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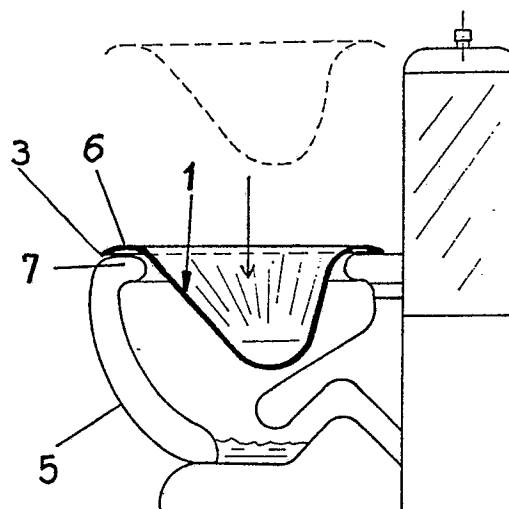
⑦① Applicant: **Garcia Borrás, Eduardo**  
**Paseo Fabra y Puig, 125**  
**E-08016 Barcelona (ES)**

⑦② Inventor: **Garcia Borrás, Eduardo**  
**Paseo Fabra y Puig, 125**  
**E-08016 Barcelona (ES)**

⑦④ Representative: **Ferregüela Colón, Eduardo**  
**Agricultura, 99**  
**E-08019 Barcelona (ES)**

⑤④ **Hygienic protector for toilet bowls.**

⑤⑦ Hygienic protector for toilet bowls (5), for a single use, to be placed over the ring (7) of the toilet bowl (5) opening or over the ring of the toilet bowl seat. It consists of a flexible laminar bag (6), made of a material which is destroyed in water, such as cellulose or the like. The protector is placed inside the toilet bowl (5) and the bottom rests on the inside surface of the bowl (5). Its opening is slightly larger than that of the toilet bowl ring (7), and it is adapted to fold over the ring (7) in order to cover it. The bag (6) decreases in size from the opening to the bottom, at which point it has a peripheral weakening line.



**FIG. 4**

## Description

### HYGIENIC PROTECTOR FOR TOILET BOWLS

The present invention refers to a hygienic protector for toilet bowls, created in such a way that it offers the maximum hygiene in the use of this type of sanitary apparatus.

The use of public toilets in such places as hotels, hospitals, work places, etc, can cause the spreading of infectious diseases such as skin diseases, venereal diseases, and even AIDS. The use of laminar protectors is known for preventing this risk. This kind of protector is generally made of paper and is ring-shaped, with an inside and outside contour approximately the same as the toilet bowl ring. This protectors are placed over the toilet bowl ring in order to avoid direct contact between the users body and the ring. The protectors are then destroyed after each use by discarding them into the toilet bowl. However, this type of laminar protector does not offer a total guarantee, as its size may not coincide exactly with that of the toilet bowl ring. It is therefore susceptible to sliding away from its correct position. In addition, it does not protect against the inside surface of the bowl, which is the area having the greatest risk of spreading disease.

The aim of this invention is to develop a hygienic protector for toilet bowls offering complete protection with the highest guarantee in hygiene, which does not move from its operative position and which also does not need to be touched after being used, as it is automatically flushed away. The protector is made in such a way that it avoids contact between the users body and any part of the toilet bowl or toilet seat. Furthermore, the protector according to the invention assures a single use making it necessary to use a new protector each time the toilet is used.

The protector according to the invention is made of a hygienic material which dissolves easily when it is flushed away, once the toilet has been utilized.

The shape and design of the protector make it easily adaptable to any kind of toilet bowl and toilet seat, covering not only the surface of the seat, but also the inside surface of the bowl. This prevents the user's body from coming into contact with the seat, the inside of the bowl or the water. In addition, since the protector totally covers the inside surface of the bowl, it prevents the bowl from becoming dirty, keeping it in perfect hygienic conditions.

According to the present invention, the protector consists of a flexible laminar bag, which is made of a material which can be destroyed in water, such as cellulose or the like. It is placed inside the toilet bowl and the bottom rests on the inside surface of the bowl. Its opening is slightly larger than that of the toilet bowl ring and it is adapted to fold over the ring in order to cover it.

According to another characteristic of the invention, the bag is made-up of a decreasing cross section from the opening to the bottom. This cross section can be circular or polygonal. The bag is cone-shaped, truncated cone-shaped, or truncated pyramid-shaped, with the large base open.

In order to use the protector of the invention, the bottom of the bag is placed inside the toilet bowl and the top part or opening is folded outwards in order to cover the toilet bowl ring or seat.

The protector of the present invention guarantees that the user will be adequately protected, by totally covering the toilet bowl ring and the inside surface of the toilet bowl, irregardless of its shape. After each use, the bag and its contents are automatically flushed away, leaving the inside surface of the toilet bowl free from any residues. Therefore, the bag cannot be used more than once.

The wall of the bag may have a peripheral weakening line towards the bottom, making it easier for the bag to break while being flushed away. this weakening line also enables the user to detach the bottom of the bag before being used, if desired.

