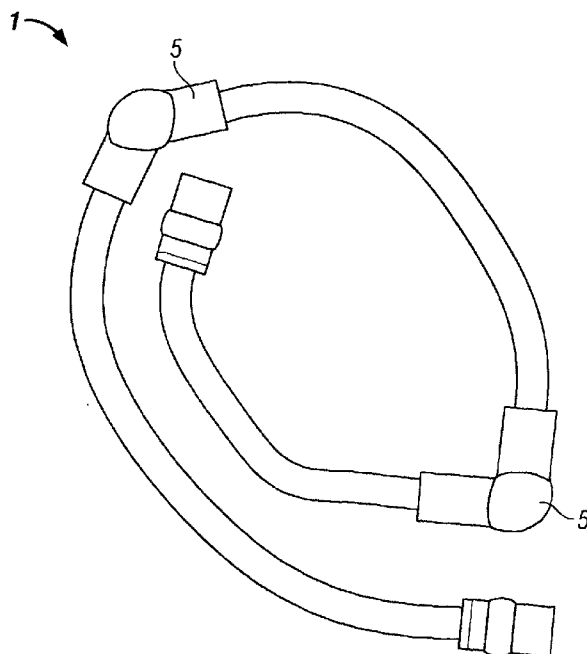


FIG. 1

(57) Abstract: Gradual-release dosing device for at least one substance in a domestic-use apparatus comprises the presence of a water based work fluid, characterised in that it comprises a casing (2) within which a plurality of doses of said substances (3) is contained, necessary for the corresponding plurality of operation cycles of said apparatus. Said casing (2) being at least partly defined by a material permeable to said work fluid and capable of releasing at least a dose of said substance (3) at each operation cycle of the apparatus. The substance comprises at least one washing- active, dishwashing- active or cleaning- active preparation from the group consisting of surfactants, builders, water softening agents, zeolites, silicates, polymers, carbonates, carboxylates, sulphonates, bleaching agents, bleach activators, bleach stabilizers, bleach catalysts, cobuilders, alkalizing agents, acidifying agents, re-deposition inhibitors, dyes, fragrances, optical brighteners, UV filters, fabric softeners, and rinse agents.



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INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER

INV. D06F39/02 A47L15/44
ADD.

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)

D06F A47L C11D

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 practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2009/037669 A2 (ZOBEBE HOLDING SPA [IT]; BARATTA CARLA [IT]; RIERA MONTSERRAT [ES]; TO) 26 March 2009 (2009-03-26) page 1, line 4 - page 3, line 9 page 4, line 4 - page 13, line 1 claims 1-19; figures 1-12C -----	1-24
X	WO 2005/077064 A2 (ECO SAFE TECHNOLOGIES L L C [US]; EVANS K DONALD [US]; COOK CORY E [US]) 25 August 2005 (2005-08-25) paragraphs [0013] - [0027] claims 1-45; figures 1-5 -----	1,9,13, 15-17,24
X	GB 2 346 904 A (RECKITT & COLMAN FRANCE [FR] RECKITT & COLMAN FRANCE [FR]; RECKITT BEN) 23 August 2000 (2000-08-23) page 4, line 26 - page 5, line 9 claims 1-20; figures 1-24 -----	1,6,7,9, 16

☐ Further documents are listed in the continuation of Box C.

☒ 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 document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"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

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

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Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2011/050710

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2011/050710

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2009037669 A2	26-03-2009	EP 2195482 A2	16-06-2010
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		US 6993796 B1	07-02-2006

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-21, 24

relate to a gradual dosing device comprising a casing being at least partly defined by a permeable polymeric membrane wherein the casing comprises a safety aperture in the polymeric membrane;

2. claims: 22, 23

relate to a seal of a domestic-use apparatus having a casing of permeable material containing a substance inside wherein said casing is rechargeable with said substance through one or more inlets.
