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(71) Applicant: **Zenone, Maria Teresa**
28043 Cavagliano Fraz. Bellinzago (IT)

(72) Inventor: **Zenone, Maria Teresa**
28043 Cavagliano Fraz. Bellinzago (IT)

(74) Representative: **Lunati & Mazzoni S.r.L.**
Via Carlo Pisacane, 36
20129 Milano (IT)

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(54) **SOAP HOLDER**

(57) It is provided a soap holder (1) suitable for supporting a soap bar (3), the soap bar (3) comprising a through-hole (3a), the soap holder (1) comprising at least one elongate body (2) having a prevailing extension direction (2a) and being capable of being inserted within the through-hole (3a), attachment means (5) connected to the elongate body (2) and configured to constrain the elongate body (2) to a support member (15, 20) with the prevailing extension direction (2a) parallel to the vertical direction, a holding element (18, 18') capable of supporting the soap bar (3) preventing the soap bar (3) from sliding away from the elongate body (2) when the elongate body (2) is inserted inside the through-hole (3a); connection means (7) for releasably constraining the elongated body (2) to the holding element (18, 18') and for allowing the soap holder (1) to be arranged in a constraining configuration, in which the holding element (18, 18') obstructs the dropping of the soap bar (3), and in a spare configuration, in which the holding element (18, 18') does not obstruct the insertion of the elongated body (2) within the through-hole (3a), and in which the connecting means (7) comprise permanent magnets (70).

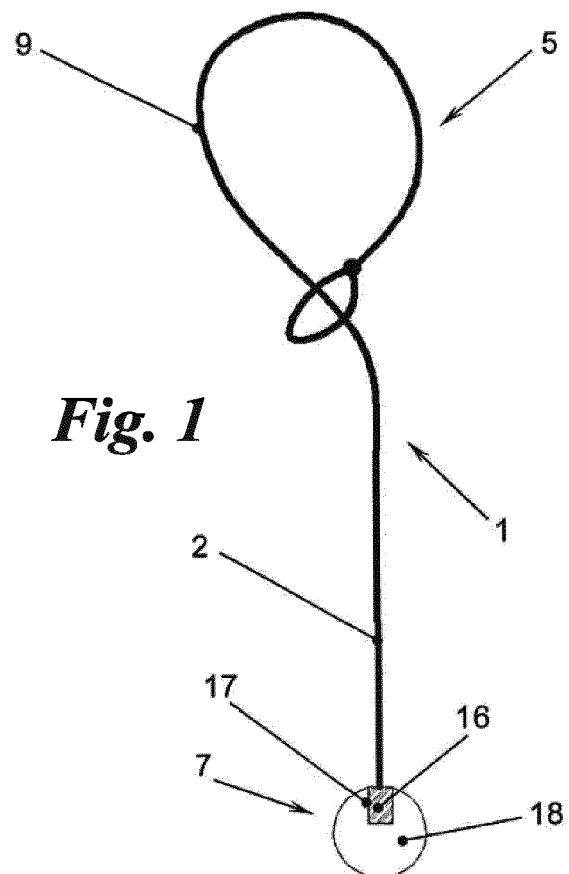


Fig. 1

Description

[0001] The present invention relates to a soap holder, of the type specified in the preamble to the first claim.

[0002] In particular, it is suitable for being made in a variety of configurations, being adaptable to any type of washbasin or washbasin, bathtub or shower, both for indoor and outdoor use, and being suitable for working with any type of soap holder, in particular if shaped as described below.

[0003] Traditional soap holders are known in the technique, made in the form of containers of various configurations, placed above washbasins, washbasins and sanitary fixtures in general, and capable of holding at least one soap bar inside: In addition to the various limitations of such soap holders related to their conformation and location, over time the used soap contained in them, in the presence of residual water, progressively dissolves and soils the walls of the soap holder and the surrounding environment, requiring various cleaning interventions and reducing the useful life of the soap holder itself.

[0004] In order to solve these problems, prior art has provided for certain types of "hanging" soap holders, as described for example in DE-A1-19963449, CN-Y-2482374, CN-Y-2267750, CN-U- 2061028, CN-U-2047171, DE-A1-19958433 and US-S1- D477949, which, however, have the drawback of being magnetic and therefore guaranteeing a poor hold of the soap holder, which often falls into the basin. In addition, the soap bar must be fitted with a magnetic plate to be attracted, inserted manually by force into it, with obvious problems of precision of placement and inconvenience of installation for the user, not to mention the fact that, with use, when the soap bar itself gradually wears out, the plate embedded in it tends to detach.

[0005] The documents CH-A-317 014, FR-A-387 743, CH-A- 174319, FR-A-754 825, FR-A-599 967 and FR-A-588 556 describe soap holders according to the preamble to claim 1: none of them, however, provides for a soap holder capable of connecting to a tap by means of a rubber ring through which the soap holder cable passes.

[0006] The purpose of the present invention is to solve the aforementioned problems of the prior art, by providing a soap holder suitable to be made in a variety of configurations, to be adaptable to any type of sink or washbasin, bathtub or shower, whether for indoor or outdoor use, and to be capable of functioning with any type of soap holder.

