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(54) **FLOOR-MOUNTED SANITARY BOWL**

(57) A sanitary bowl (1) comprises a basin (3), a siphon (4) connected to a bottom portion of the basin (3), a supply duct (5) of the washing water, which communicates with the basin (3) through a washing opening (6), and a side wall (7) which has a lower edge (7a) in use placed to rest on the ground; the siphon (4) has an input

portion (8) connected to a lower portion of the basin (3), a U-shaped portion (9) of water stagnation and an output portion (10) which ends with an outlet opening (10a) placed at a distance (h) equal to or more than 230 mm from a plane (P) defined by said lower edge (7a) of the side wall (7).

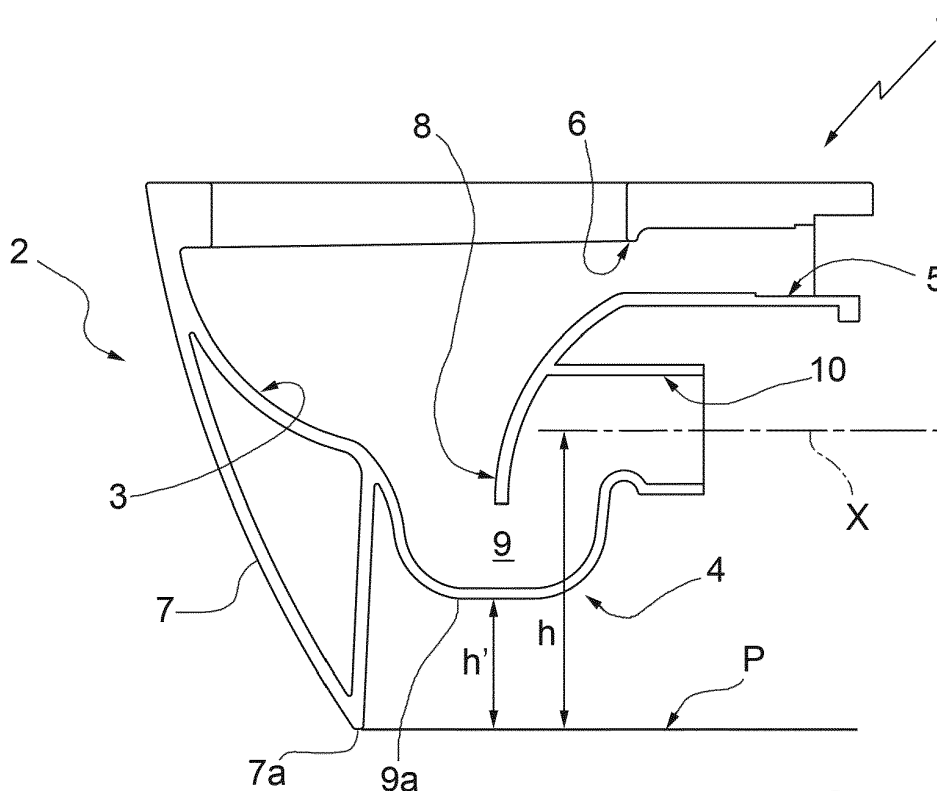


FIG.1

Description

[0001] The present invention relates to a floor-mounted sanitary bowl adaptable both to a predisposition of a wall drain for suspended bowls, and to a predisposition of a floor drain (floor-mounted bowls) placed at various distances from the line of attachment of the floor/wall.

[0002] These features make the sanitary bowl very flexible especially for renovation works where the demolition and reconstruction of the sewage facilities is not provided for.

[0003] For suspended sanitary bowls, law Uni En 38 provides for only horizontal wall drains, while for floor-mounted bowls, Uni En 37 legislation provides for both horizontal wall drains and vertical floor drains.

[0004] The drainage system of the suspended sanitary bowls differs from that of floor-mounted sanitary bowls in the height of the internal siphon, which consequently affects the height from the ground of the attachment to the wall of said drain pipe, pursuant to Uni En 38 and Uni En 37 legislation.

