Title: TOILET FLUSH WITH A TANK AND CLEANER

(57) Abstract: Toilet flusher encompasses tank (1) with cleaning and desinfection products in the shape of balls (6) which is filled through tank neck (1) or neck extension thread (11), on which plug (3) and rubber gasket (4) are located. Neck extension (11) is fixated with connecting nut (10) neck extension (11) and rubber ring (9) of connecting nut (10). Neck extension (11) can be adapted to any toilet flusher by cutting. Releasing water from the flusher (2) one part of water enters in the tank goes over cleaning products and sends the collected solution back to the flusher and to the toilet for cleaning the entire toilet surface.
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

— with information concerning request for restoration of the right of priority in respect of one or more priority claims (Rules 26bis.3 and 48.2(b)(vii))
WC DISINFECTANT DOSING DEVICE FOR FLUSHING PIPE

INVENTION DESCRIPTION

Area in which the invention relates

This invention relates to a toilet flush that has a build in tank in which you put cleaning and disinfection products for the entire toilet surface.

Technical problem

With this invention we enforce our everyday battle in waste management, like with the earlier products like toilet carts and gels. With it you reduce hand contact with the toilet and the possibility of transmitting a large number of bacteria and venereal diseases during switching toilet carts. This invention also enables protection of small children and elderly people so that they don't come in direct contact with cleaning and disinfection products, which are located in a easily accessible and visible place, which are not only more hygienic, but can be threatening to the health of groups mentioned above.

Technical state

A lot of solutions for this problem were proposed, which were a lot of cleaners of all smells, shapes and sizes. All those inventions are not only visible, but they can't clean the entire toilet. This invention can also be appropriate for people that care about toilet esthetics. Some cleaning products are not easily adaptable four use and they can fall in the toilet and clog it.

Problem essence exposition

The primary goal is to enhance desinfection and cleaning, of the entire toilet.

The secudary goal is to insure a enhanced toilet flush with a tank which ofers a simpler and hygienicly better toilet clening.

A Further invention goal is to enable a enhanced toilet flush with a tank which is hiden in a wall or behind the cistern, so the cleaning products are not in a visible and children accesible place.

Further more the benefits of this invention will be shown in the following description, also they will be learned through invention usage. Toilet flush in this invention includes a tank with a neck in wich you put cleaning products in the shape of balls in specific size; neck extension with a thread and notch which is mounted
in hidden tanks; connecting nut with a rubber ring which serves for fixation of the neck extension on the tank, and a plug with a rubber gasket with a goal of closing the tank and preventing water leakage.

In the tank water openings are located with wings upward for water entrance and wings downward for water exit. The opening wings collect water from the flush, one part of the water they send further in the tank, where cleaner and disinfection products are dissolved.

On the downward side of the tank the wings for water exit are located, which enables the solution from the tank to enter the flush in which the rest of the water is mixed with it and sent to the toilet for cleaning and disinfection.

**Drawing list**

The drawings which are included in the description and make a part of invention description illustrate the best way to invention appliance and help explain the basic invention principles.

D.1. Is a side drawing of the toilet flush with a tank and cleaner, a plug and rubber gasket.

D.2. Is a spatial look of the toilet flush with a tank on which are shown the neck extension with a rubber gasket and connecting nut for tank filling in the flush.

D.3. Is a side drawing of the tank.

**Detail description of at least one way to invention achievement**

In drawing 1, you can see that the tube of flusher 2 encompasses the tank with cleaner 1 which needs to be released with the water in the toilet to clean the entire surface of the toilet. Cleaning products in the shape of balls in a determined size of 6 is filled through the neck of the tank with thread 1 in a way that you also loosen the plug with thread 3 on which there is a rubber gasket 4 in a ring shape.

After filling tank 1 we twist in plug 3 which prevents water leakage while flushing. On tank 1 are the upward openings wings 7 that collect one part of water from flush 2 and send in to tank 1 which further dissolves cleaning products 6. After that the solution goes through downward exiting wings 8 mixes with the water which did not pass through tank 1 and goes through opening 13 of flush 2 to the toilet.