[0007] A further purpose of the present invention is to provide a soap holder as set forth above that allows maximum use of the soap holder attached thereto, without problems of soiling of related sinks and without inconvenience of placing and maintaining, within a soap holder, more or less reliable sealing equipment.

[0008] A further purpose of the present invention is to provide a soap holder that can also be used by persons with reduced manual dexterity, for example handicapped

persons or children.

[0009] The aforementioned and other purposes and advantages of the invention, as will result from the following description, are achieved with a soap holder as described in claim 1. Preferred forms of embodiment and non-trivial variants of the present invention form the subject matter of the dependent claims.

[0010] It is understood that all the appended claims form an integral part of the present description.

[0011] The present invention will be best described by certain preferred forms of embodiment, provided by way of example and not limitation, with reference to the attached drawings, in which:

- the **Fig. 1** is a side view of a preferred first embodiment of the soap holder according to the prior art;
- the **Fig. 2** is a side view of a second preferred embodiment of the soap holder according to the prior art;
- the **Fig. 3** is a side view of a third preferred embodiment of the soap holder according to the prior art;
- the **Fig. 4** is a side view of a fourth preferred embodiment of the soap holder according to the prior art;
- the **Fig. 5** is a side view of an installation configuration of the soap holder of Fig. 3;
- the **Fig. 6** is a side view of a first preferred embodiment of a support, for a plane, for the soap holder according to the present invention;
- the **Fig. 7** is a side view of a second preferred embodiment of a support, for a wall, for the soap holder according to the present invention;
- the **Fig. 8**, illustrates an example of a holding element according to the present invention in a first configuration;
- the **Fig. 9**, is the example of Fig. 8 in a second configuration;
- the **Fig. 10**, illustrates in axonometry a soap holder apparatus according to the invention; and
- the **Fig. 11**, is section XI-XI shown in Fig. 10.

[0012] In the present document, the measurements, values, shapes and geometric references (such as perpendicularity and parallelism), when associated with words like "about" or other similar terms such as "approximately" or "substantially", are to be considered as except for measurement errors or inaccuracies due to production and/or manufacturing errors, and, above all, except for a slight divergence from the value, measurements, shape, or geometric reference with which it is associated. For instance, these terms, if associated with a value, preferably indicate a divergence of not more than 10% of the value.

[0013] Moreover, when used, terms such as "first", "second", "higher", "lower", "main" and "secondary" do not necessarily identify an order, a priority of relationship or a relative position, but can simply be used to clearly distinguish between their different components.

[0014] Unless otherwise specified, as results in the following discussions, terms such as "treatment", "comput-

ing", "determination", "calculation", or similar, refer to the action and/or processes of a computer or similar electronic calculation device that manipulates and/or transforms data represented as physical, such as electronic quantities of registers of a computer system and/or memories in, other data similarly represented as physical quantities within computer systems, registers or other storage, transmission or information displaying devices.

[0015] The measurements and data reported in this text are to be considered, unless otherwise indicated, as performed in the International Standard Atmosphere ICAO (ISO 2533:1975).

[0016] Referring to the Figures, a preferred form of realisation of the soap holder of the present invention is illustrated and described. It will be immediately obvious that innumerable variations and modifications (e.g., relating to shape, dimensions, arrangements and parts with equivalent functionality) can be made to the described embodiment without departing from the scope of protection of the invention as appears from the appended claims.

[0017] As illustrated in the Figures, the soap holder 1 of the present invention is suitable for supporting a soap bar 3, preferably by suspending it vertically, comprising a through-hole 3a. As soap bars usually have a shorter size than the others, the through-hole 3a preferably does not pass through the shorter size but one of the two larger sizes, preferably the larger size of the others, or alternatively the second larger size.

[0018] The soap holder 1 is preferably constrained to a support element 15, 20, hereinafter described. The soap holder 1 and the support element 15, 20 together form a soap holder apparatus 100.

[0019] The soap holder 1 found substantially comprises:

- at least one elongate body 2 having a prevailing extension direction 2a and being suitable for being inserted within the through-hole 3a,
- attachment means 5 connected to the elongate body 2 and configured to constrain the elongate body 2 to the support element 15, 20 with the prevailing extension direction 2a parallel to the vertical direction,
- a holding element 18, 18' capable of supporting said soap bar 3 preventing said soap bar 3 from sliding away from said elongate body 2 when said elongate body 2 is inserted inside said through-hole 3a;
- connection means 7 for releasably constraining said elongate body 2 to said holding element 18, 18' and allowing said soap holder 1 to be arranged
 - in a constraining configuration, wherein the holding element 18, 18' prevents the soap bar 3 from falling, and
 - in a replacement configuration, in which the holding element 18, 18' does not obstruct the insertion of the elongated body 2 within the through-hole 3a.

[0020] The connection means 7 preferably comprise, and more preferably are, permanent magnets.

[0021] As can be seen in the various Figures, the elongated body 2 may comprise a wire 2, made of steel, plastic or any other suitable material to ensure its flexibility.

