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(54) **Tank or Bath**

(57) The invention is a tank or bath (1, 100, 200, 300) comprising several parts (2a, 2b, 2c, 2d, 2e, 2f, 2g),

each one of said parts (2a, 2b, 2c, 2d, 2e, 2f, 2g) extending for one entire horizontal cross section of the tank or bath (1, 100, 200, 300).

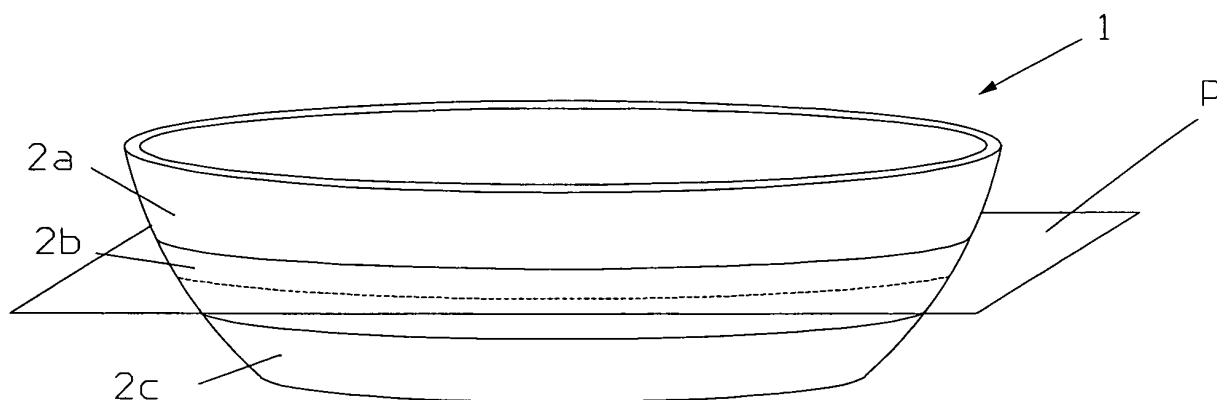


Fig. 1

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Description

[0001] The invention concerns a tank particularly suited to be made from stone, marble, granite, or of natural, synthetic or mixed conglomerates and to be used for hygienic, therapeutic or recreational purposes.

[0002] As already known, in the sector of house furnishing and design in general, many innovative efforts are aimed to create increasingly catching structures, shapes and works, which sometimes poses considerable problems in terms of implementation, application and costs.

[0003] In the sector of bath furnishing, for example, baths obtained by processing a single stone block have met with considerable success on the market.

[0004] These tanks or baths are produced using special machine tools, generally milling machines that, equipped with rotating diamond tools, remove the excess material from the block, thus obtaining a tank or bath of the desired shape.

[0005] The shape is generally defined by the operator through an integrated CAD/CAM system that makes it possible to design and directly display on the screen of a processor the product to be made and manages the control of the above mentioned machine tools.

[0006] The high-level finishing ensured by these machines, together with the characteristics of the material used, make these tanks or baths particularly successful on the market.

[0007] However, these tanks or baths have some drawbacks that limit their diffusion.

[0008] A first drawback, in particular, is represented by the fact that they are difficult to move and to handle, due both to their considerable size and to their weight.

[0009] Another drawback, associated with the previous one, is constituted by the fact that these tanks or baths are also difficult to install.

[0010] It is important to remember, in fact, that the installation is carried out manually by one or more operators, with serious risks, sometimes also for the safety of the operator.

[0011] A further drawback associated with the previous ones is constituted by the fact that very often these tanks or baths cannot be transported to the place where they are to be installed.

[0012] To understand this, in fact, it is sufficient to think of modern building practice, which, for various reasons, tends to propose increasingly small and confined spaces.

[0013] The difficulty in transporting and the risk of breakages must be also taken in consideration.

[0014] A further drawback is constituted by the fact that to process single blocks with size suitable for making tanks or baths of the type described very expensive machinery is required.

[0015] It is the aim of the invention to overcome the drawbacks described above.

[0016] In particular, a first aim of the invention is to

carry out a bath that can be completely made from stone and in particular, but not necessarily, from marble or granite.

[0017] Another aim of the invention is to carry out a tank or bath that, compared to the known tanks or baths with similar characteristics, should be easier to install.

