UK Patent Application (19) GB (11) 2559435

08.08.2018

1710783.0 (21) Application No:

(22) Date of Filing: 05.07.2017

(30) Priority Data:

(31) 1701081

(32) 23.01.2017

(33) GB

(71) Applicant(s):

Ali Reza Mokhber 16 Howgate Road, LONDON, SW14 8NQ, **United Kingdom**

(72) Inventor(s):

Ali Reza Mokhber

(74) Agent and/or Address for Service:

Ali Reza Mokhber 16 Howgate Road, LONDON, SW14 8NQ, **United Kingdom**

(51) INT CL:

A61F 5/453 (2006.01) A61F 5/455 (2006.01)

A61F 5/442 (2006.01)

(56) Documents Cited:

WO 2002/038089 A1 SE 001000917 A1

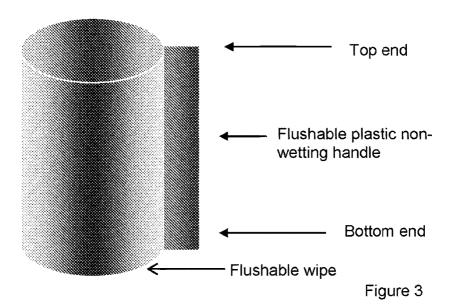
DE 102013105862 A1

(58) Field of Search:

INT CL A61F

Other: WPI, EPODOC, INTERNET

- (54) Title of the Invention: A toilet flushable handle for a flushable urination aid Abstract Title: Water soluble urination aid handle
- (57) Urine splash protection device which prevents male and female urine from splashing on toilet rim, seat and surrounding floor area, the protection device further comprises a non-liquid absorbent and non-wetting handle which is water soluble and thus can be flushed down the toilet after use. The handle may be made from polyvinyl alcohol. The splash protection device may be a flushable wipe formed as a hollow cylindrical tube with an open end at each side. This device is placed over the female urinary meatus or male penis is inserted at one end and it is held in position by the non-wetting handle. Using this handle ensures that the user's hands are not contaminated with urine. It provides for more effective toilet hygiene on urination.