The composition, shape and advantages of the protector of the invention, can be better understood by means of the following description, which corresponds to the attached drawings, in which different possible designs as non-limitative examples are shown.

In the drawings:

Fig. 1 is a view in perspective of a protector built according to the invention;

Fig. 2 shows a variation in the carrying-out of the protector; and

Figs. 3 and 4 are each views in front elevation and in longitudinal section respectively. They illustrate the way to use the bag which is the object of the present invention.

As can be seen in the drawings, the hygienic protector is composed of a laminar bag 1, which is made from a product which destroys easily in water as, for example, cellulose. The bag represented in Fig. 1 is shaped like an inverted truncated pyramid, with the large base open and the small base 2 closed, defining the bottom of the bag 1.

The dimensions of this bag are such that it seats in the inside of a toilet bowl 5 so that the top part of the sides of the bag 6, which are close to its edge 3, overlap the ring of the bowl 5 and fold over the top of the toilet bowl or toilet seat 7 so as to cover it.

With this arrangement the bag 1 protects the entire surface of the toilet bowl ring 7 and the inside surface of the toilet bowl 5. After having utilized the toilet, the residues and the bag 1 are flushed away, thus preventing the bag from being used again.

The bag 1 can adopt any kind of shape. Fig. 2 represents bag 1 shaped like a truncated cone. It could also have a totally conical or prismatic shape, among others.

In addition, the bottom 2 of the bag may have a weakening line 4, enabling the user to discard the bottom part of the bag 1 when desired, or allowing for the bag to be destroyed when flushed away.

Having sufficiently described the nature of the invention, as well as its method of usage, it must be stated that the previously indicated arrangements are susceptible to modification, without altering their

fundamental principles.

#### Claims

1st.- Hygienic protector for toilet bowls, for a single use, to be placed over the ring of the toilet bowl opening or over the ring of the toilet bowl seat characterized by consisting of a flexible laminar bag, made of a material which is destroyed in water, such as cellulose or the like,

which is placed inside the toilet bowl and the bottom rests on the inside surface of the bowl, its opening being slightly larger than that of the toilet bowl ring, and being adapted to fold over the ring in order to cover it.

2nd.- Protector according to claim 1, characterized by the bag decreasing in size from the opening to the bottom.

3rd.- Protector according to claim 1, characterized by the bag being provided with a peripheral weakening line near the bottom.

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FIG. 1

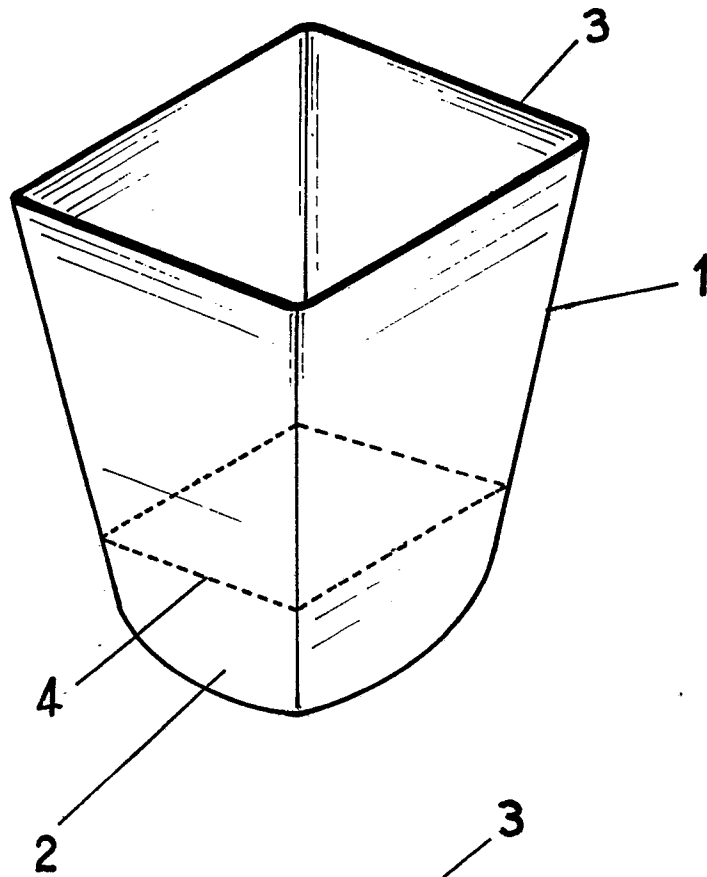
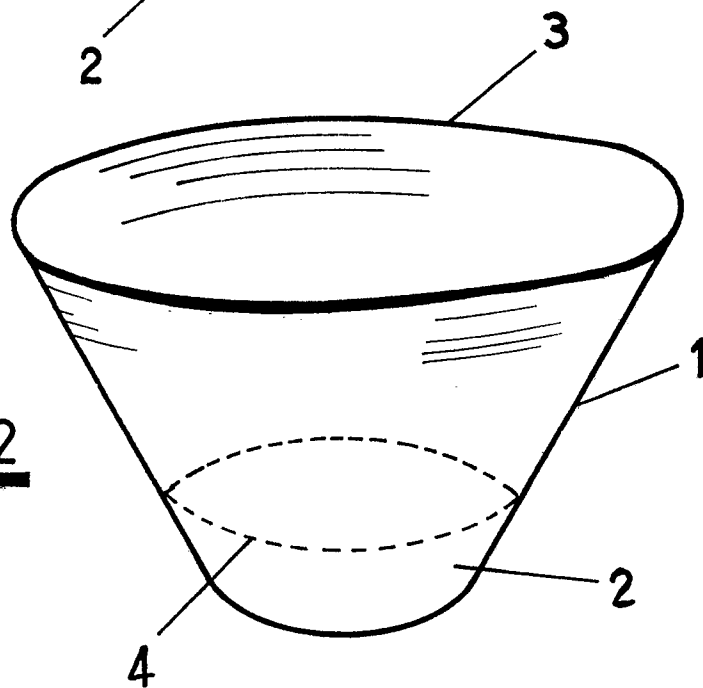