[0018] A further aim is to carry out a tank or bath that is easier to transport than the known tanks or baths comparable with it.

[0019] Another aim of the invention is to carry out a tank or bath that can be comfortably transported and installed even in small and confined spaces.

[0020] Another aim is to carry out a tank or bath that can be constructed even with less complex and less expensive machines than the known tanks or baths comparable with it.

[0021] The aims mentioned above have been achieved through the implementation of a tank or bath that, according to the main claim, is characterized in that it comprises two or more parts, each of said parts extending for the entire at least one horizontal section of said tank or bath.

[0022] To advantage, the proposed tank or bath can thus be divided in parts with reduced dimensions and weight for transport and then assembled at the moment of installation.

[0023] This allows, to advantage, to facilitate the transport and handling stages, which, as mentioned above, are performed manually.

[0024] The aims and advantages described above will be highlighted in greater detail in the description of some among many possible applications of the invention, with reference to the enclosed drawings, wherein:

- Figure 1 is an axonometric view of the tank or bath object of this invention;
- Figure 1a is a view of the tank or bath of Figure 1 according to the horizontal plane P;
- Figure 2 is an axonometric view, partially exploded, of the tank or bath of Figure 1;
- Figure 3 is an axonometric view of a construction detail of the tank or bath of Figure 1;
- Figures from 4 to 6 represent each a side view of a variant of the tank or bath of Figure 1.

[0025] Although the applications described refer to baths, it is evident that the solution proposed can be applied also to other types of tanks destined for other uses and having any shape and/or size.

[0026] The tank or bath suited to contain liquids that is the object of the invention is represented in Figure 1, where it is indicated as a whole by 1.

[0027] According to the invention, the bath 1 is constituted by several homogeneous and distinct parts or layers, indicated by 2a, 2b, 2c, each one of said parts or layers extending for the entire at least one horizontal cross section of the bath 1, as shown in Figure 1a.

[0028] In particular, the example shows the bath com-

prising three parts 2a, 2b, 2c that are distinct, overlapping and made from natural or artificial stone, or from equivalent materials such as marble, granite or agglomerates of various nature, synthetic, natural or mixed.

[0029] More precisely, each part 2a, 2b, 2c is delimited by plane surfaces 3, suited to be placed in contact with each other, shown in detail in Figure 2 and provided with first and second connection means indicated as a whole by 4 and 5, respectively, in Figure 3.

[0030] Said connection means 4, 5 are constituted by a male element 41 suited to be coupled with a corresponding female element 51 and located on the surface 3 of the part over it.

[0031] A first variant indicated as a whole by 100 in Figure 4 is differentiated from the previous one by the number of parts or layers 2d, 2e, 2f, 2g, as well as by the fact that the intermediate part 2e is made of a transparent material.

[0032] Another variant, not represented, is differentiated from the previous one by the fact that the various parts constituting the bath are made of materials of different colours.

[0033] A further variant indicated as a whole by 200 in Figure 5 is differentiated from the previous one by the fact that the surfaces 3 delimiting the parts or layers are wavy surfaces. This makes it possible to obtain pleasant and appreciable aesthetical results.

[0034] Figure 6 represents a further variant indicated as a whole by 300, which is differentiated from the previous ones owing both the shape of the parts and the configuration of the contact surfaces 3.

[0035] To advantage, the solution proposed allows particular solutions to be obtained, by simply combining parts made of different materials or by modifying the shape of the single parts.

[0036] A further variant, not represented, is differentiated from the others by the fact that it is provided with a hydromassage system that is of the known type and therefore not described below.

[0037] The assembly of the bath 1 substantially requires that the various parts 2a, 2b, 2c are arranged in sequence and overlapped, if necessary spreading the surface contacts 3 between said parts with glue, silicone or other compounds useful to increase the tightness of the bath 1.

[0038] To advantage, the solution proposed makes it possible to construct baths, even of considerable size, using machines with moderate performance levels, that is, capable of processing single blocks of limited size.

[0039] In fact, the solution proposed allows the product to be divided into parts of smaller dimensions that can be successively assembled.

[0040] It must also be observed that the particular shape of the connection elements increases the strength, the stability and also the tightness of the bath itself.

[0041] The above clearly shows that the solution proposed overcomes the drawbacks described.

[0042] Although the invention is described with reference to the enclosed drawings, modifications may be made upon implementation, which all fall within the innovative concept expressed in the following claims and are therefore covered by this patent.

