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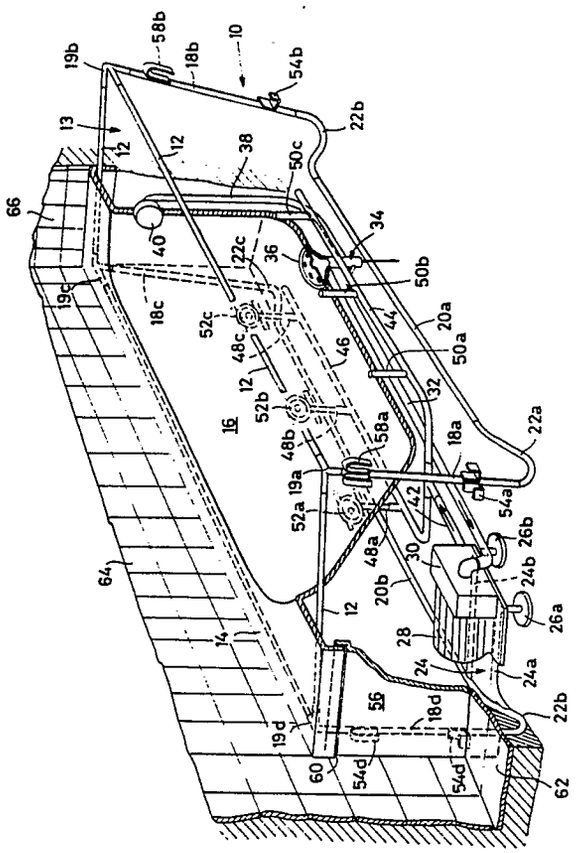
(54) Equipped base for bath tubs, especially bath tubs with hydromassage system.

(57) Equipped base for bath tubs comprising a bath supporting frame (10), a recirculating pump (30), a suction duct (32) connecting at least a suction inlet (34) with a pump inlet, a delivery duct (42) connecting a pump outlet with side branches (44, 46) and with at least a hydromassage fitting (52), fixtures or brackets (54a-d) for the fastening of wall panels (56) to the said supporting frame (10), the frame consisting of composable members to be coupled to each other.



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"Equipped base for bath tubs, especially bath tubs with hydromassage system."

The present invention relates to a base of standardizable type, suitably equipped and adapted to receive bath tubs of different sizes and, especially, bath tubs provided with a hydromassage system.

The bath tubs, which are manufactured with an outer shape very adherent to the internal one, are commonly housed in housings conforming to the architectural requisites of the room within which they are installed.

A very simple and common method to form those housings is that of building around the bath tub masonry works which are suitably finished with facing material having the aesthetic properties as required by said room. If the bath tub is of common type, this usual type of facing may be sufficient since, especially with recent types of tubs manufactured with materials which are scarcely subjected to corrosion and scaling, it is rather unprobable that it is necessary to have acces to the space between the tub and the outer facing to carry out substitution, repair or maintenance operation.

Obviously in the case of the masonry housing, it is possible to have acces only by breaking said housing and remaking the same, with serious problems as to finding facing tiles to be substituted having colours and drawings identical or consistent with those which are destroyed during the breaking operation.

Such a drawback may involve the remaking of the entire facing of a men room with the economical consequences which can be easily imagined.

In order to eliminate this very serious drawback it has been tought to place said tub onto a supporting frame which is hidden and lined with an outer paneling, suitably anchored to said frame, having finishings and colours harmonized with the remaining part of the room.

This solution constitutes a relevant advance with respect to the previous solution since it is sufficient to make said paneling easily removable in order to have whatever acces to the parts positioned between the tub and the outer paneling, such as outlet and overflow ducts, opening and closing controls for the discharge, such as the tipical ratchet closing device and the like.

This system with outer paneling is still more necessary when between the tub and the housing further auxiliary devices must be housed such as suction and delivery fittings, pumps, electrovalves, control processing circuits, controls and the like, such as those used in bath tubs provided with a hydromassage system, since the need of having access to the components of said system for maintenance, repairing, substitution operations, may be rather highly probable.

The above described system has been to date realized by using a fixed frame, the size of which must be changed according to the size of the tub and of the connection ducts between the pump, the suction fitting and the hydromassage fitting, the lenghts of said ducts being also dependent on the tub size.

Thus it it necessary to keep on a storage as much types of frames and of connecting ducts as the types of tubs being sold are, whereby an expensive and of difficult handling storage situation occurs.

Now it would be very useful to have a system having a frame, even if not unique for all tubs, but at least compcsable with standardized fixed members and with pipes of fixed lenght so as to have only one hydromassage system for all type of tubs.