[0022] Moreover, the elongated body 2 could be constituted in other preferable ways, for example a small plastic tube or other flexible material (not illustrated), in various configurations suitable for the purpose, or again in rigid, non-flexible material (such as, for example, an asti-form metal rod: in this solution, a joint, placed in the upper part of the body, could allow the movement of the rod in the desired directions).

[0023] In practice, the support element 15, 20 may comprise a tap 15, as illustrated in Fig. 5, or a support 20 suitable to be placed on a plane (Fig. 6) or a wall (Fig. 7) for supporting the soap holder 1, if it is not considered useful to connect it directly to a tap 15. For this purpose, the support 20 may be provided, again as illustrated in Figures 6 and 7, with at least one contact element 22 (e.g. a suction cup, common screws, double-sided adhesive tape) enabling the support 20 to be attached precisely to a plane or a wall. Preferably, but not limitingly, as illustrated in Figure 1, the attachment means 5 comprise a ring 9 made seamlessly with the cable 2, obtained by re-knotting the cable 2 on itself.

[0024] According to an alternative illustrated in Fig. 2, the coupling means 5 comprise a ring 11, preferably made of a plastic material, within which the cable 2 passes, or operatively connected to the cable 2.

[0025] According to a further preferred alternative, illustrated in Fig. 3, the coupling means 5 instead comprise at least one first threaded socket 13 suitable for being screwed into a corresponding first cavity 14 of the support element 15, 20.

[0026] In the example shown in Figs. 10 and 11, the attachment means 5 comprise a cavity 80, preferably arranged on the lower surface of the sink, and a slider 81, suitable for sliding within said cavity. Preferably, the elongated body 2 is constrained to said slider. And again, as illustrated in Figures 1 to 3, the connection means 7 comprise, in a known manner, at least a second threaded socket 16 apt to be screwed into a corresponding second cavity 17 of the holding elements 18, 18'.

[0027] Innovatively, as illustrated in Figs. 8 and 9, the soap holder 1 comprises, preferably, an elongated body 2 comprising an upper portion 50 and a lower portion 51.

[0028] The lower portion 51 is, preferably, in one piece with the holding element 18, 18', or integrally constrained thereto.

[0029] Furthermore, preferably, the upper portion 50 comprises connection means 7 comprising an upper magnet 70, and the lower portion 51, comprises connection means 7 comprising a lower magnet 71. The two magnets 70 and 71 are preferably capable of being bound to each other, obviously by magnetic attraction.

[0030] The upper magnet 70 and the lower magnet 71 are preferably housed within respective cavities 50a, 50b

present in the upper and lower portions 50, 51.

[0031] Furthermore, preferably, the upper magnet 70 and the lower magnet 71, when the device 1 is in a spare configuration, are facing outwards from the respective cavities 50a, 50b.

[0032] The outwardly facing portions of the upper and lower magnets 70, 71 are preferably coated with powder coating.

[0033] The elongated body 2 is preferably circular in cross-section. It also preferably has an average diameter between 0.5 mm and 1 cm and in particular between 5 mm and 1 cm.

[0034] Also, in the example of Figs. 8 and 9, the attachment means 5 preferably comprise a support cable 60 constrained to the upper portion 50.

[0035] In the examples of Figs. 5-7, and also in the other cases, the first hexagon socket 13 may be replaced by equivalent elements, which perform the functions of the coupling means 5. For example, the coupling means 5 could be replaced by at least one hook (not illustrated) capable of being operatively inserted into a cavity (not illustrated) provided by the support element 15, 20. Or, the attachment means 5 could be at least one magnetic element (not illustrated), also capable of being operatively coupled (in a manner known or within the reach of an average branch technician) to the support element 15, 20.

[0036] In the various Figures, two preferred forms of realisation of the holding element 18, 18' are illustrated, namely the spherical shape (Figures 1, 3, 5) and the truncated cone shape (Figures 2 and 4), but of course the holding element 18 may be realised in cubic, parallelepiped or similar shapes (not illustrated).

[0037] With the above configuration, it is therefore possible to connect the soap holder 1 to a tap 15 or a surface or wall, and to use the soap 3 connected to it, before washing. Soiling of the washbasin, sink or other sanitary fixture is also prevented, as the wet soap drips briefly into the drainage basin and then dries in the air, without soiling external walls. Furthermore, soap 3 can be easily replaced, depending on the user's operational or even just aesthetic needs.

[0038] In the version with the first socket 13, the conceptual flexibility of the inventive soap holder 1 also allows it to be installed on a tap 15 which has been prepared for this purpose by means of the simple hole 14 in it: here, also, it is easy to screw and unscrew the soap holder 1 should one wish to insert it on the tap 15 or not, and it is just as easy to unscrew the holding element 18 should one wish to replace the soap 3 held by it in the soap holder 1.

[0039] In the innovative solution of the two magnets, the use of the soap holder 1 of the present invention will also be open to persons with reduced manual abilities, for example handicapped persons or children, for whom the screwing of the various components in the traditional version would have been difficult to accomplish: in this case, the simple coupling of the soap holder 3 to the soap

holder 1 allows the mutual magnetic coupling, in a simple, easy and reproducible manner in any configuration.

