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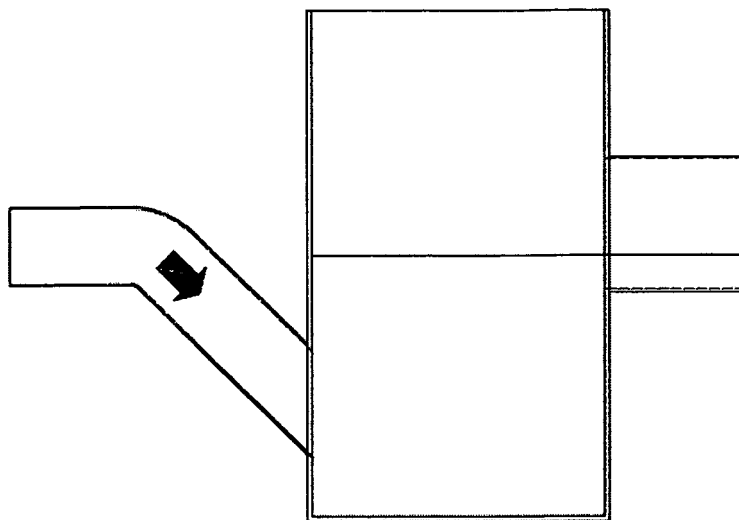
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(54) **Central Odour Trap**

(57) Siphon having a plurality of inlets which are joined to a lower part of the main body of the siphon under an oblique angle with respect to the horizontal axis, and

having an outlet whose lower edge is above the upper edge of the inlets. The main body may be telescopically adjustable to different heights.

FIGURE 3



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Description

OBJECT OF THE INVENTION

[0001] This descriptive report is of the invention of a "central odour isolation trap" sensitively perfected with the aim to improve its functioning and efficiency.

[0002] The "central odour isolation trap" in the invention presented fulfils the basic function of isolating unpleasant odours, by means of a deposit of a sufficient quantity of residual water at the bottom of the trap, separating the inlet and outlet pipes.

[0003] Basically the new design features various inlets and one outlet to the external drainage system.

BACKGROUND:

[0004] Currently there are various different systems of odour isolation. There are those which are attached to the installation with the disadvantage of the space that they occupy. There are also those with an internal partition which forms a trap or water block with the disadvantage that the outlet is obstructed during discharge.

DESCRIPTION OF THE INVENTION:

[0005] The "central odour isolation trap" presented features the following main characteristics:

1. Isolation of the inlet piping from unpleasant odours.

This is achieved by maintaining a layer of water 25 mm above the inlet pipes and below the outlet pipe (figure 4).

2. Outlet to the main drainage network.

The discharge of water is carried out on the upper side of the cylinder, directly to the main drainage network, achieving the release of a greater volume of water as there are fewer internal obstacles or impediments (figure 3).

3. The capacity to be built into a building structure. Due to its design and construction, the "central odour isolation trap" can be inlaid within the main structure or floors, occupying minimal space (figure 5).

4. No internal partition.

The "central odour isolation trap" is free of any internal partition. The water inlet pipes are connected to the lower part of the trap and the outlet pipe to the upper part. This allows a layer of water to settle with a minimum of 25 mm between the inlet and outlet pipes, avoiding contact with the air between them and at the same time creating a whirlpool effect at the base of the cylinder permitting the removal of a greater quantity of solid matter thus avoiding the accumulation of any solid matter, hairs or other residue (figure 2).

5. May be mounted within a space of minimum height of 70 mm. This could be between the main floor struc-

ture and the finished floor.

Owing to its design and structure, from the lower level of the outlet to the highest part of the "central odour isolation trap", the minimum space between the main floor structure and the finished floor could be 70 mm, facilitating its installation (figure 5).

6. Prepared for telescopic elongation to the necessary height.

Due to its design and structure the "central odour isolation trap" may be elongated using compatible materials, until reaching the height of the finished floor, according to the installation requirements of the building.. For the upper cover any conventional lid on the market may be used.

7. The inlet pipes may be fixed or adjustable depending on the installation requirements.

The inlet pipes at 45°, along with some 45° male/female elbows allow for the direction to be appropriate according to the installation requirements, or it can be fixed (figures 1 and 2).

