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(54) **Flush-mounted box for hydraulic systems**

(57) A flush-mounted box for hydraulic systems comprises a container body having a substantially parallelepiped configuration with an open face adapted to be closed by a closure plate.

With the container body are rigidly coupled a water outlet fitting and cold and hot water fittings which can be respectively coupled to a cold water and a hot water delivery pipes, the delivery fittings being adapted to be coupled to flexible tubes for connection to a user apparatus.

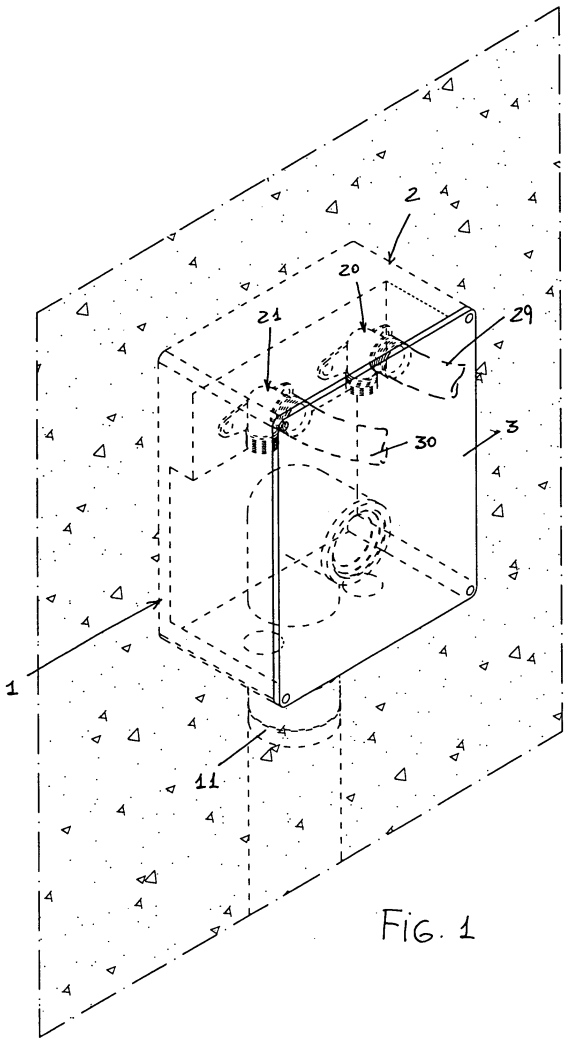

FIG. 1

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Description

BACKGROUND OF THE INVENTION

[0001] The present invention relates to a flush-mounted box for hydraulic systems in general.

[0002] As is known, conventional hydraulic systems comprise a plurality of outlet ducts and delivery ducts which are preliminarily flush mounted in a wall; then, for installing the wall, it is necessary to hydraulically connect the ducts, with consequent serious problems deriving from a non proper locating of both the outlet and delivery tubes.

[0003] Moreover, it is at present necessary to perform drilling operations on tiles and walls, at each tube or pipe, with the requirement to use great labor. Moreover, in performing these operations, defects are frequently caused which cannot be properly concealed.

SUMMARY OF THE INVENTION

[0004] Accordingly, the aim of the present invention is to solve the above mentioned problems, by providing a flush-mounted box for hydraulic systems in general, allowing to greatly simplify all the operations related to the coupling of hydraulic apparatus, such as sanitary devices, basins and the like, while allowing these apparatus to be quickly and easily assembled.

[0005] Within the scope of the above mentioned aim, a main object of the invention is to provide such a flush-mounted box which can be easily and quickly assembled without drilling tiles and the like, thereby greatly improving the aesthetic properties of the finished working operations.

[0006] Yet another object of the present invention is to provide such a flush-mounted box or case for hydraulic systems in general which, owing to its specifically designed constructional features, is very reliable and safe in operation.

[0007] Yet another object of the present invention is to provide such a flush-mounted box or case which can be made in a very simple and inexpensive manner.

