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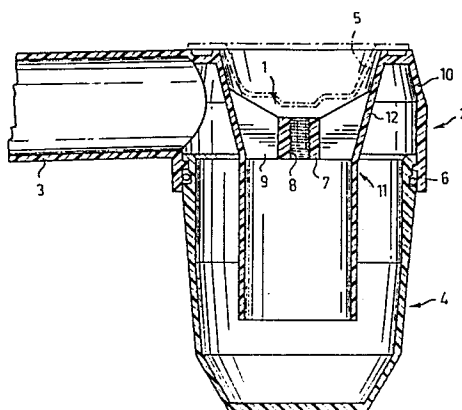
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EUROPEAN PATENT APPLICATION

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Bulletin 86/43(72) Inventor: **Säntti, Kalevi, Honkakatu 4, SF-65230 Vaasa (FI)**(84) Designated Contracting States: **AT BE CH DE FR GB IT LI LU NL SE**(74) Representative: **Klöpsch, Gerald, Dr.-Ing., An Gross St. Martin 6, D-5000 Köln 1 (DE)**(54) **Water seal.**

(57) The present invention relates to a water seal for wash basins. The water seal comprises a fastening portion (1), by which the water seal is attached to the basin, a frame portion (2) comprising two concentric pipes (10, 11), and a bottom portion (4) detachably attached to the outer pipe (10).



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Water seal

The present invention relates to a water seal for wash basins or the like comprising a fastening portion by which the water seal can be attached to the basin at said basin's outlet by fastening means, a frame portion attached to the fastening portion, said frame portion being formed by two concentric pipes attached to each other at their upper end, the outer one of said pipes being provided with a pipe stub, and a bottom portion detachably attached to the outer pipe of the frame portion.

In connection with various wash basins water seals attached to the outlet at the bottom of the basin are used, which water seals are made of metal or plastics. Known water seals consist of a fastening portion in the shape of a truncated cone, in the middle of which is a body provided with inside threads to which a screw extends from the strainer of the basin. The fastening body extends downward from the conical part as a vertical pipe. The water seal comprises further a frame portion, the inner pipe of which surrounds the vertical pipe of the fastening portion and is closely attached to it. The outer pipe of the frame portion comprises, in addition, a pipe stub to which the other discharge pipes are connected.

This known structure is complex and thus expensive and it has a potential leakage spot between the vertical pipe of the fastening portion and the inner pipe of the frame portion. In addition, the construction is relatively high which reduces the applicability of a cabinet situated under the basin.

The object of the present invention is to achieve a water seal with a simple construction, without any potential leakage spot and which, in addition, is low. The water seal according to the invention is characterized in that the fastening portion is located in the inner pipe of the frame portion.

By placing the fastening portion in the inner pipe of the frame portion the advantage is achieved that the vertical pipe of the fastening portion and the inner pipe of the frame portion, which exist in known solutions, can be replaced by an only pipe which simplifies the construction a great deal. This omits also the possible leakage spot between the pipes. In addition, the height of the water seal construction is reduced since the fastening portion no longer is located above the frame portion, but inside it.

When producing the water seal of plastic the fastening portion can in a simple way be made integral with the frame portion.

The attaching of the water seal to the wash basin is simplified if the upper part of the inner pipe of the frame portion, where the fastening portion is located, expands conically upward.

A placement of the fastening portion in accordance with the invention enables the fastening portion to be placed at the same height as the pipe stub.

A preferred embodiment of the water seal according to the invention will be described more closely in the following with reference to the attached drawing, wherein

Figure 1 is a vertical section of the water seal according to the invention and

Figure 2 is a top view of the water seal.

The water seal shown in the drawing is formed by a fastening portion 1, a frame portion 2, with a pipe stub 3, which in the presented case is an actual pipe, and a bottom portion 4. In Figure 1 is with a dotted line further presented a restrainer 5 of the wash basin. The bottom portion 4 is detachably attached to the frame portion 2 by snap-in joint and the joint is sealed by a sealing ring 6. The fastening portion 1 is formed of a body 7 located on the middle line of the water seal, said body comprising

vertical inner threads 8 and from the outer surface of which radial wings 9 extend.

The frame portion of the water seal consists of two concentric pipes, an outer pipe 10 and an inner pipe 11, which are connected to each other from the upper end. The water seal is formed by a water column between the lower end of the inner pipe 11 and the lower edge of the pipe 3.

According to the invention the fastening portion 1 is attached to the inner pipe 11 of the frame 2. The fastening portion is located at such a distance from the upper end of the pipe 11 that the basin's restrainer 5 fits inside the pipe 11 above the fastening portion. In order for the upper end of the pipe 11 to be mounted tightly against the lower surface of the basin the upper end 12 of the pipe 11 has the form of an upwardly expanding truncated cone. The fastening portion 1 is attached by means of its wings 9 to the lower edge of said expanding portion 12 substantially at the same height as the pipe 3.

The fastening portion 1, the frame portion 2 and the pipe 3 form, as illustrated in the Figure, preferably an integral piece which is easy to achieve when the material is plastic. Thus the water seal according to the invention is formed of only two pieces which reduces the number of possible leakage spots. The water seal is attached to the basin by a screw (not shown) whose head rests on the basin's restrainer which is attached to the threads 8 of the body 7.

In an alternative embodiment the pipe 11 can be made straight over the whole length thereof and the fastening portion 1 can be manufactured separately and be attached to the pipe 11.

Claims:

1. A water seal for wash basins or the like comprising a fastening portion (1) by which the water seal can be attached to the basin (5) at said basin's outlet by fastening means, a frame portion (2) attached to the fastening portion, said frame portion being formed by two concentric pipes (10, 11) attached to each other at their upper end, the outer one (10) of said pipes being provided with a pipe stub (3), and a bottom portion (4) detachably attached to the outer pipe (10) of the frame portion, c h a r a c t e r i z e d in that the fastening portion (1) is located in the inner pipe (11) of the frame portion.