[0040] It goes without saying that the first lug 13 can be replaced by equivalent elements, which perform the functions of the attachment means 5. For example, the attachment means 5 could be replaced by at least one hook (not illustrated) capable of being operatively inserted into a cavity (not illustrated) provided by the support element 15, 20. Or, the attachment means 5 could be at least one magnetic element (not illustrated), also capable of being operatively coupled (in a manner known or within the reach of an average branch technician) to the support element 15, 20.

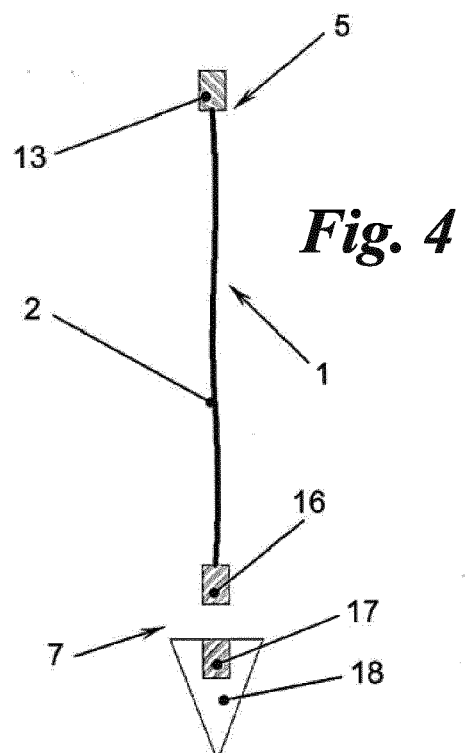
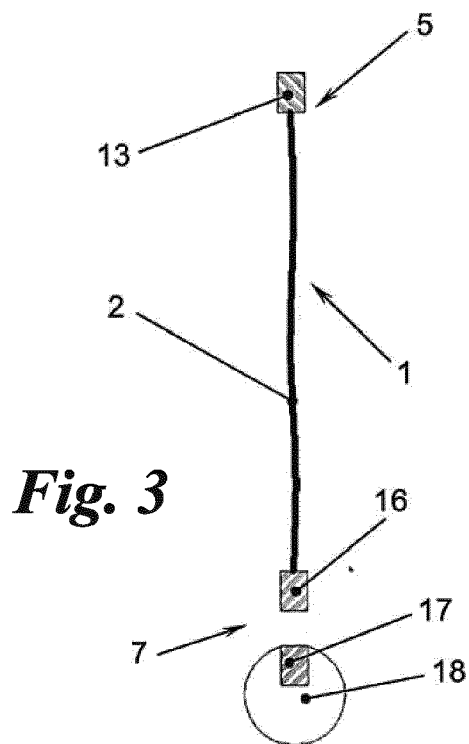
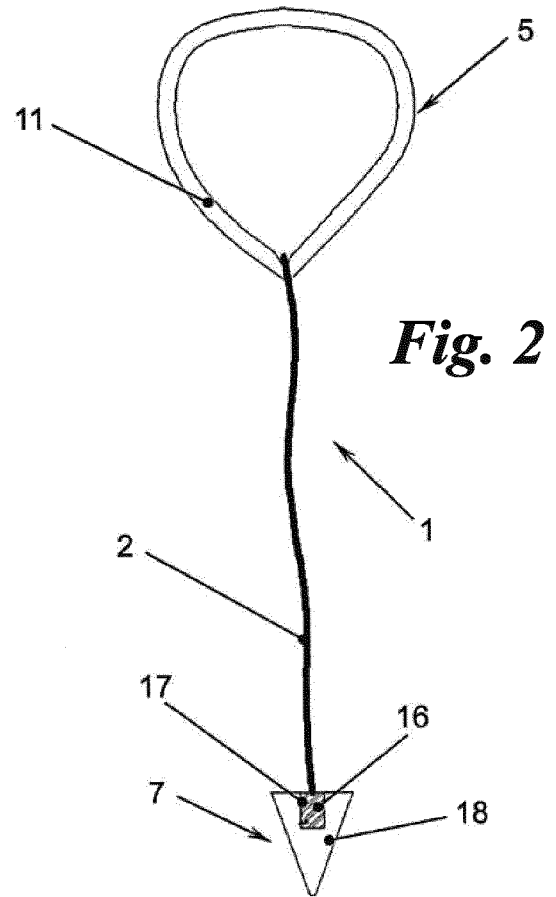
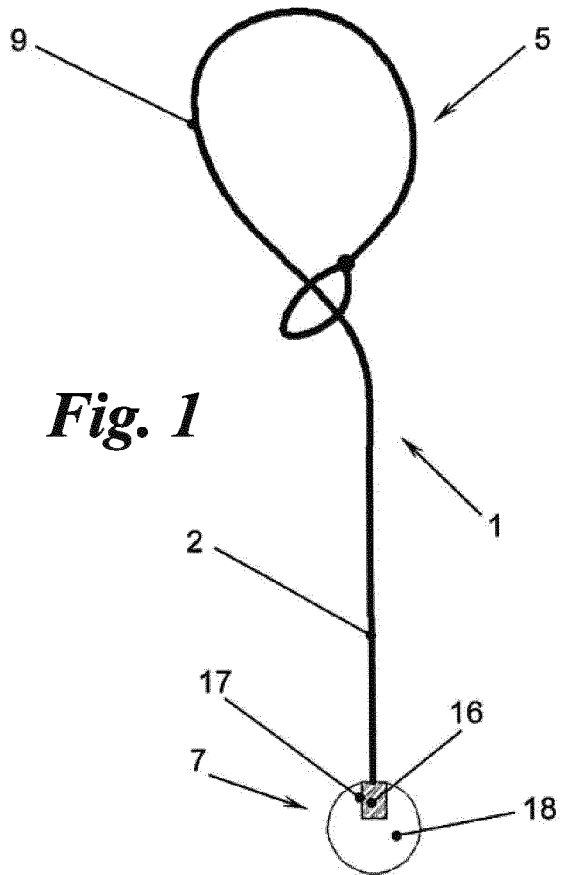
[0041] With the above configuration, it is therefore possible to connect the flexible soap holder 1 to a tap 15 or a surface or wall, and use the soap 3 connected thereto, before washing, so as to minimise consumption. The contamination of the washbasin, sink or other sanitary fixture is also prevented, as the wet soap briefly drips into the drainage basin and then dries in the air, without soiling external walls. Furthermore, soap 3 can be easily replaced, depending on the user's operational or even just aesthetic needs.