[0008] According to one aspect of the present invention, the above mentioned aim and objects, as well as yet other objects, which will become more apparent hereinafter, are achieved by a flush-mounted box for hydraulic systems in general, characterized in that said flush-mounted box comprises a substantially parallelepipedal container body having an open face adapted to be closed by a closure plate, with said container body being rigidly coupled a water outlet fitting and cold water and hot water delivery fittings, respectively, said fittings being adapted to be coupled to a cold water delivery tube and a hot water delivery tube, flexible tubes for connection to a user apparatus being further adapted to be coupled to said delivery fittings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Further characteristics and advantages of the present invention will become more apparent hereinafter from the following detailed disclosure of a preferred, though not exclusive, embodiment of a flush-mounted box for hydraulic systems in general, which is illustrated, by way of an indicative, but not limitative, example in the accompanying drawings, where:

Figure 1 is a schematic perspective view of the inventive flush-mounted box or case, fixed to a wall;
Figure 2 is a further perspective view of the subject flush-mounted box, in an open condition thereof;
Figure 3 is a front view of the flush-mounted box or case according to the invention;
and
Figure 4 is a schematic cross-sectional view showing the flush-mounted box or case according to the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0010] With reference to the number references of the above mentioned figures, the flush-mounted box or case for hydraulic systems in general, which has been generally indicated by the reference number 1, comprises a container body 2, having a substantially flattened parallelepipedal configuration, including an open face which can be closed by a closure plate 3.

[0011] More specifically, said container body 2 is advantageously flush-mounted on a wall, with its open face substantially flush with said wall; in this manner, the closure plate will be arranged on the extension of the flush-mounting wall.

[0012] Moreover, as shown, said container body 2 is rigidly coupled to an outlet fitting 10 which is advantageously of elbow configuration and comprises an outlet mouth 11 including an OR element 12 projecting from the bottom side wall to be coupled to the outlet duct 13 which is also flush-mounted on the wall.

[0013] The fitting 10 comprises an inlet 14 whereat a gasket membrane 15 is provided, for allowing the outlet tube coming from a user apparatus to be tightly coupled by a simple pressure coupling method.

[0014] Said container body 2 comprises, in its inside, cold water and hot water fittings, respectively indicated by the reference numbers 20 and 21, which are also advantageously of elbow configuration, with a coupling mouth, respectively indicated by 23 and 24, for connection to a cold water delivery tube 25 and a hot water delivery tube 26 respectively, said delivery tubes being also flush-mounted on the wall.

[0015] In particular, the fittings, which are coupled by coupling screws, define outlets 27 and 28 which can be conventionally coupled to flexible tubes 29 and 30 for connection to a respective user apparatus.

[0016] Thus, the disclosed device allows to flush-mount directly on a wall the container body by coupling the latter both to the hydric outlet system and the hot water and cold water delivery systems, thereby always allowing a precise positioning to be achieved.

[0017] Moreover, the possibility of using a single covering element enclosing the overall container body and, accordingly, all the region thereat the tubes are flush-mounted, allows to greatly simplify and accelerate all the subsequent necessary operations for applying, for example, tiles or the like, thereby providing a finished system having very good aesthetic properties.

[0018] The invention, as disclosed, is susceptible to several modifications and variations, all of which will come within the scope of the invention.

[0019] Moreover, all the details can be replaced by other technically equivalent elements.

[0020] In practicing the invention, the used materials, provided that they are compatible to the intended application, as well as the contingent size and shapes, can be any, depending on requirements.

Claims

1. A flush-mounted box for hydraulic systems in general, **characterized in that** said flush-mounted box comprises a substantially parallelepipedal container body having an open face adapted to be closed by a closure plate, with said container body being rigidly coupled a water outlet fitting and cold water and hot water delivery fittings, respectively, said fittings being adapted to be coupled to a cold water delivery tube and a hot water delivery tube, flexible tubes for connection to a user apparatus being further adapted to be coupled to said delivery fittings.

2. A flush-mounted box, according to the preceding claim, **characterized in that** said water outlet fitting has an elbow configuration.

3. A flush-mounted box, according to the preceding claims, **characterized in that** said water outlet comprises an outlet mouth which is rigidly coupled to a bottom side face of the container body.