8. Construction can be in PVC, or other materials as required for its different functions.

The construction materials may be any currently available to present technology or those available in the future, for example PVC.

DESCRIPTION OF DRAWINGS:

[0006] To facilitate understanding of this new invention, two pages with plans are attached to this report, in which each and every one of the component parts are shown as examples.

[0007] In these drawings the following features may be distinguished:

(1) Main body of the "central odour isolation trap". The inlet and outlet pipes are noteworthy.

(2) Outlet or discharge pipe in a radial position at a height which guarantees a minimum water level of 25 mm between the outlet and inlet pipes. It is projected at an angle to be connected to appropriate systems or apparatus. Such connections must always be watertight to prevent leaks.

(3) Inlet pipes to the "central odour isolation trap". These are positioned radially around the main body of the trap entering at the lower section at an angle of 45°. These inlets may be "blind" and are projected at an angle to be connected to appropriate systems or apparatus. Such connections must always be watertight to prevent leaks.

[0008] Represented in the aforementioned drawings attached:

FIGURE 1: PLAN VIEW.

Overhead view of the "central odour isolation trap" (1) where the different inlet pipes may be observed (3), to be defined according to usage, the outlet pipe

to the main drainage network (2). The diameters are defined according to usage.

FIGURE 2: SIDE VIEW.

This is a cross-section offering a side view of the "central odour isolation trap". In this view one can observe the position of the inlet pipes (3), the main body of the trap (1) and the outlet pipe (2). The inclination of the inlet pipes at an angle of 45° (3) to the vertical body of the trap (1) and a water level of 25 mm between inlet and outlet pipes provides the required odour isolation.

Connection to the inlet pipes (2) is carried out with 45° elbows available on the market, compatible with the construction materials of the "central odour isolation trap", allowing them to be adjusted according to structural requirements.

FIGURES 3 and 4: SIMULATION OF THE FUNCTIONING OF THE "CENTRAL ODOUR ISOLATION TRAP".

Figure 3 represents the trap at the moment of discharge. The inlet pipe (3) causes the water level in the main body of the trap to rise (1) until reaching the level of the outlet pipe.

Figure 4 represents the trap in its rest state, where one can observe the minimum water level which achieves the isolation of odours between the inlet pipes connected to the installations and the outlet pipe.

FIGURE 5: INSTALLATION OF THE "CENTRAL ODOUR ISOLATION TRAP".

As has already been stated, this new design may be mounted within a space of minimum height of 70 mm between the building structure and the finished floor. This facilitates its installation.

cient capacity, to which the inlet pipes are joined on the lower part in radial form, at an angle of 45°, (3), and a lateral outlet pipe at a height with respect to the inlet pipes which allows a constant water level of at least 25 mm, which separates the inlet pipes from the outlet pipe. The inlet pipes may be "blind" if not required for connection.

2. The "central odour isolation trap" is unique due to the design of its radially positioned inlet pipes in the lower part allowing for a high level of debris removal in the interior of the apparatus.
3. The "central odour isolation trap" is unique in its capacity to be installed in finished floors within a space of a minimum height of 70 mm.
4. The "central odour isolation trap" is unique in that it may be elongated telescopically to reach the necessary height (1).
5. The "central odour isolation trap" is unique in that it may be constructed in PVC, copper or other materials required for its distinct functions.

SUGGESTED MODE OF FABRICATION:

[0009] Given the simplicity of the invention, the mode of fabrication may be adapted to suit the requirements of its use.

[0010] Usually it will be made from PVC, the main body (1) as well as the outlet (2) and inlet pipes (3).

[0011] The outlet and inlet pipes are attached to the main body (circular without a lid) and may be "blind" allowing them to be opened and used according to requirements. These pipes are compatible with accessories available on the market (elbows, tubes, T's, etc), to enable their connection to discharge sources and the main drainage network.

[0012] The lid of the "central odour isolation trap" may be any available on the market compatible with the materials and whose diameter may be adjusted.