[0042] In the version with first socket 13, the flexibility of the inventive soap holder 1 also allows it to be installed on a tap 15 prepared for the purpose by means of the simple hole 14 cut in it: here too, it is easy to screw and unscrew the soap holder 1 should one wish to insert it or not on the tap 15, and it is just as easy to unscrew the holding element 25 should one wish to replace the soap 3 supported by it in the soap holder.

Claims

1. Soap holder (1) capable of supporting a soap bar (3),
 - said soap bar (3) comprising a through-hole (3a),
 - said soap holder (1) comprising:
 - at least one elongate body (2) having a prevailing extension direction (2a) and being capable of being inserted within said through-hole (3a)
 - attachment means (5) connected to said elongate body (2) and configured to constrain said elongate body (2) to a support element (15, 20) having said prevailing extension direction (2a) parallel to said vertical direction
 - a holding element (18, 18') capable of supporting said soap bar (3) preventing said soap bar (3) from sliding away from said elongate body (2) when said elongate body (2) is inserted inside said through-hole (3a)
 - connection means (7) capable of releasably constraining said elongate body (2) to

- said holding element (18, 18') and allowing said soap holder (1) to be arranged
- in a constraining configuration, in which said holding element (18, 18') prevents said soap holder (3) from falling, and
 - in a replacement configuration, in which said holding element (18, 18') does not obstruct the insertion of said elongated body (2) within said through-hole (3a),
- **characterised by**
- said connecting means (7) comprise permanent magnets (70).
2. Soap holder (1) according to claim 1, wherein said elongated body (2) comprises an upper portion (50) and a lower portion (51), said lower portion (51) being in one piece with said holding element (18, 18'), said upper portion (50) comprising connection means (7) comprising an upper magnet (70), and said lower portion (51) comprising connection means (7) comprising a lower magnet (71).
3. Soap holder (1) according to any preceding claim, wherein said upper magnet (70) and said lower magnet (71) are housed within respective cavities (50a, 50b) present in said upper and lower portions (50, 51).
4. Soap holder (1) according to any preceding claim, wherein said upper magnet (70) and said lower magnet (71), when said device (1) is in a spare configuration, are facing outwardly from respective cavities (50a, 50b).
5. Soap holder (1) according to any preceding claim, wherein said outwardly facing portions of said upper and lower magnets (70, 71) are coated with powder coating.
6. Soap holder (1) according to any preceding claim, wherein said elongated body has an average diameter of between 0.5 mm and 1 cm.
7. Soap holder (1) according to any preceding claim, wherein said attachment means (5) comprise a support cable (60) constrained to said upper portion (50).
8. Soap holder apparatus (100) comprising a support member (15, 20) and a soap holder (1) according to any one of the preceding claims.
9. Soap holder apparatus (100) according to claim 8, wherein said support element (15, 20) is a tap.
10. Lather holder apparatus (100) according to claim 8 or 9, wherein said attachment means (5) comprise a cavity (80), disposed on the lower surface of said support element (15, 20) and a slider (81), suitable for sliding within said cavity (80).