Like best shown on drawing 2, on the flush tube 2 the tank 1 with cleaning products is fixed. Further, more on tank 1 can be put a neck extension of the tank with thread 11 which on its connecting part has notch 14 which is connected to lumps of tank 5 which prevent turning of neck extension 11 during tightening plug 3.

Fixation is done with nut 10 and rubber ring 9. That neck extension can be adapted to any toilet flusher by cutting.

Drawing 3 shows a side drawing of tank 1 on which you can see openings with wings upward 7 and downward 8 for water entrance and exit. On the neck for filling tank 1 is lump 5 for connecting neck extension.
The connecting parts of this invention can be made of PVC which includes; tube with tank, plug and connecting nut and neck extension with thread. The other two parts; gasket and ring can be made from rubber. The cleaning and disinfection product is made in the shape of balls in a specific size which can be adapted for the tank size.

**Applying the invention**

In this way this invention enables a very simple, practical and a considerably hygienically more improved device which can be economically produced and which offers improvements considering the earlier known devices.

**Numbers list**

1. Tank tube that contains cleaning and disinfection products
2. Toilet flusher
3. Tank plug with thread
4. Rubber gasket for the plug
5. Lump for connecting tank neck
6. Cleaning and disinfection products in the shape of balls
7. Upward wings for water entrance
8. Downward wings for water exit
9. Rubber ring of connecting nut
10. Connecting nut of tank neck extension
11. Neck extension with thread
12. Water entrance from the flusher
13. Water exiting the flusher entering the toilet
14. A notch in the connecting part of tank neck extension
PATENT REQUESTS

1. Toilet flusher encompasses tank (1) which is located in flush tube (2) where are wings openings (7) and (8), neck extension with thread (11) and notch (14), connecting nut (10) with ring (9), tank plug (3), in which you put cleaning and disinfection products.

2. Flusher according to request (1), characterised that cleaning and disinfection products are in the shape of balls in a specific size.

3. Flusher according to request (2), characterised that tank (1) has wing openings upward and downward (8) for releasing cleaning solution, lump (5) for connecting neck extension with thread (11) on which is notch (14).

4. Flusher according to request (3), characterised that the neck extension with thread (11) is fixated on tank neck (1) with connecting nut (10) and rubber ring (9).

5. Flusher according to request (4), characterised that the tank neck (1) or neck extension (11) is closed with the thread of tank plug (3) and rubber gasket (4) for plug (3).
This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of _______ sheets.

- It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**
   a. With regard to the **language**, the international search was carried out on the basis of:
      - The international application in the language in which it was filed
      - A translation of the international application into __________, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))
   b. [ ] This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6E>s(a)).
   c. [ ] With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. 1.

2. [ ] Certain claims were found unsearchable (See Box No. II)

3. [ ] Unity of invention is lacking (see Box No III)

4. With regard to the **title**,
   - [ ] The text is approved as submitted by the applicant
   - [x] The text has been established by this Authority to read as follows:

   WC DI SF INFECTANT DOS ING DEVICE FOR FLUSHING PIPE

5. With regard to the **abstract**,
   - [x] The text is approved as submitted by the applicant
   - [ ] The text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,
   a. The figure of the **drawings** to be published with the abstract is Figure No. __1____
      - [ ] as suggested by the applicant
      - [x] as selected by this Authority, because the applicant failed to suggest a figure
      - [ ] as selected by this Authority, because this figure better characterizes the invention
   b. [ ] None of the figures is to be published with the abstract
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

INV. E03D9/03

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)

E03D

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)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<td>DE 299 06 392 U (KLIMSE HEINRICH [DE]) 1 July 1999 (1999-07-01) page 7, lines 18-26 page 7, line 29 - page 8, line 7 page 8, lines 11-30 figures</td>
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<td>DE 199 10 918 Al (SCHMITT UWE [DE]) 8 March 2001 (2001-03-08) abstract; figure 4</td>
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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
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  "A" document member of the same patent family

Date of the actual completion of the international search

22 August 2013

Date of mailing of the international search report

29/08/2013

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016

Urbahn, Stephani

See patent family annex.

Form PCT/ISA/210 (second sheet) (April 2005)
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