Male stand to pee guard with non-wetting handle

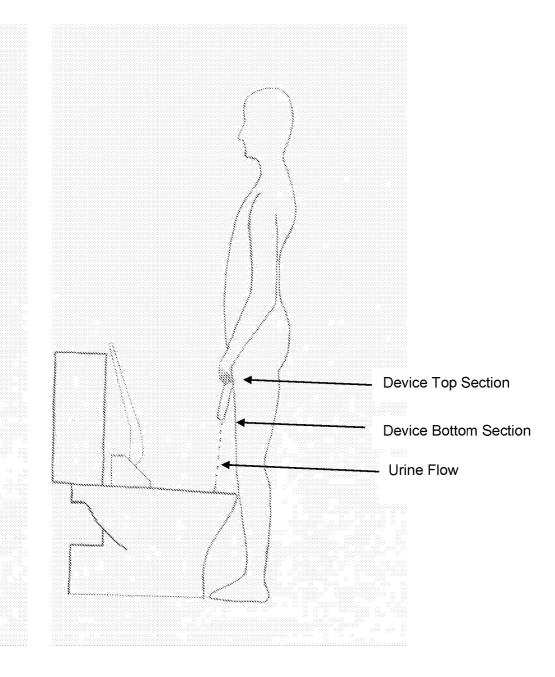


Figure 1

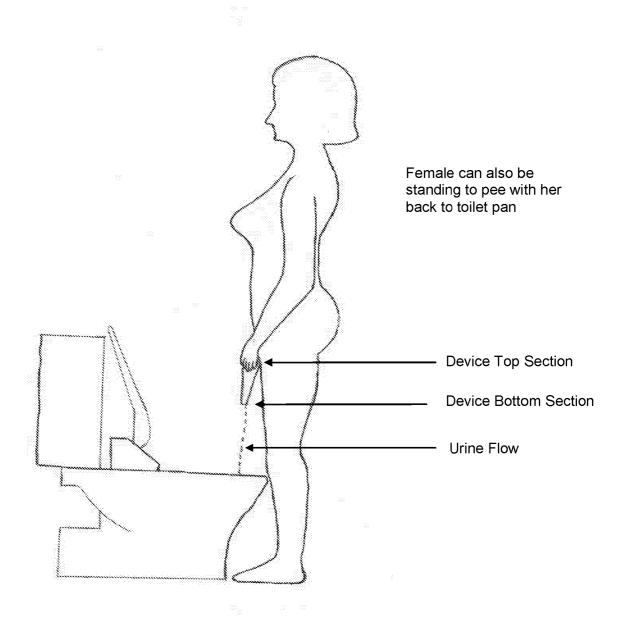
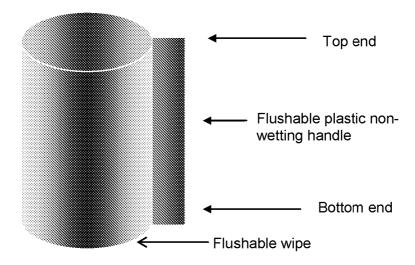
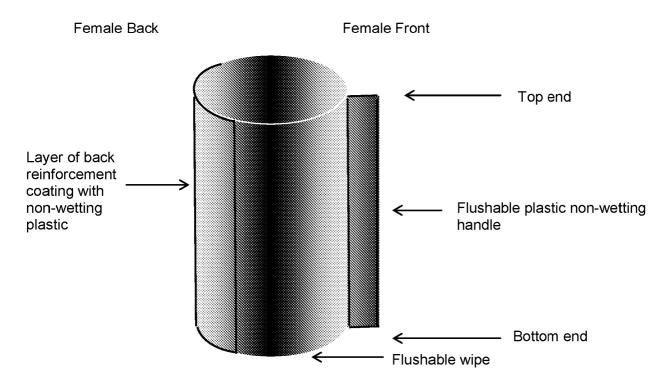


Figure 2



Male stand to pee guard with non-wetting handle

Figure 3



Female stand to pee guard with non-wetting handle and reinforcement coating

Figure 4

A Toilet Flushable Handle for a Flushable Urination Aid

This invention relates to a novel handle for urination aid device which is used for avoiding urine splash on toilet bowl top rim, seat and surrounding floor area. This device is applicable to male and female stand to pee position. The handle provides hygienic use of the urination aid by preventing the user's hand contamination with the flowing urine. This handle is referred in this patent as non-wetting toilet flushable handle.

During urination when men are at standing position, urine is discharged from penis as stream or as droplets flowing down into toilet bowel. Urine stream can break to form droplets, and also the stream flow direction can change as bladder is emptied. Also at urination, the stream or drops could run down over testicles and fall on toilet pan seat area uncontrollably. In this situation it may be possible to aim for the centre of the toilet pan to avoid urine splash. However this targeting action is hard to achieve since any slight movement in body position can widely divert the direction of the urine stream and droplets. This would result in urine stream and droplets falling on the toilet pan top side, seat or surrounding floor area and the consequence is urine splash around the toilet seat and floor area.

Women need to sit down on the toilet pan to urinate so they could get exposed to unsanitary and soiled toilet seats. There are situations where unisex or public toilets are soiled by previous users and women could find it easier to urinate in stand up position. Women on urination cannot aim so if they stand up and urinate, the urine will flow uncontrollably downwards to their lower body and splash, leading into soiling their cloths and adjacent floor area.

This leaves dirt marks and stains on the toilet top rim, seat, and floor area around the toilet bowl. It is unhygienic and it could adversely impact on health of other users. It requires extra cleaning and it can also be embarrassing for the user and annoyance to others. In order to overcome these problems, a urine protection device is used in order to prevent urine splash and soiling of a toilet pan (i.e. toilet seat top exposed surface and toilet rim area) and the floor around the toilet.

This patent is related to the use of an innovative handle for holding the urine splash protection device. Other flushable urination aids are already patented which are made from liquid absorbent fabrics and can contain the flow and direct the urine stream towards and into the toilet pan without causing urine splash. These devices however are made from cylindrically shaped flushable wipes which soak liquid urine and cause the user's hand contamination with the flowing urine on direct contact. This phenomenon could potentially make their usage unpleasant. This patent is related to a flushable plastic such as polyvinyl alcohol which is non-liquid absorbent and is attached to the side or sides of the flushable wipe. Since the handle is liquid not absorbent, it would not get wet. This non-wetting handle prevents direct hand contact between the urination device and the holding fingers, consequently avoiding urine hand contamination.