4. A flush-mounted box, according to one or more of the preceding claims, **characterized in that** said flush-mounted box comprises sealing OR elements, arranged on said outlet mouth.

5. A flush-mounted box, according to one or more of the preceding claims, **characterized in that** said water outlet fitting comprises an inlet mouth including a sealing membrane for providing a tight pressure connection of a user apparatus outlet duct.

6. A flush-mounted box, according to one or more of the preceding claims, **characterized in that** said delivery fittings are coupled to said container body by coupling screw means.

7. A flush-mounted box, according to one or more of the preceding claims, **characterized in that** said delivery fittings have an elbow configuration.

8. A flush-mounted box for hydraulic systems in general, according to one or more of the preceding claims, and substantially as broadly disclosed and illustrated, for the intended aim and objects.

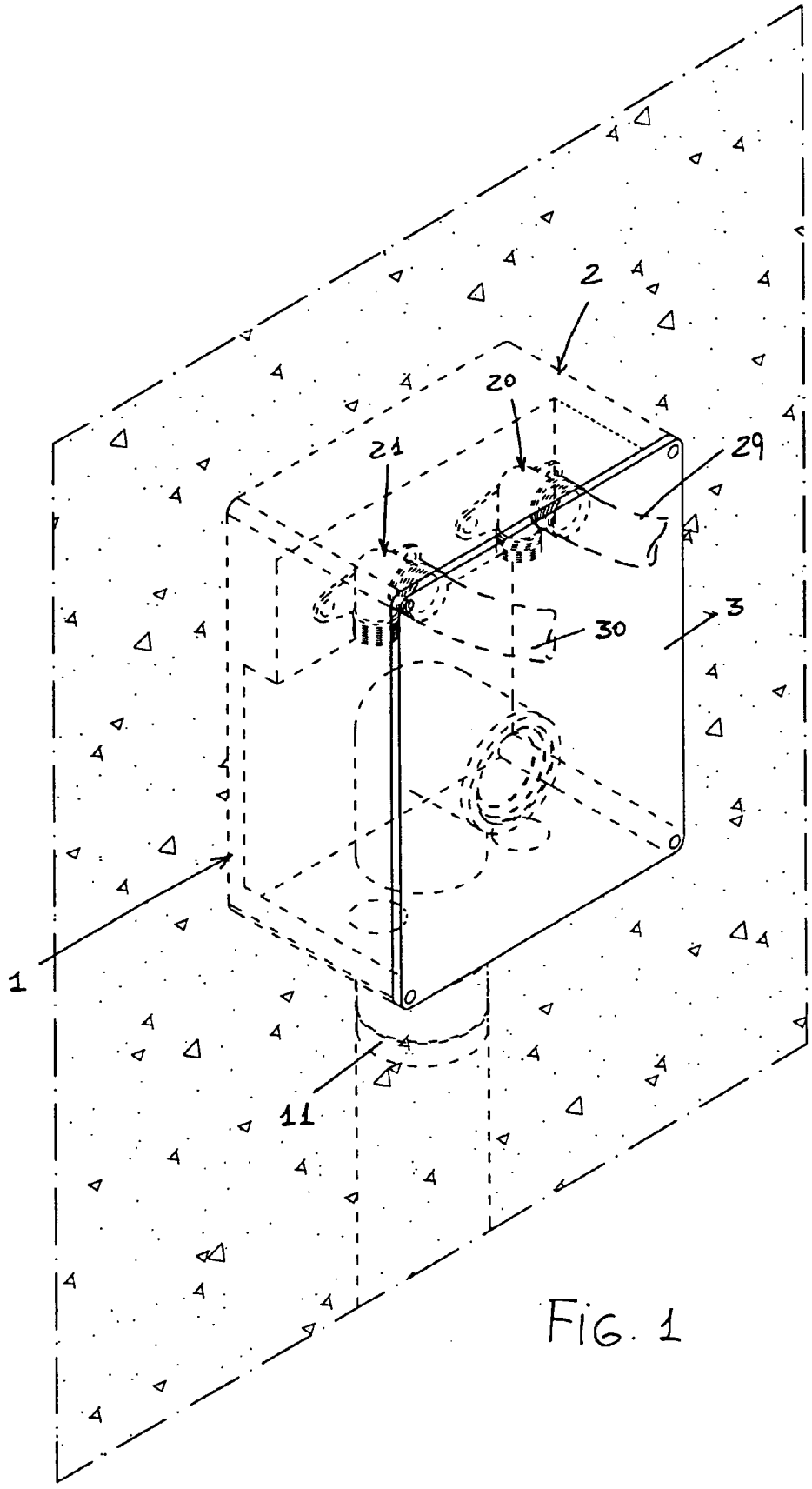

FIG. 1

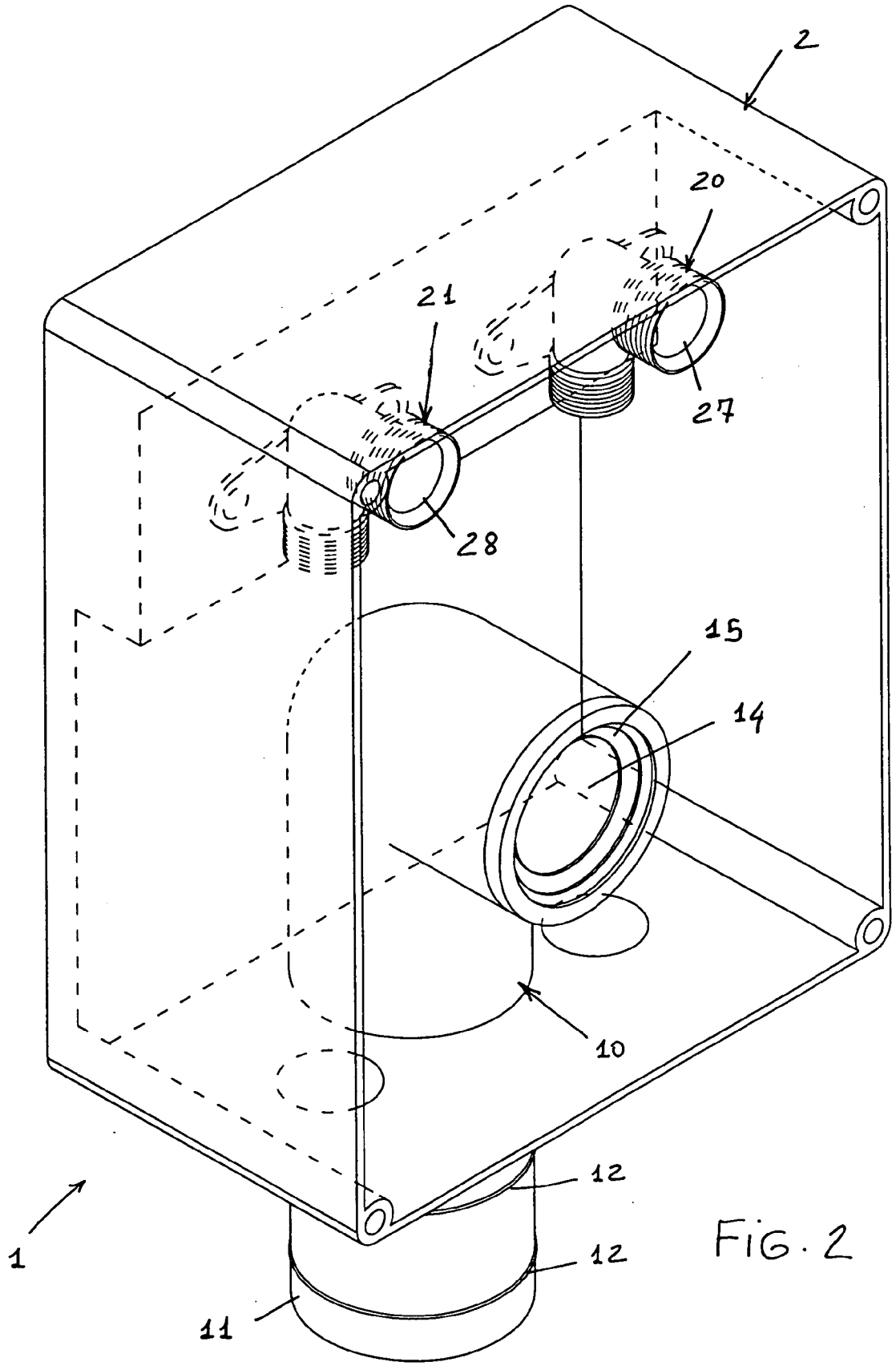

FIG. 2

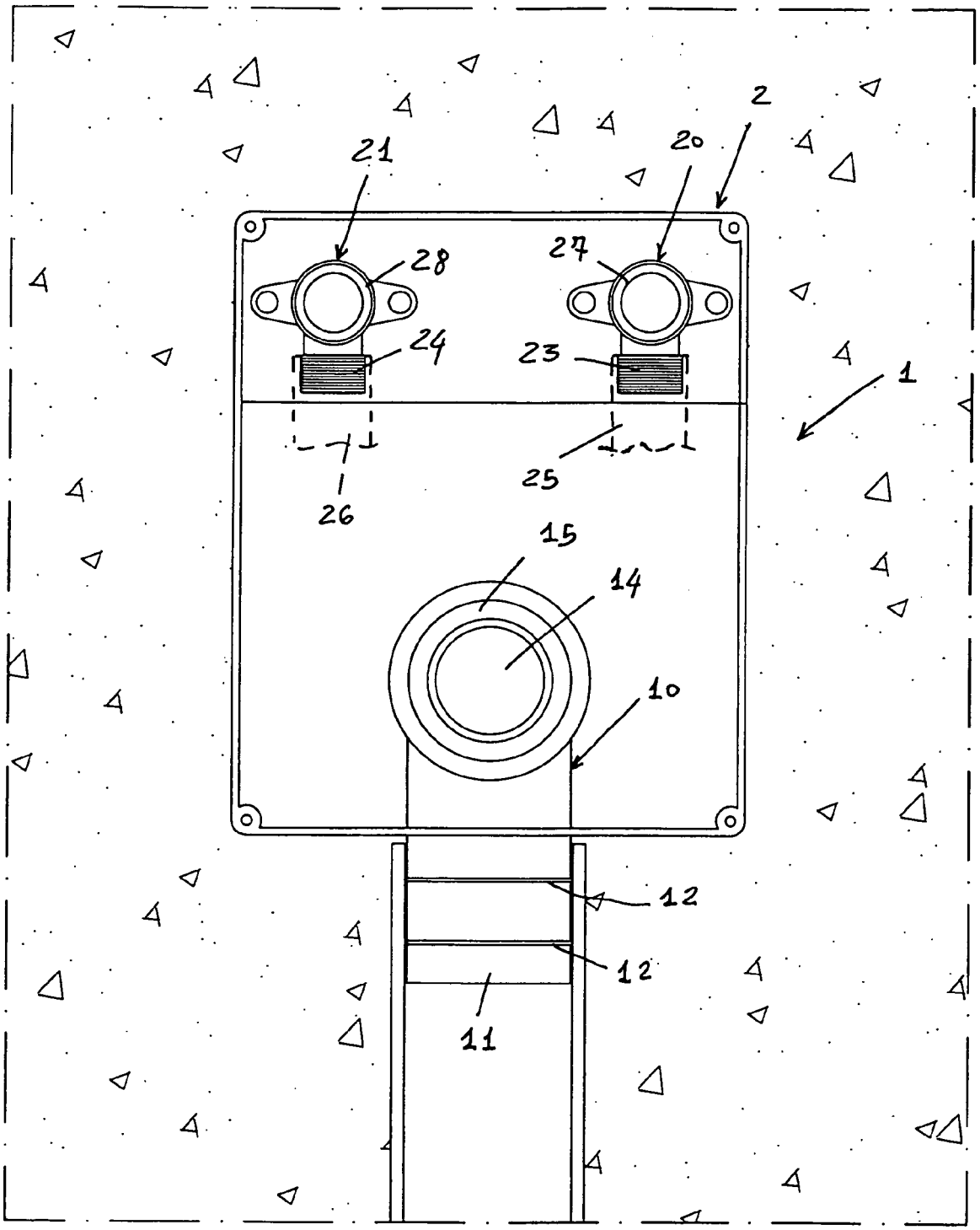

FIG. 3

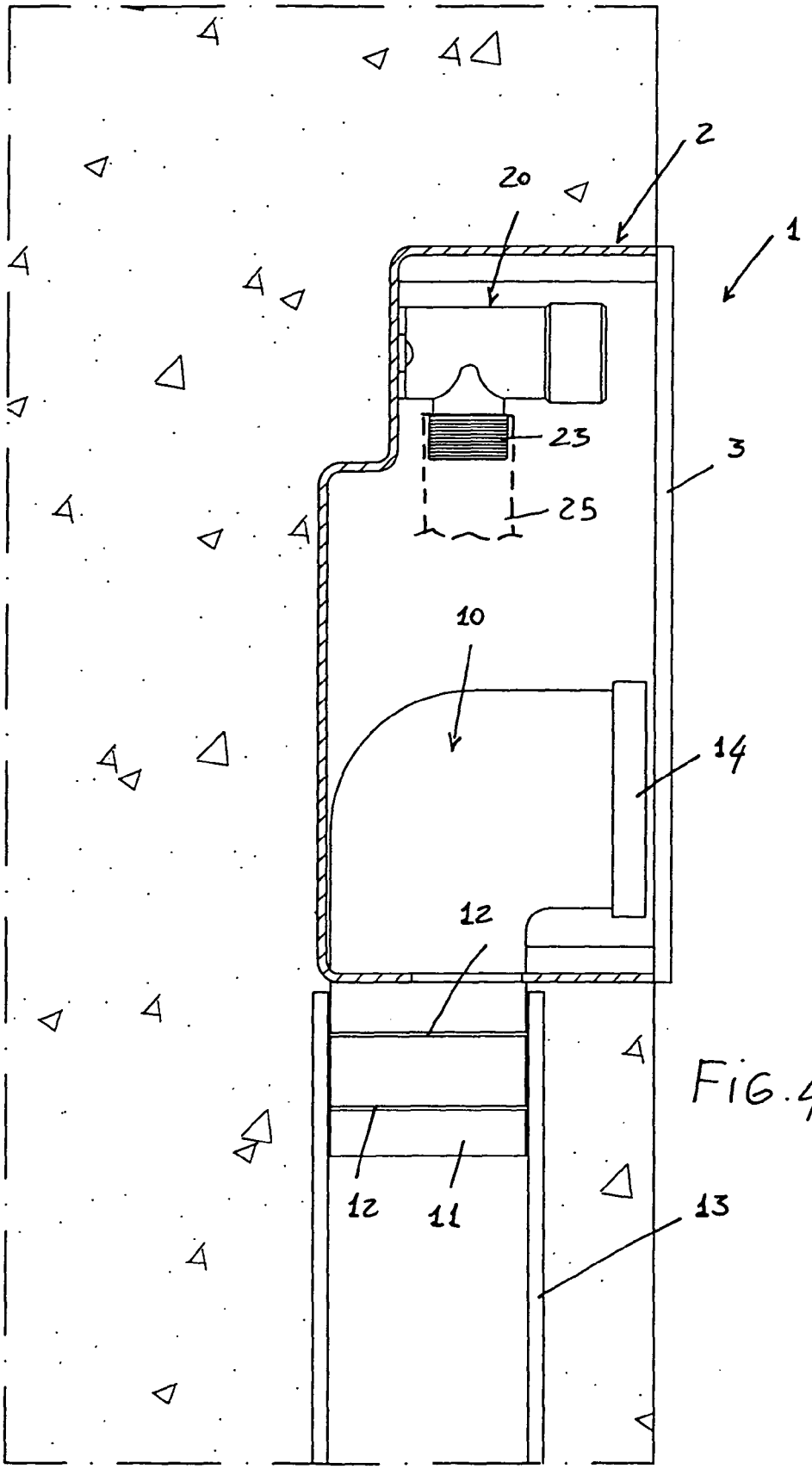

FIG. 4