



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 1 375 760 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
02.01.2004 Bulletin 2004/01

(51) Int Cl.7: **E03D 9/06**

(21) Application number: **03425397.1**

(22) Date of filing: **19.06.2003**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PT RO SE SI SK TR**
Designated Extension States:
AL LT LV MK

(72) Inventor: **Lorenzi, Giampiero**
51011 Buggiano (PT) (IT)

(74) Representative: **Martini, Lazzaro**
Studio Brevetti Ing. Dr. Lazzaro Martini s.r.l.
Via dei Rustici 5
50122 Firenze (IT)

(30) Priority: **21.06.2002 IT PT20020012**

(71) Applicant: **Lorenzi, Giampiero**
51011 Buggiano (PT) (IT)

(54) **Brush-holder for WC**

(57) A brush-holder comprising a body (1) able to receive a brush (2) and to hold a preset amount of water or other cleaning liquid; the brush-holder includes an in-

let section (10) for the admission of water or other cleaning liquid into said body (1), and an outlet section for the discharge of water or other liquid used for the cleaning.

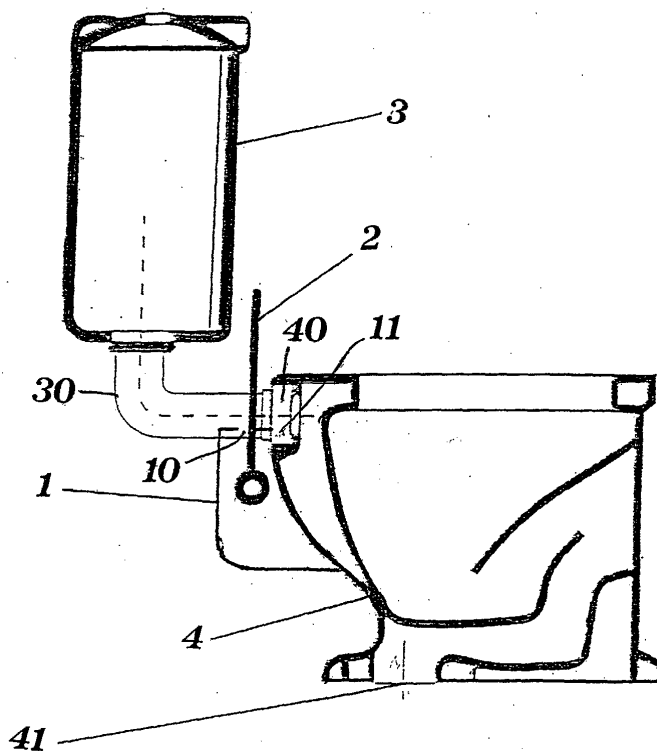


Fig. 1

Description

[0001] The present invention refers to a brush-holder for WC.

[0002] Traditional brush-holders are known to consist of containers made of plastics, ceramic or metal materials, in shapes and dimensions suitable for holding the brush immersed into water or other cleaning and disinfectant liquid.

[0003] A drawback connected to the use of the traditional brush-holders is that the washing of the brush, which for reasons of hygiene should be performed very frequently, results an awkward and unpleasant operation to those (housewives, domestic helps, and staff of cleaning offices, industries, restaurants, hotels, hospitals and commercial premises) in charge.

[0004] More often than not, this operation, which requires always some time for cleaning each brush, causes the dripping of more or less dirty water onto the floor of the bathroom and, if carried out by using the washbasin, implies risks of hygiene order for all those persons using the washbasin afterwards.

[0005] The same drawbacks relate also to the washing of the brush-holder.

[0006] The main object of the present invention is to overcome the said drawbacks.

[0007] This result has been achieved, according to the invention, by adopting the idea of making a brush-holder having the characteristics indicated in the claim 1. Further characteristics being set forth in the dependent claims.

[0008] The advantages deriving from the present invention lie essentially in the fact that it is possible to fully eliminate all the drawbacks above mentioned, inasmuch as no handling of the brush and brush-holder is required to carry out the washing. Moreover, a brush-holder of the present invention is easy to make and cost-effective.

[0009] These and other advantages and characteristics of the present invention will be best understood by anyone skilled in the art from a reading of the following description in conjunction with the attached drawings given as a practical exemplification of the invention, but not to be considered in a limitative sense, wherein:

- Fig. 1 is a schematic view in longitudinal section of a possible embodiment of brush-holder according to the invention;
- Fig. 2 is a schematic view in longitudinal section of a further possible embodiment of brush-holder according to the invention; and
- Fig. 3 is a schematic view in longitudinal section relating to a third embodiment of the present invention.