FIG. 2



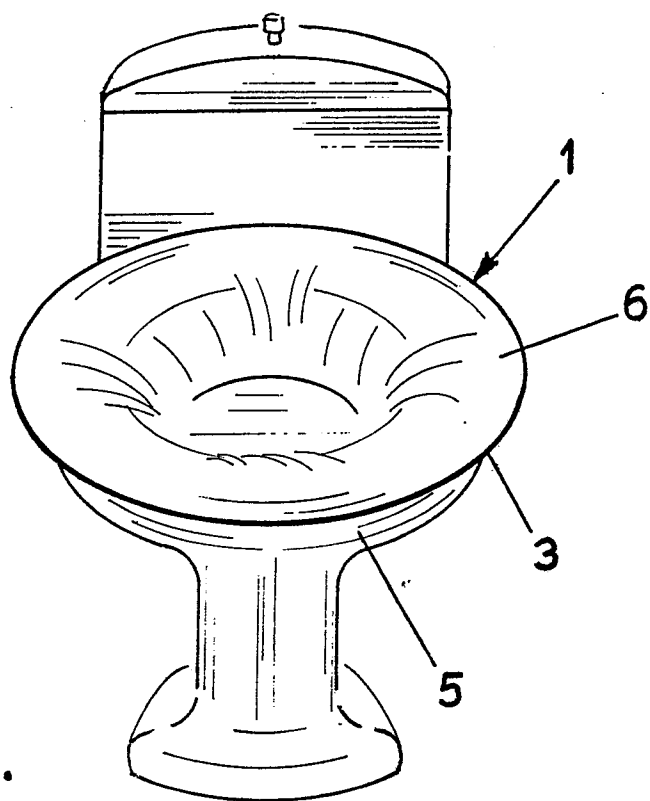


FIG. 3

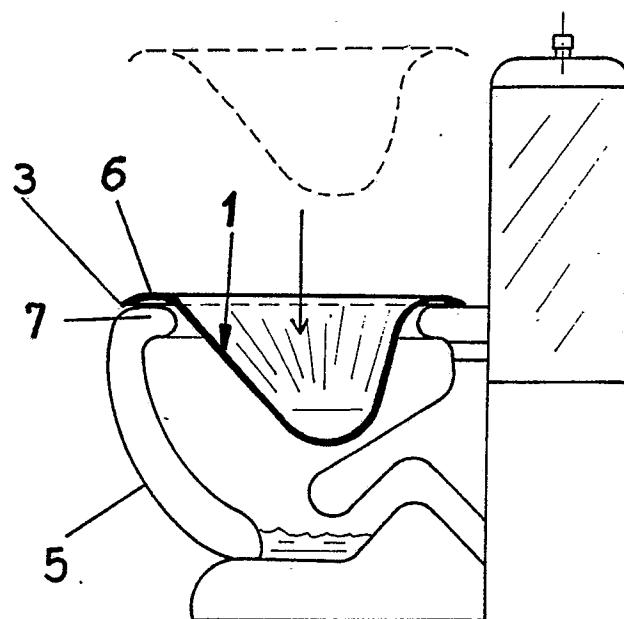


FIG. 4



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.5)
X,P	FR-A-2 618 062 (DESILLES) * Page 1, lines 1-4; page 1, line 22 - page 2, lines 6,37; figures * ---	1-2	A 47 K 13/14
X	WO-A-8 604 222 (BARREAU) * Page 4, line 3 - page 6, line 30; figures; claims 1,8 * ---	1-2	
X	GB-A-1 339 675 (HENDERSON) * Page 1, lines 49-83; figures * ---	1-2	
X	FR-A-2 043 852 (PERICHETTI) * Page 1, line 34 - page 2, line 74; figures * ---	1-2	
A	DE-A-3 212 243 (RICHARTZ) * Whole document * -----	1-3	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A 47 K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 02-10-1989	Examiner LAUE F.M.
<b>CATEGORY OF CITED DOCUMENTS</b> 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			