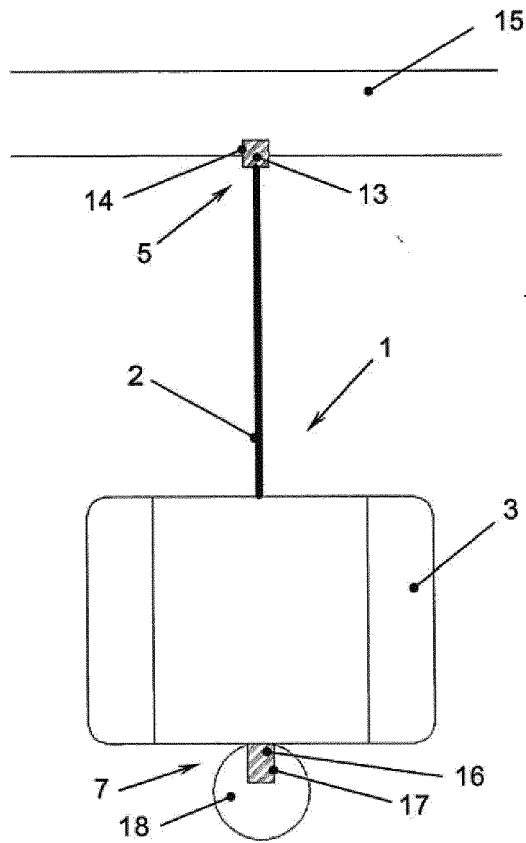


Fig. 5

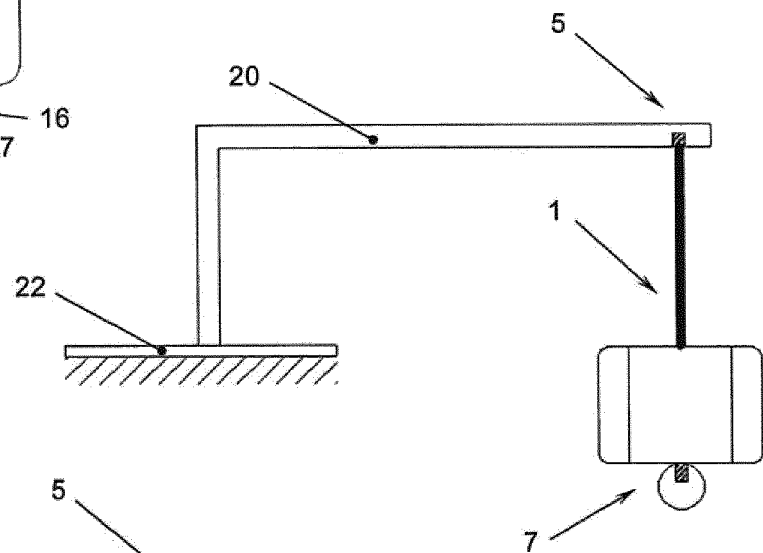


Fig. 6

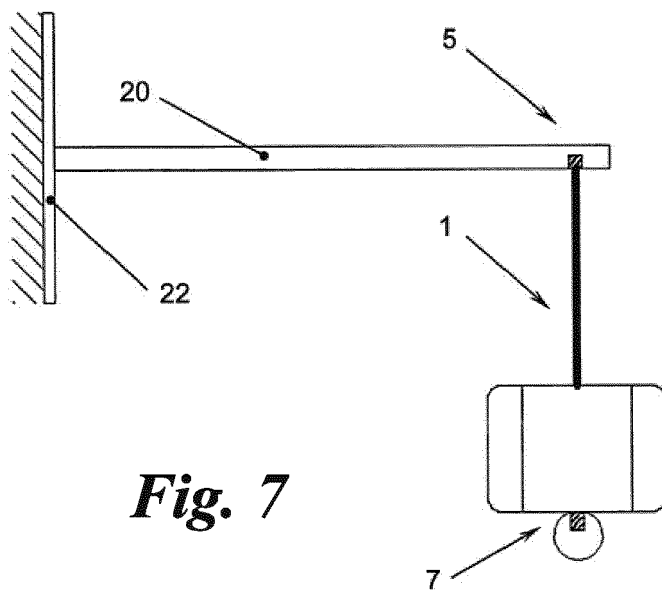


Fig. 7

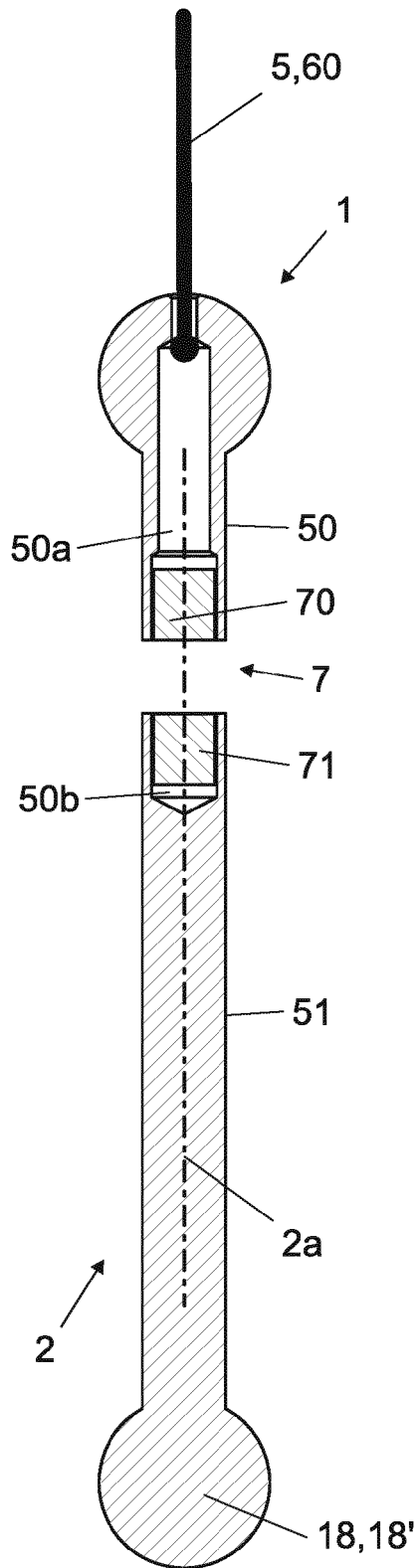


Fig. 8

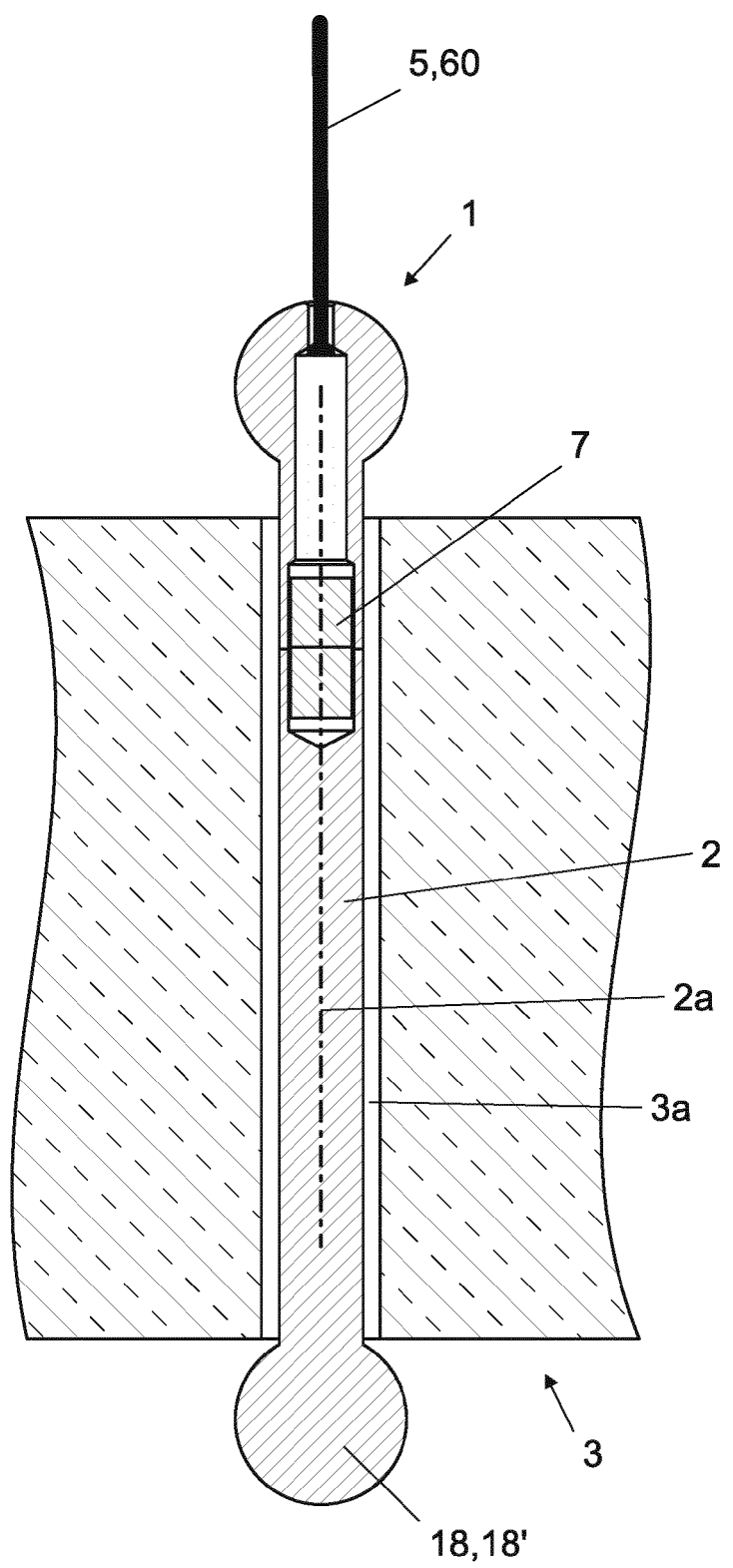