Claims

1. The "central odour isolation trap" is unique as it incorporates a main body within its structure and suffi-

FIGURE 1

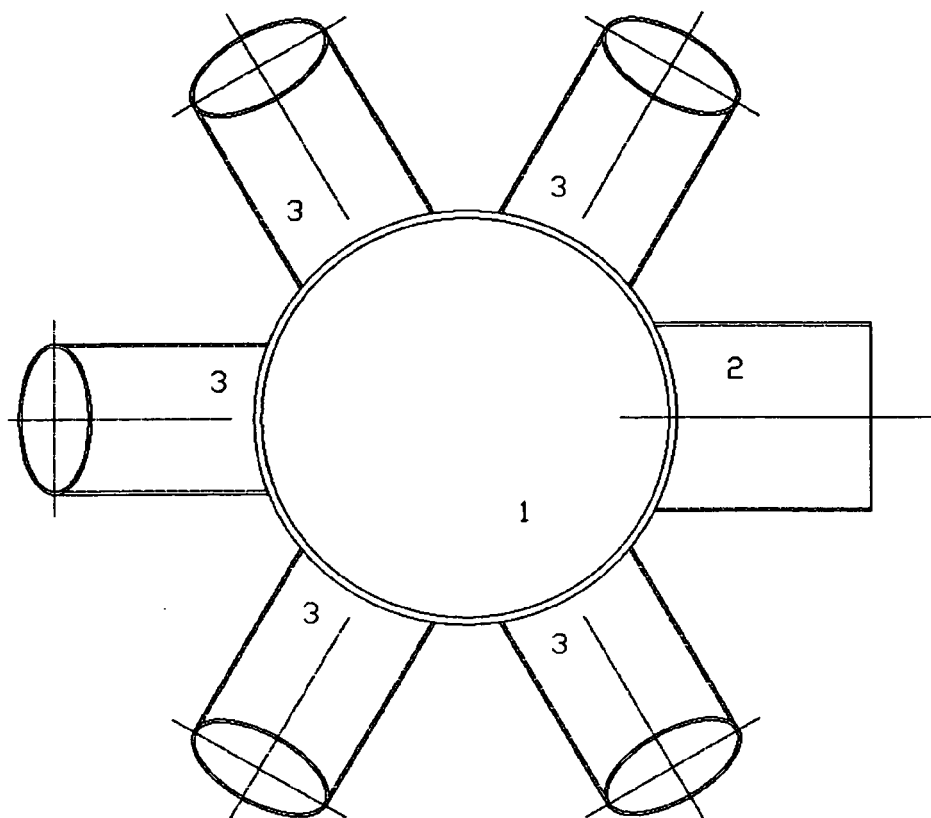


FIGURE 2

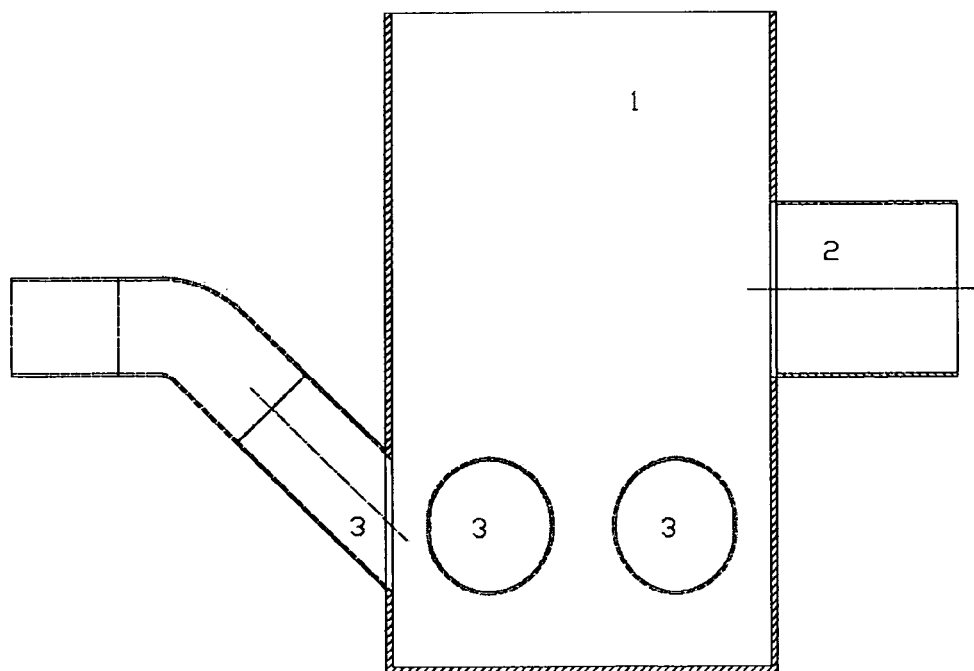


FIGURE 3

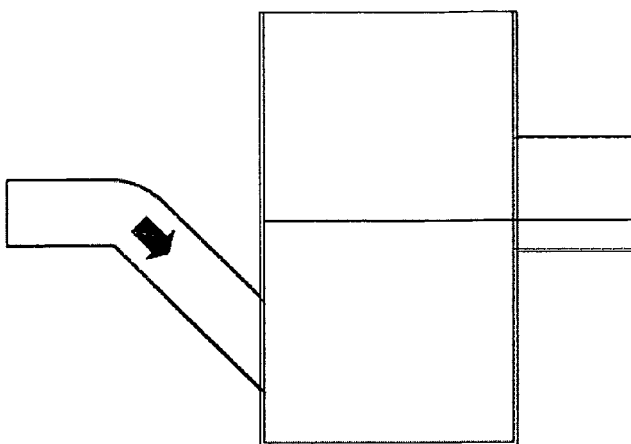


FIGURE 4

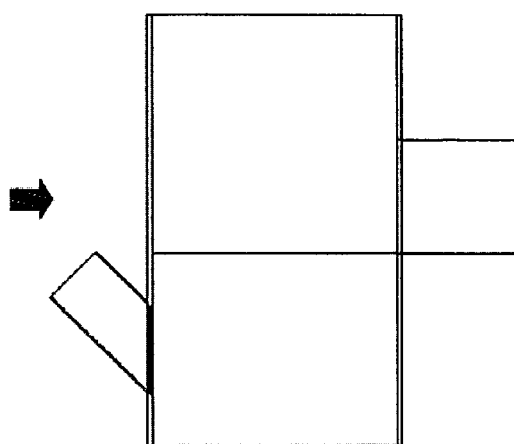
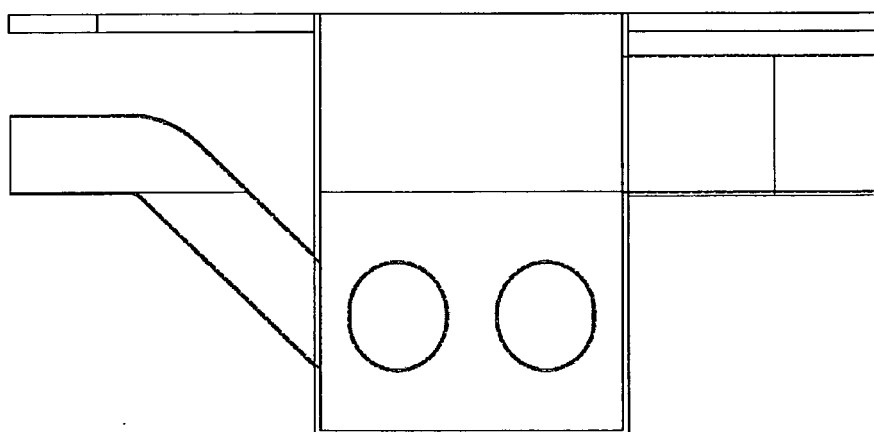


FIGURE 5





EUROPEAN SEARCH REPORT

Application Number
EP 10 38 0092

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	DE 28 23 463 A1 (AR T I R E S R L ARTICOLI TECN) 14 December 1978 (1978-12-14)	1-3,5	INV. E03C1/28
Y	* the whole document *	4	
A	EP 0 429 352 A1 (SCPA DUBOSC ET LANDOWSKI [FR]) 29 May 1991 (1991-05-29) * figure 1a *	1	
Y	FR 2 849 664 A1 (ELABORECO PROJECT [FR]) 9 July 2004 (2004-07-09) * page 2; figures 6,7 *	4	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			E03C
Place of search		Date of completion of the search	Examiner
Munich		14 January 2011	Horst, Werner
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 10 38 0092

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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14-01-2011

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