2. A water seal according to claim 1, c h a r a c t e r i z e d in that the fastening portion (1) forms an integral piece with the frame portion.

3. A water seal according to claim 1, c h a r a c t e r i z e d in that the upper end (12) of the inner pipe of the frame portion where the fastening portion (1) is located widens conically upward.

4. A water seal according to claim 1, c h a r a c t e r i z e d in that the fastening portion (1) lies at the same horizontal plane as the pipe stub (3).

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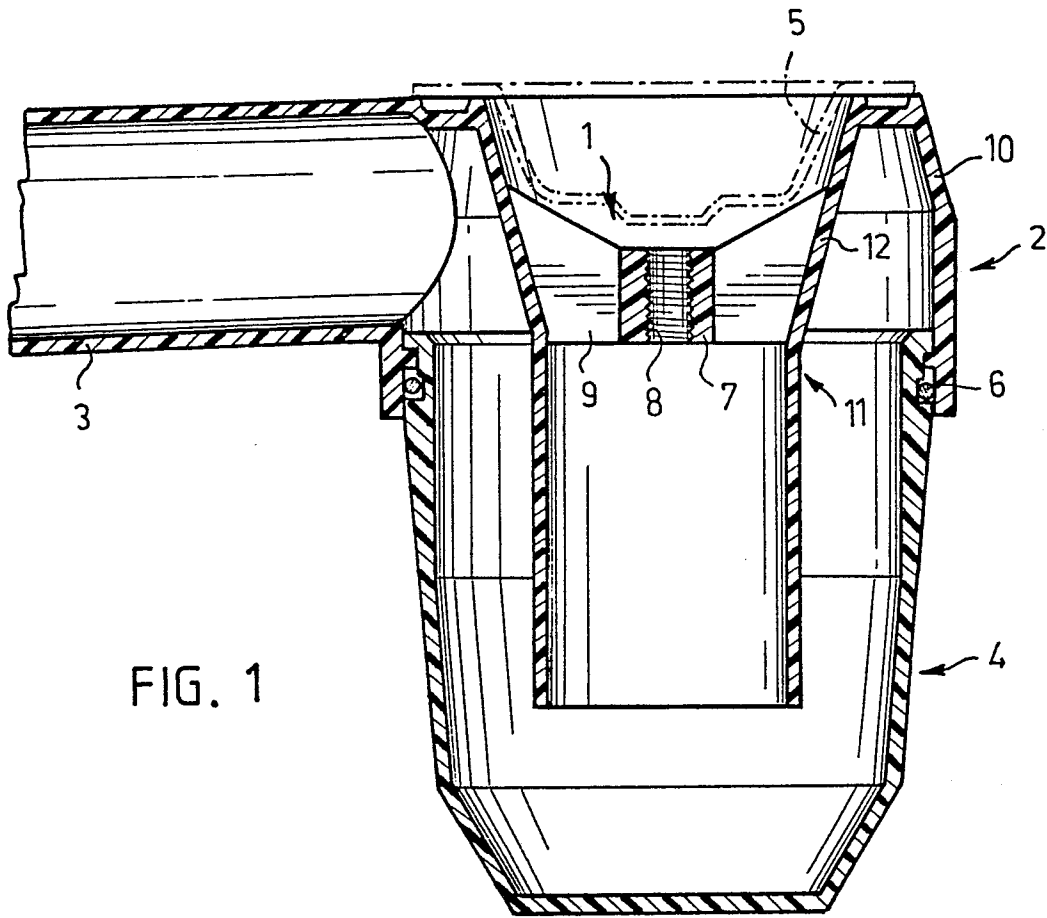


FIG. 1

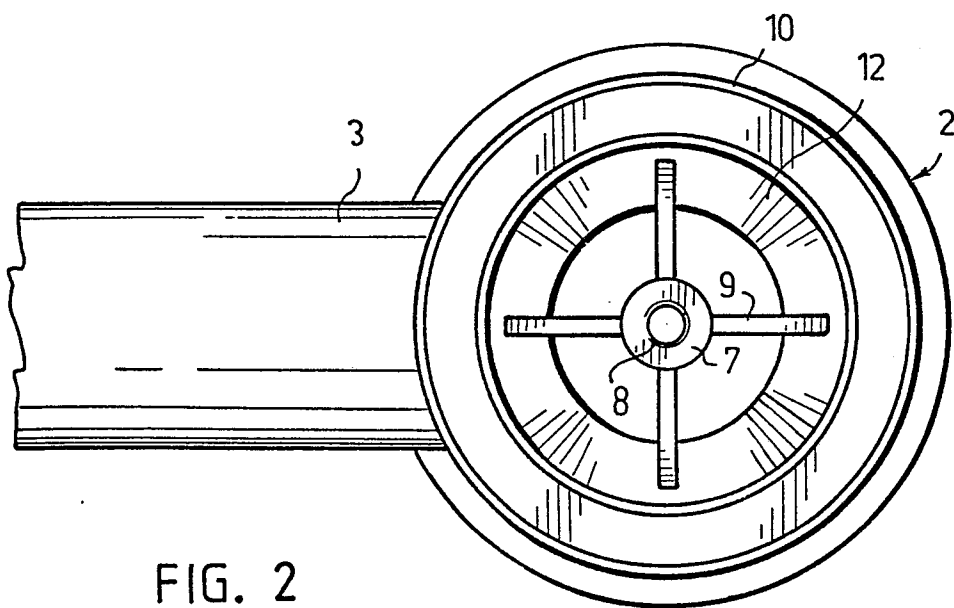


FIG. 2