[0010] Reduced to its basic structure, and reference being made to the figures of the attached drawings, a brush-holder according to the invention comprises a body-container (1) open on top to house a brush (2),

and provided with an inlet (10) for clean water (or other liquid) to be used for washing the brush and brush-holder, and an outlet (11) for the discharge of water (or other liquid) used for the cleaning.

[0011] Advantageously, according to the example of Fig. 1, the said body (1) is fixed to the WC (4), that is, solid thereto, to allow the connection of inlet (10) with the discharge tube (30) of the water closet (3) thereby receiving water from the latter, and the connection of outlet (11) with the inlet (40) for the admission of water in the WC (4), so that the water flowing out from the body (1) is able to pass through the discharge (41) of the WC. In practice, according to the example of Fig. 1, the inlet and outlet sections (10, 11) of the body (1) are substantially at the same height as section (40) of the WC (4).

[0012] According to the example of Fig. 2, the said body (1) is separated from the WC (for example, it may be wall-mounted by means of one or two brackets): the said section (10) is connected with a tube (5) which feeds cleaning water, and the said section (11) is connected with a corresponding tube (6) for the discharge of dirty water.

The tube (6) is in turn connected with the sewage system.

In this case, the said sections (10, 11) of said body (1) are at different levels.

[0013] In any case, whether the cleaning water comes from a water closet or from other supply, the washing of the brush, and at the same time also that of the brush-holder, takes place without causing the drawbacks typical of the traditional brush-holders.

[0014] In both the cases exemplified in Fig. 1 and Fig. 2, the admission of cleaning water into said body (1) is user-operated; by activating the water closet (3) in the case of Fig. 1, or by opening a valve (not shown) located on tube (5) in the case of Fig. 2.

[0015] According to the example of Fig. 3, the outlet of said body (1) is connected direct to the WC's outlet section (41) via the corresponding conduit (44).

Claims

1. Brush-holder comprising a body (1) able to receive a brush (2) and to hold a preset amount of water or other cleaning liquid, **characterized in that** it includes an inlet section (10) for the admission of water or other cleaning liquid into said body (1), and an outlet section for the discharge of water or other liquid used for the cleaning.
2. Brush-holder according to claim 1, **characterized in that** the two inlet and outlet sections (10, 11) are substantially at the same height.
3. Brush-holder according to claim 1, **characterized in that** the two inlet and outlet sections (10, 11) are at different heights.