[0005] In detail, the measurements for a suspended sanitary bowl are 230 mm from the ground to the wall drain (having placed the sanitary bowl at 420 mm from the floor), while for a floor-mounted sanitary bowl, the wall drain is 180 mm from the ground. As may be obvious, then in a bathroom predisposed for use of a suspended bowl (wall drain) it is impossible to adapt a floor-mounted sanitary bowl.

[0006] Such limitation is becoming a major disadvantage. In fact, every time, for any reason, one decides to replace a suspended sanitary bowl with a floor-mounted sanitary bowl one is forced to undertake expensive and cumbersome renovation works.

[0007] The need is therefore felt to provide for a sanitary bowl for floor installations the technical characteristics of which are able to adapt it both to a predisposition of a wall drain for suspended bowls, and to a predisposition of a floor drain (floor-mounted bowls) placed at various distances from the line of attachment of the floor/wall.

[0008] The inventor of the present invention has realized a solution able to fulfil the need referred to above in a simple and economic manner.

[0009] The object of the present invention is a floor-mounted sanitary bowl the essential characteristics of which are described in claim 1, and the preferred and/or additional characteristics of which are described in claims 2 - 4.

[0010] For a better understanding of the invention an embodiment is described below merely by way of a non-limiting example with the help of the appended drawings, wherein:

- figure 1 shows a longitudinal cross-section of a preferred embodiment of the sanitary bowl according to the present invention;
- figure 2 is a cross-section along the line II-II in figure

1.

[0011] In Figures 1 and 2, a floor-mounted sanitary bowl according to the present invention is globally denoted by reference numeral 1.

[0012] The sanitary bowl 1 comprises a ceramic monobloc structure 2 defining a basin 3, a siphon 4 connected to a bottom portion of the basin 3, a supply duct 5 of the washing water, which communicates with the basin 3 through a washing opening 6, and a side wall 7 which extends from the upper edge of the basin to the ground.

[0013] Following the direction of water flow, the siphon 4 provides in sequence for an input portion 8 connected to a lower portion of the basin 3, a U-shaped portion 9 of water stagnation and an output portion 10 that ends with an outlet opening 10a and which extends along a horizontal axis X.

[0014] The axis X is located at a distance h of at least 230 mm from a plane P defined by a lower edge 7a of the side wall 7.

[0015] The lower edge 7a in use rests on a floor, which means that the plane P in use is identified with the floor and that, therefore, the axis X of the output portion 10 of the siphon 4 is at least 230 mm away from the floor on which the sanitary bowl 1 rests.

[0016] The distance of 230 mm from the floor is that established by the regulations for the wall drain for the suspended sanitary bowls.

[0017] This way the sanitary bowl 1 of the present invention, having an outlet opening 10 of the siphon 4 at a height greater than or equal to 230 mm, can be easily connected to a possible wall drain made for a suspended sanitary bowl.

[0018] Also, the U-shaped portion 9 of the siphon 4 has its bottom portion 9a placed at a distance h' of at least 100 mm from the plane P defined by the lower edge 7a of the side wall 7. As indicated above, since in use the plane P is identified with the floor on which the bowl 1 rests, the bottom portion 9a will be at least 100 mm away from the floor.

[0019] Such a distance from the floor of the bottom portion 9a ensures the necessary space between the siphon and the floor to be able to use a wide range of connectors, in order to adapt the sanitary bowl 1 to possible drains made on the floor.

[0020] In other words, the sanitary bowl of the present invention can be used both with the wall drains predisposed for a suspended sanitary bowl, and with any type of floor drain, suitable for a floor-mounted sanitary bowl.

[0021] In fact, in the first case the opening 10a of the siphon 4 is placed at a height equal to that provided for the drainage of suspended sanitary bowls. If, however, the height of the opening 10a is at a greater height than the wall drain, it is possible to make an efficacious drain connection therewith by means of a connector. Vice versa, as may seem obvious to a person skilled in the art, if the height of the opening 10a were lower than the drain hole, it would not be possible to make an efficacious drain

connection therewith.