Claims

1. Tank or bath (1, 100, 200, 300), **characterized in that** it comprises two or more parts (2a, 2b, 2c, 2d, 2e, 2f, 2g), each one of said parts (2a, 2b, 2c, 2d, 2e, 2f, 2g) extending for the entire at least one horizontal cross section of said tank or bath itself (1, 100, 200, 300).
2. Tank or bath (1, 100, 200, 300) according to claim 1), **characterized in that** at least one of said two or more parts (2a, 2b, 2c, 2d, 2e, 2f, 2g) is made of stone.
3. Tank or bath (1, 100, 200, 300) according to claim 1), **characterized in that** at least one of said two or more parts (2a, 2b, 2c, 2d, 2e, 2f, 2g) is made of marble.
4. Tank or bath (1, 100, 200, 300) according to claim 1), **characterized in that** at least one of said two or more parts (2a, 2b, 2c, 2d, 2e, 2f, 2g) is made of granite.
5. Tank or bath (1, 100, 200, 300) according to claim 1), **characterized in that** at least one of said two or more parts (2a, 2b, 2c, 2d, 2e, 2f, 2g) is made of conglomerate.
6. Tank or bath (1, 100, 200, 300) according to any of the previous claims, **characterized in that** at least one of said two or more parts (2a, 2b, 2c, 2d, 2e, 2f, 2g) is made of a material different from the other materials.
7. Tank or bath (100) according to any of the previous claims, **characterized in that** at least one (2e) of said two or more parts (2d, 2e, 2f, 2g) is made of a transparent material.
8. Tank or bath (1, 100, 300) according to any of the previous claims, **characterized in that** at least one of the surfaces (3) delimiting said parts (2a, 2b, 2c, 2d, 2e, 2f, 2g) is a plane surface.
9. Tank or bath (200) according to any of the previous claims, **characterized in that** at least one of the surfaces (3) delimiting said parts is a wavy surface.
10. Tank or bath (1, 100, 200, 300) according to claim 8) or 9), **characterized in that** at least one of said

surfaces (3) is provided with first connection means (4) cooperating with corresponding second connection means (5) belonging to the surface (3) of the part over or under it.

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11. Tank or bath (1, 100, 200, 300) according to claim 10), **characterized in that** said connection means (4,5) comprise male-female joints (41, 51).

12. Tank or bath (1, 100, 200, 300) according to any of the previous claims, **characterized in that** it is provided with a hydromassage system.

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13. Tank or bath (1, 100, 200, 300) substantially as described herein with reference to the attached drawings.

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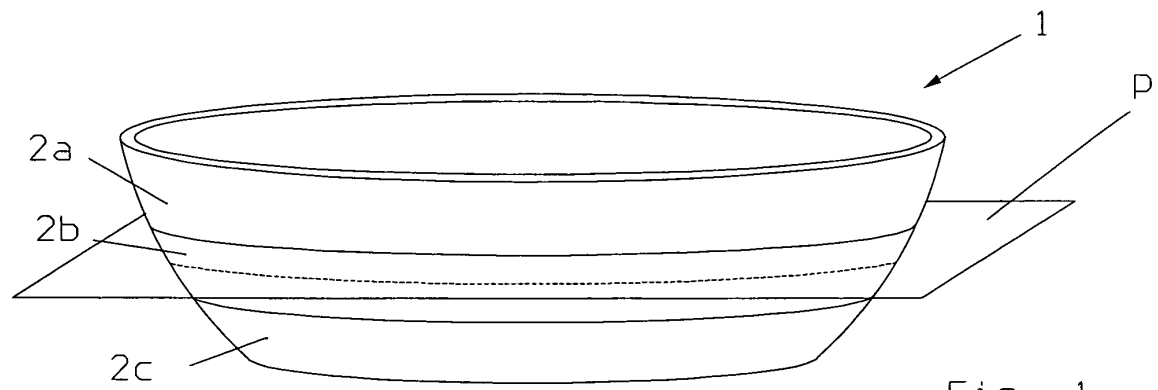