This system is provided by the present invention by using a supporting frame formed by elongated metal members, such as profhiles or pipes having a restricted series of fixed lenghts, joined by couplings or fittings which are certainly connectable to each other by means such as couplings, and a system for the water recirculation comprising a pump and suction and delivery ducts of fixed dimensions connectable to at least a suction fitting and at least a hydromassage fitting, respectively, by means of flexible and of adjustable lenght couplings, in order to fully adapt the water recirculation system to the bath tub.

More preferably, said frame is formed by elongated members, horizontally positioned to form a tub rectangular support, connected at their corners by joining elements like pipe fittings of the type suitable to fit the members of the rectangular support and a post, each of said posts, being vertically positioned and acting as a support leg of the horizontally positioned members, said posts being coupled to foot elements which in turn are engaged with longitudinal members or ground abutments, having the purpose of keeping the feet correctly spaced and of connecting together the vertical posts to prevent them from being spread apart.

More preferably the recirculation pump comprises its own supporting frame anchored to the tub frame and provided with at least a floor bearing foot.

The features and advantages of the present invention shall be better understood from the detailed description of an embodiment thereof taken into consideration with the enclosed drawing in which the only figure is a perspective view, partially

in cross-section, of an equipped base for bath tubs according to the present invention.

Considering the figure it is seen that the said equipped base consists of a supporting frame 10 comprising metal members, such as profiles, or pipes 12 joined together by suitable joints or weldings, said frame 12 forming an essentially rectangular supporting system 13 for an upper plane 14 of a bath tub 16 from which posts 18a-18d are vertically directed and connected to two longitudinal members 20a,20b for the abutment onto the floor ending with feet 22a-22d, said posts 18a-18d being connected to said members 12 by triple fitting joints 19a-19d and to said longitudinal members 20a, 20b, by means of the said feet, 22a-22d, provided with connecting joints.

A secundary small frame 24 is abutted against said frame 10 and consists of two cross-pieces 24a, 24b, connected for example to the foot 22d and to the longitudinal member 20b, and ending with two abutting feet 26a and 26b, it serving as a support for a group consisting of a motor 28 and of a water recirculation pump 30 to produce the desired hydromassage. Said pump 30 is provided with a suction duct 32 connected to a discharging and suction fitting 34 positioned under a discharge outlet 36 of the tub 16, said fitting 34 also receiving an overflow discharge duct 38 connected to an overflow 40. From the said pump 30 a delivery duct 42 extends, it being divided into two branches 44 and 46 provided with fittings 48a-48C and 50a-50C , respectively, of which the connection fittings 48a-48c , connected to hydromassage fittings 52a-52c, are seen.

The posts 18a-18b are provided with brackets 54a-54d adapted to support panels such as the panel 56 by which the outer lining of the tub housing is completed, and elastic members or leaf springs 58a-58d serving to keep said panels 56 engaged between a lower edge 60 of the tub rim and the said brackets 54a-54d, so as to complete and aesthetically finish the tub with respect to the floor 62 and to the walls 64 and 66 of the room.

Claims

A. Equipped base for bath tubs, especially hydromassage tubs, comprising a frame (10) supporting a tub (16) together with lining panels (56) , characterized in that said frame 10 is formed by elongated metal members, such as profiles or pipes having a restricted range of fixed lenghts, kept together by joints or fittings which can be certainly coupled to each other by means such as fittings, wherein a water recirculation system is housed comprising a pump (30), suction ducts (32) and delivered ducts (42) which can be connected to at least a suction nozzle (34) and to a least a hydromassage nozzle (52), respectively, by means of flexible and length adjustable fittings (48,50) to fully adapt the water recirculation system to the bath tub (16).

2. Equipped base according to claim 1, characterized in that said frame (10) is formed by elongated members (12) of fixed lenghts, which can be connected to each other so as to form a rectangular support (13) for said tub (16) of variable size, such as to meet the dimension of said tub, the rectangular support (13) being closed at its corners by triples joints (19a-19d) which moreover permit posts (18a-18d) supporting the rectangular support (13) and coupled to feet (22a-22d), connected to longitudinal members of ground abutment (20a-20b), to be housed, having the purpose of keeping the feet correctly spaced (22a-22d) and of connecting together the posts (18a-18d) to prevent them from being spread apart.

3. Equipped base according to claims 1 and 2, characterized in that said hydromassage fittings (52a-52d) are in number greater than one and are fixed to branches (44, 46) of a suction duct (42) of said water recirculation system by means of flexible fittings of adjustable lenght (48a-48d, 50a-50d).

4. Equipped base according to claim 3, characterized in that the recirculation pump (30) is provided with its own supporting frame (24), anchored to the frame (10) of the tub (16) and provided with at least a floor abutting foot (26).

5. Equipped base according to claim 4, characterized in that said abutting frame (24) for the pump is provided with two feets of floor abutment (26a, 26d)