[0022] In the second case, considering that the height from the floor of the siphon is such as to allow the insertion of possible connectors, it is possible to use a wide range of such connectors to connect the opening 10a to a floor drain, regardless of the position thereof. 5

[0023] In conclusion, the floor-mounted sanitary bowl of the present invention, resting on the wall and on the floor, offers the great advantage of avoiding a double production of bowls: those with floor drains and those with wall drains. In fact, the sanitary bowl of the present invention has a horizontal drain which, with the aid of a plastic S technical curve, hidden by the vessel structure, makes it possible to bring the drain to the floor. 10

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Claims

1. A sanitary bowl (1) comprises a basin (3), a siphon (4) connected to a bottom portion of the basin (3), a supply duct (5) of the washing water, which communicates with the basin (3) through a washing opening (6), and a side wall (7) which has a lower edge (7a) in use placed to rest on the ground; said sanitary bowl (1) being **characterized in that** said siphon (4) has an input portion (8) connected to a lower portion of the basin (3), a U-shaped portion (9) of water stagnation and an output portion (10) which ends with an outlet opening (10a) placed at a distance (h) equal to or more than 230 mm from a plane (P) defined by said lower edge (7a) of the side wall (7). 20 25 30
2. Sanitary bowl (1) according to claim 1, **characterized in that** said outlet portion (10) of said siphon (4) extends along a horizontal axis (X) placed at a distance (h) equal to or more than 230 mm from said plane (P) defined by said lower edge (7a) of the side wall (7). 35
3. Sanitary bowl (1) according to claim 1 or 2, **characterized in that** said siphon (4) has a minimum distance (h') equal to or greater than 100 mm from said plane (P) defined by said lower edge (7a) of side wall (7). 40 45
4. Sanitary bowl (1) according to claim 3, **characterized in that** said U-shaped portion (9) has its bottom portion (9a) arranged at a distance (h') greater than or equal to 100 mm from said plane (P) defined by the lower edge (7a) of the side wall (7). 50

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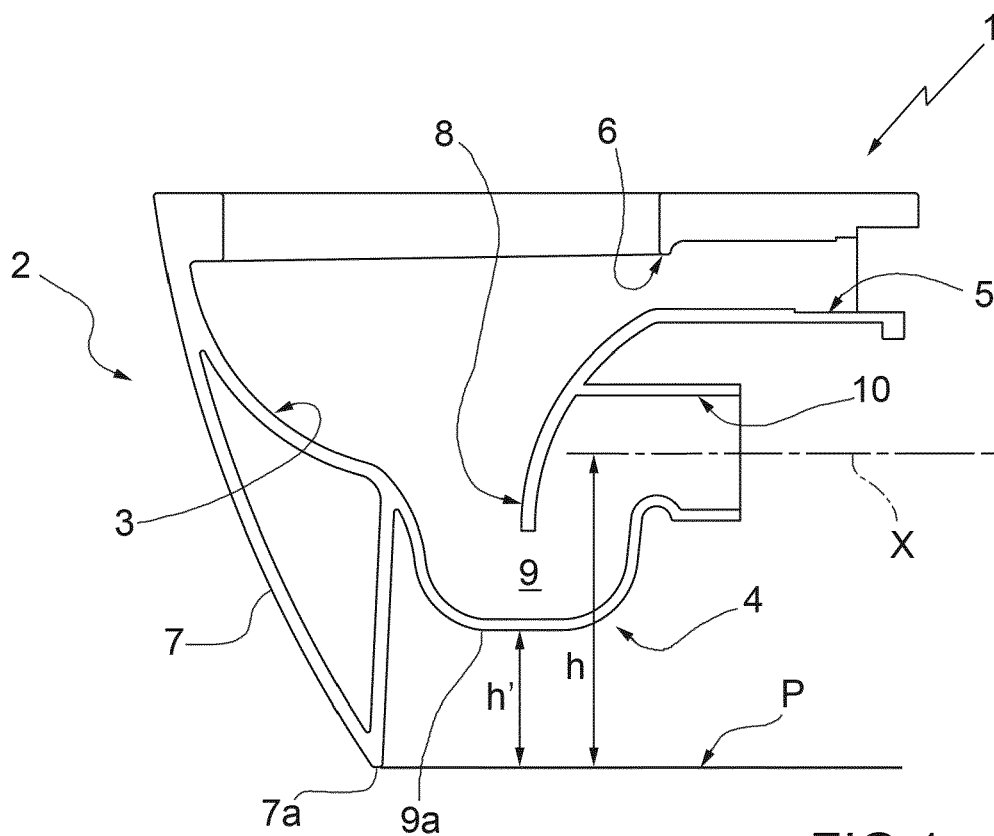