Fig. 1

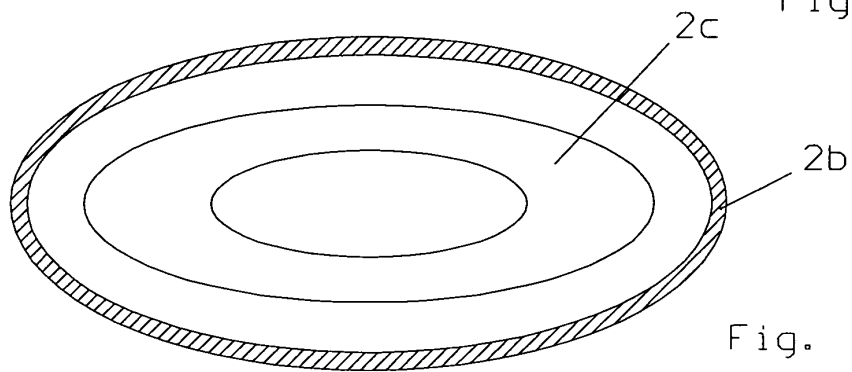


Fig. 1a

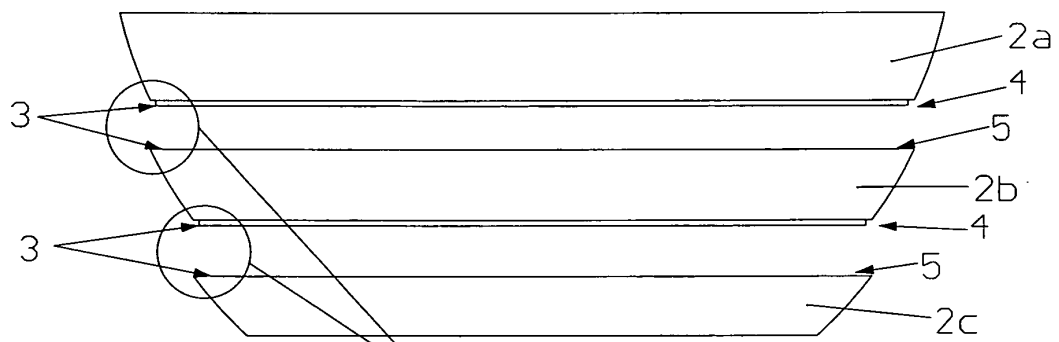


Fig. 2

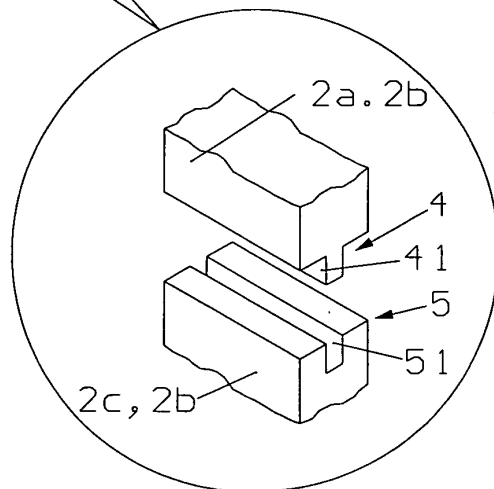
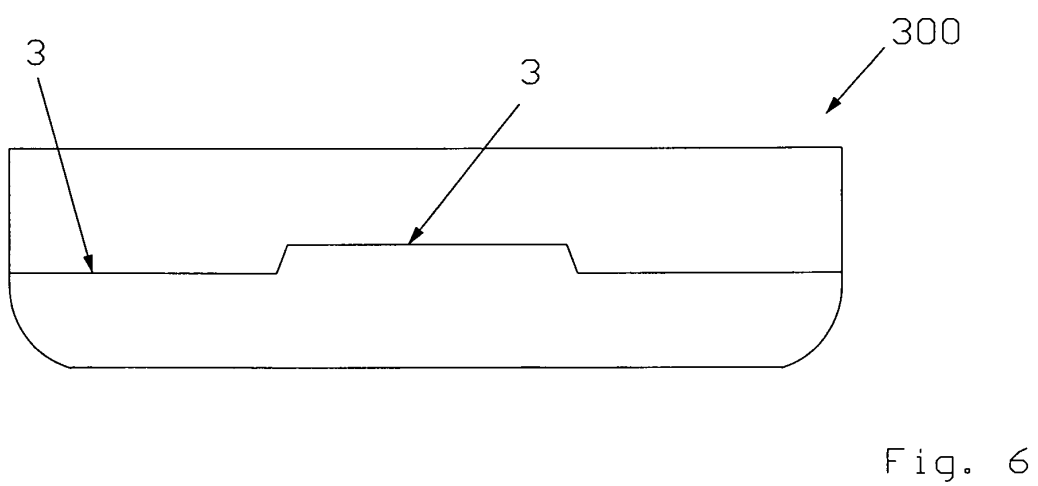
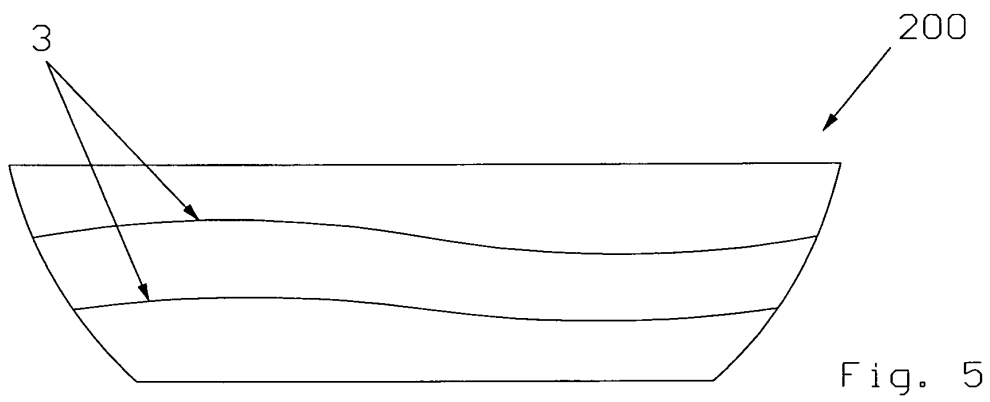
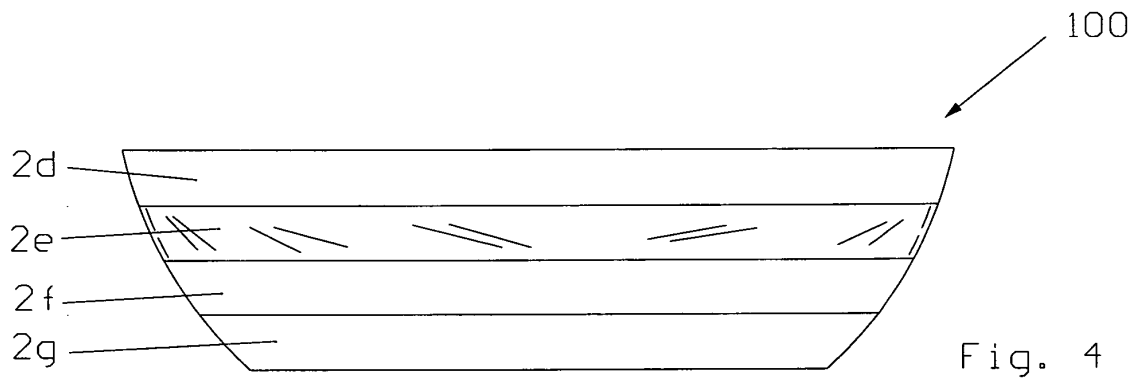


Fig. 3





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EUROPEAN SEARCH REPORT

Application Number
EP 04 02 2620

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	DE 90 07 643 U (SCHMITZ GRUENBAU GMBH) 16 December 1993 (1993-12-16) * page 3, line 9 - line 30; figure *	1,5,8, 10,11	A47K3/02
X	EP 0 015 463 A (RHEINHOLD & MAHLA GMBH) 17 September 1980 (1980-09-17) * page 2, line 31 - page 3, line 25; figures *	1,5,8, 10,11	
X	PATENT ABSTRACTS OF JAPAN vol. 0186, no. 48 (C-1284), 8 December 1994 (1994-12-08) & JP 6 253993 A (NICHIBOO:KK), 13 September 1994 (1994-09-13) * abstract *	1,8	
A	US 2 333 491 A (PLANTE ARCHIE E) 2 November 1943 (1943-11-02) * page 1, right-hand column, line 13 - line 48; figures 1-5 *	1,5,10, 11	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			A47K E04H
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 15 November 2004	Examiner Porwoll, H
<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 04 02 2620

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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