4. Brush-holder according to claim 1, **characterized in that** the said body (1) is a built-in part of the WC (4).

5

10

15

20

25

30

35

40

45

50

55

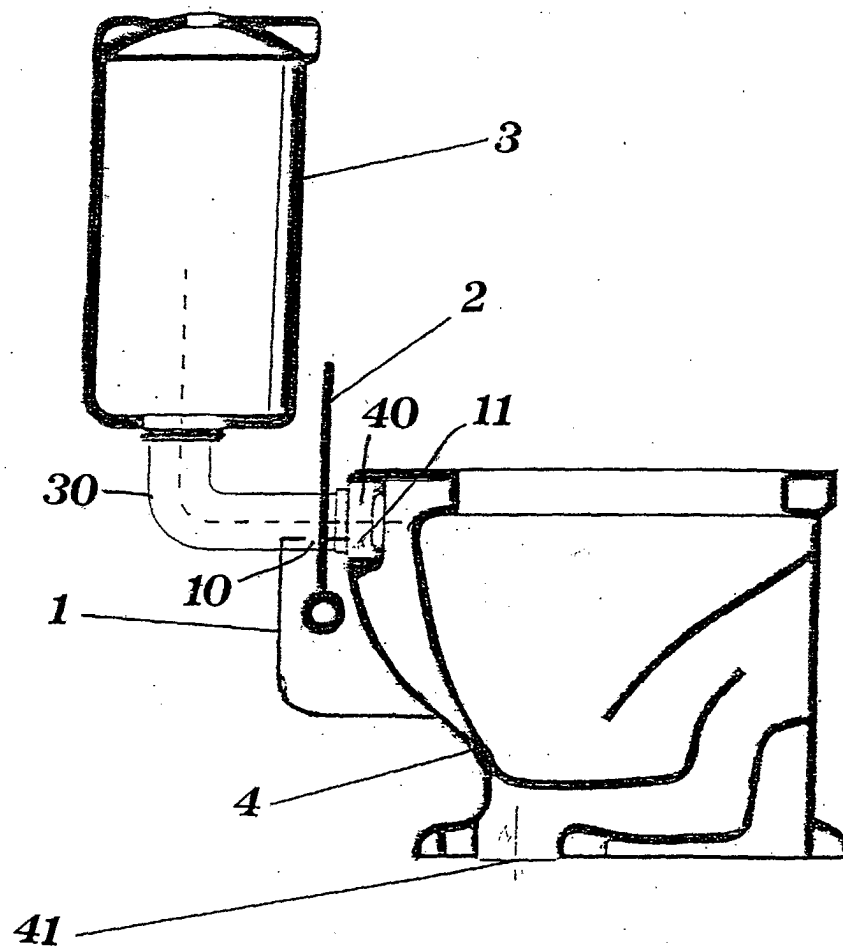


Fig. 1

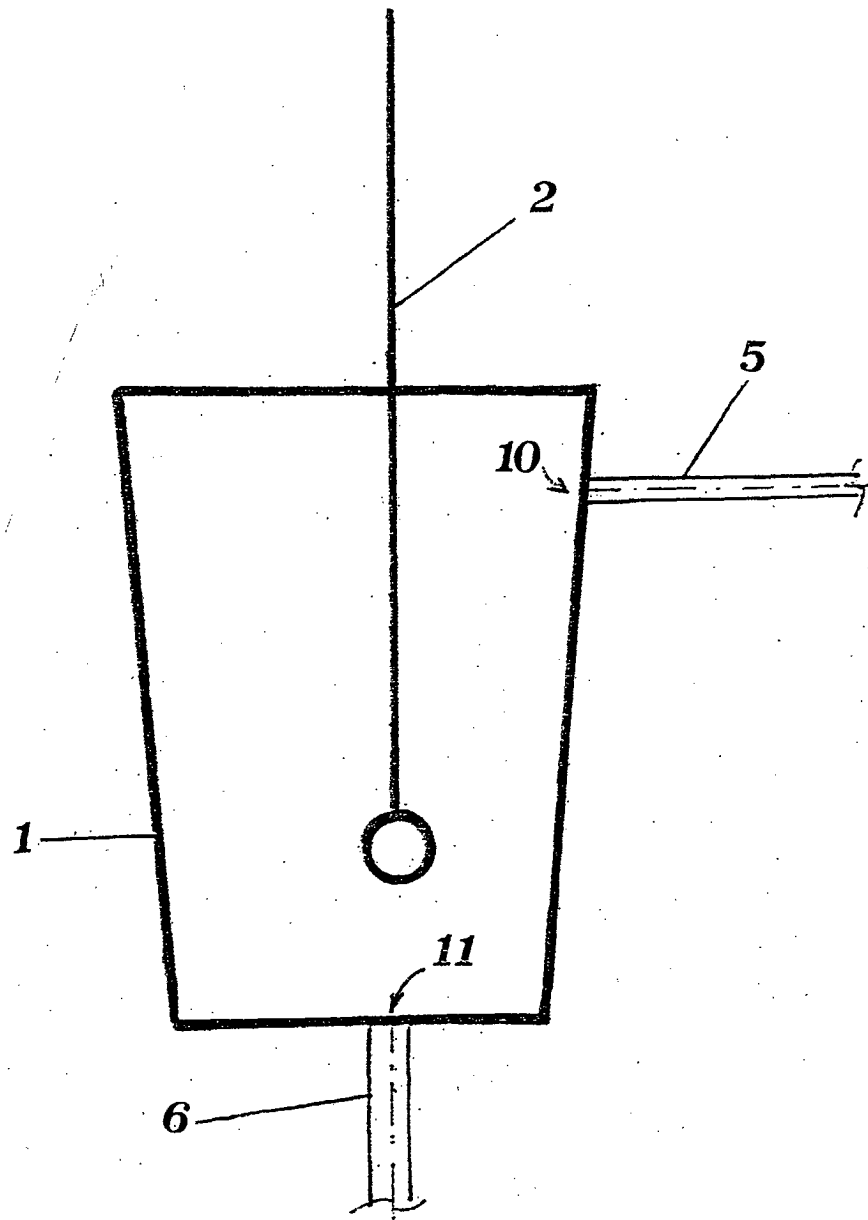


Fig. 2

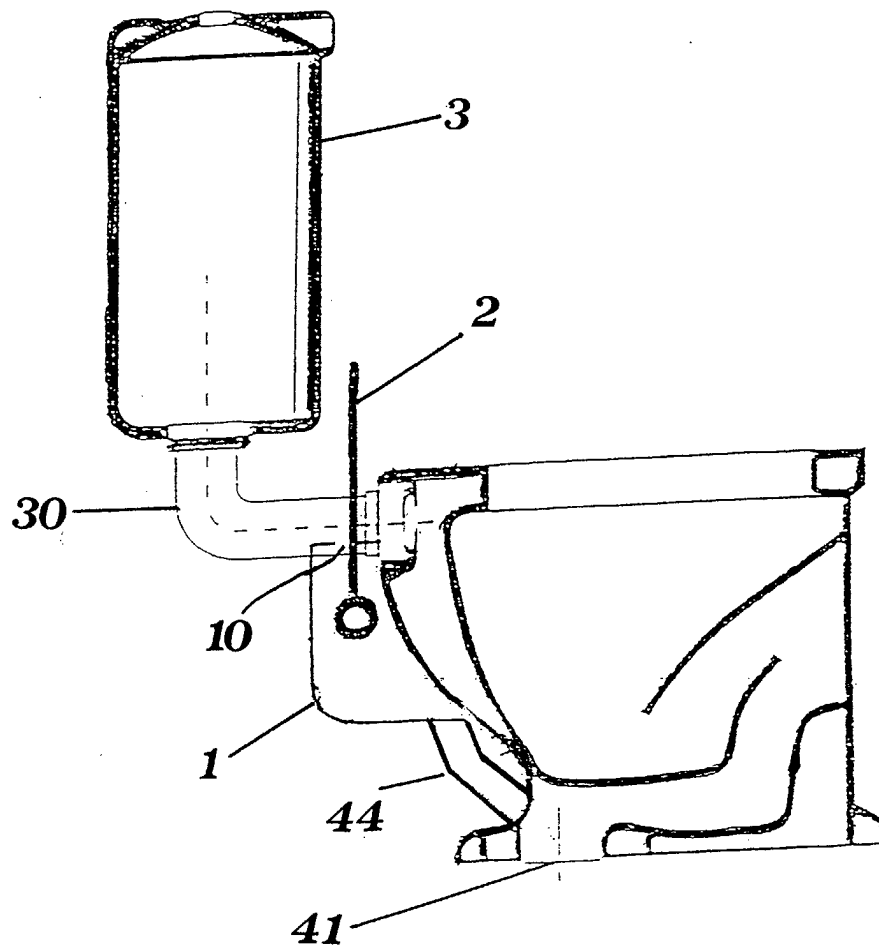


Fig. 3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 42 5397

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	GB 619 597 A (PIERRE JEAN MARIE THEODORE ALL) 11 March 1949 (1949-03-11) * page 1, line 74 - line 92; figure 5 *	1-4	E03D9/06
X	DE 200 01 316 U (TEWAAG BENJAMIN) 27 April 2000 (2000-04-27) * page 5, paragraph 2; figures 1,3,4 *	1-4	
X	FR 2 664 923 A (OLICART LUCETTE) 24 January 1992 (1992-01-24) * abstract *	1-4	
X	DE 201 01 771 U (KOENIGBAUER FOLKER) 19 April 2001 (2001-04-19) * the whole document *	1,3,4	
X	FR 2 718 938 A (SAVARY CLAUDE ;SAVARY JEAN CLAUDE; SAVARY CHRISTINE) 27 October 1995 (1995-10-27) * the whole document *	1,3,4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E03D A47K
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 18 September 2003	Examiner Flygare, E
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 42 5397

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

18-09-2003

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 619597	A	11-03-1949	NONE	
DE 20001316	U	27-04-2000	DE 20001316 U1	27-04-2000
FR 2664923	A	24-01-1992	FR 2664923 A1	24-01-1992
DE 20101771	U	19-04-2001	DE 20101771 U1	19-04-2001
FR 2718938	A	27-10-1995	FR 2718938 A1	27-10-1995

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82