FIG.1

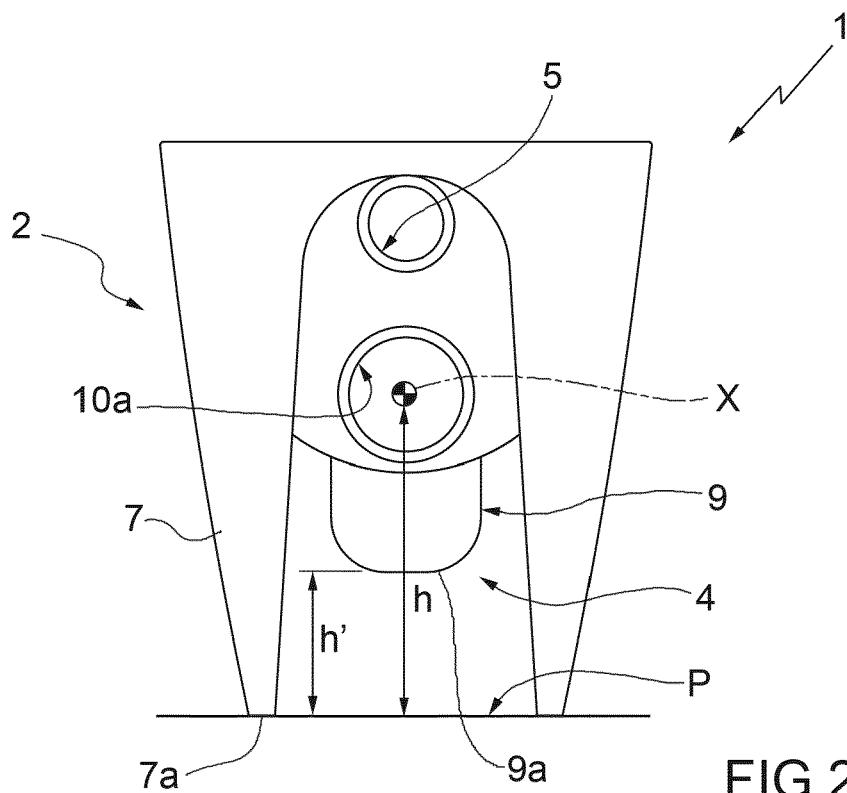


FIG.2



EUROPEAN SEARCH REPORT

Application Number
EP 16 16 0229

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 2 226 439 A2 (DURAVIT AG [DE]) 8 September 2010 (2010-09-08) * figure 1 *	1,2	INV. E03D11/13 E03D11/14
X	----- WO 2012/140608 A2 (SACMI [IT]; BERNABEI ALESSANDRO [IT]; MAZZANTI VASCO [IT]) 18 October 2012 (2012-10-18) * figure 5 *	1,2	
			TECHNICAL FIELDS SEARCHED (IPC)
			E03D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 19 August 2016	Examiner Flygare, Esa
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			

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EPO FORM 1503 03/82 (P04C01)

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

EP 16 16 0229

5 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
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19-08-2016

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