The invention will now be described solely by way of example and with reference to the accompanying drawings. Figure 1 depicts this device which is urine splash guard with the non-wetting handle that it is subject of this patent. In figure 1 male is urinating at standing position and his penis is inserted inside the toilet flushable urine protection device top section. The bottom of the device is pointed towards the toilet bowl.

Figure 2 shows the urine splash protection device which is equipped with the non-wetting handle and it is subject of this patent. The female is urinating at standing position and the top section of the toilet flushable urine protection device is placed over her genital area covering the female urinary meatus. The bottom section of the device is pointing towards the toilet bowl.

Figures 3 and 4 respectively show the male and female urine splash protection device which has a cylindrical configuration with an opening at each end, the top end is placed at urinary area (penis or meatus) and bottom end is pointed towards the toilet bowl. Urine protection device is a toilet flushable wipe (in wet or dry form) rolled to form a hollow cylinder and it is fitted with a non-wetting handle. Before use it can be stored inside a suitable packing. For use it is opened up to form a hollow cylindrical tube with an opening at each end. The side non-wetting handle is made from a toilet flushable plastic such as polyvinyl alcohol. This non-wetting handle is also used in order to provide better finger grip and also to prevent direct hand contact with the wipe when it gets soaked with urine.

The novelty of this patent application is related to the use of toilet flushable plastic as a holding handle on urination splash guard device. Although polyvinyl alcohol has been used in other products as a soluble plastic, and it is also mentioned in other patents to be used as a conduit to guide the urine flow into the toilet bowel but the concept of using it as a handle to avoid hand contamination with flowing urine is new. This feature provides firm hand grip and principally it is more hygienic as the fingers are not contacted by urine soaking the wipe.

There are other patented urination aids which are biodegrade; however the novelty of this non-wetting device is that it is toilet flushable. Not all biodegradable products are toilet flushable. The fact that this device is toilet flushable makes it a novel product.

The protection device size (i.e. diameter and length) can vary depending on the male height, penis and testicles sizes, and the elevation of the toilet pan. It can be made as small, medium, or large for varying sizes.

Claims

- 1. The non-wetting handle is made from a non-liquid absorbent toilet flushable plastic such as polyvinyl alcohol which is fitted on the toilet flushable urine splash protection device in order to prevent users' hands direct contact with the wipe when it gets soaked with urine.
- 2. The non-wetting toilet flushable handle which is more hygienic for male and female stand up urination as the flowing urine does not contact the user's hands.

4

Claims

- 1. A narrow strip band hand holder made from water soluble poly vinyl alcohol attached to the side of a cylindrically shaped toilet flushable wipe functioning as a urine splash protection device.
- 2. A narrow strip band handle of claim 1 which is attached to the urine flushable wipe by a limited width in relation to its length so that it can maintain its integrity not to dissolve on urine exposure, therefore providing a practical and hygienic buffer between urine soaked wipe and the user's hands.



-

Application No: GB1710783.0 **Examiner:** Mr Jorge Quintero

Claims searched: 1-2 Date of search: 20 December 2017

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1-2	SE1000917 A1 KAERRSTEDT - See Figure 1 and abstract.
X	1-2	DE 102013105862 A1 JAVADI et al - see abstract and paragraph 0015.
X	1-2	WO 02/38089 A1 DEMIR et al - see Figure 2a and related description.

Categories:

X	Document indicating lack of novelty or inventive	Α	Document indicating technological background and/or state
	step		of the art.
Y	Document indicating lack of inventive step if	Р	Document published on or after the declared priority date but
	combined with one or more other documents of		before the filing date of this invention.
	same category.		
&	Member of the same patent family	Е	Patent document published on or after, but with priority date
			earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the $UKC^{\rm X}$:

Worldwide search of patent documents classified in the following areas of the IPC

A61F

The following online and other databases have been used in the preparation of this search report

WPI, EPODOC, INTERNET

International Classification:

Subclass	Subgroup	Valid From
A61F	0005/453	01/01/2006
A61F	0005/442	01/01/2006
A61F	0005/455	01/01/2006