Fig. 9

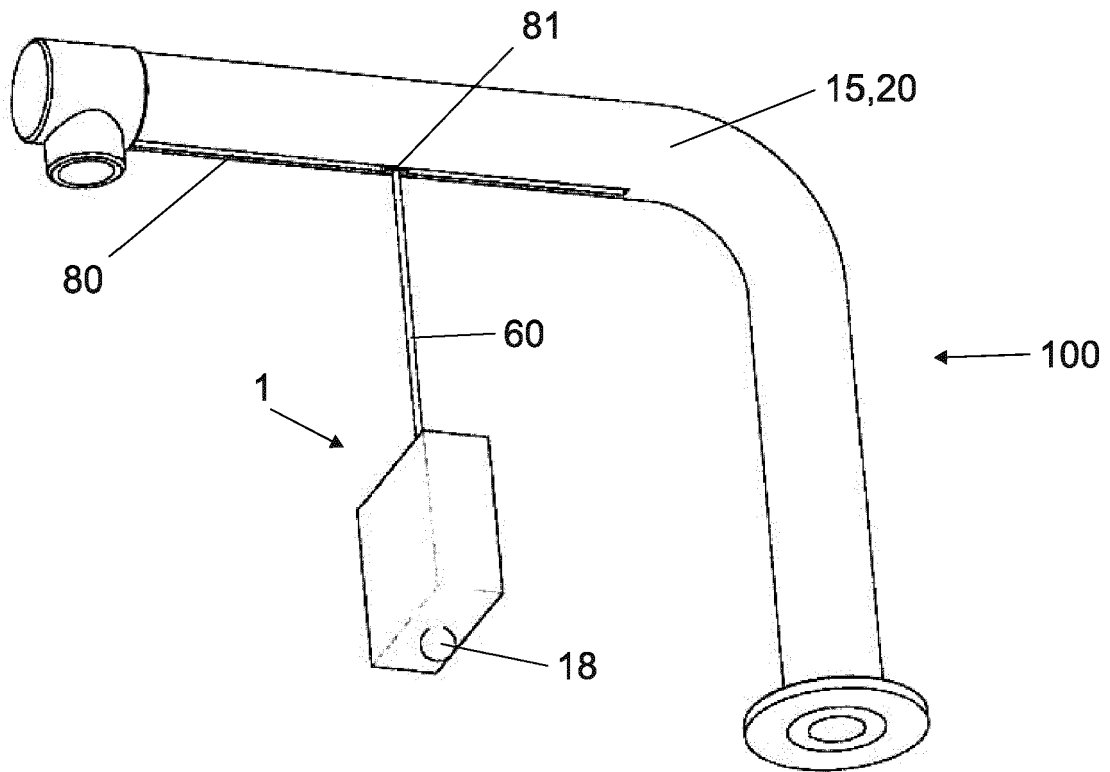


Fig. 10

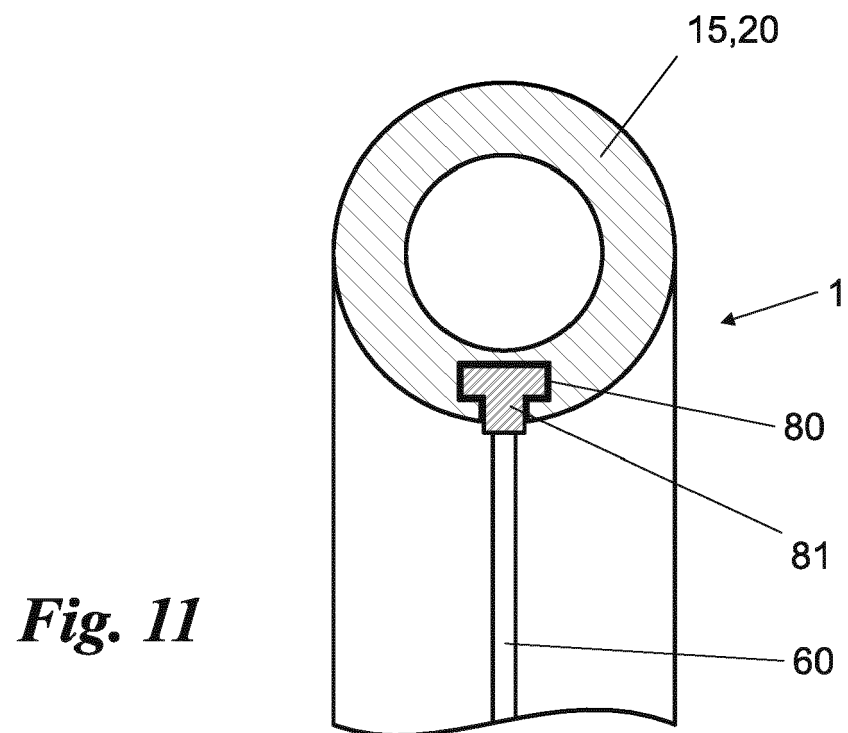


Fig. 11



EUROPEAN SEARCH REPORT

Application Number

EP 22 17 0197

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	IT TO20 111 252 A1 (ZENONE MARIA TERESA) 31 March 2012 (2012-03-31) * figures 1-7, 10, 11 * -----	1-10	INV. A47K5/05
X	JP S56 9294 U (UNKNOWN) 27 January 1981 (1981-01-27) * figures 1, 2 * -----	1, 3, 7	
			TECHNICAL FIELDS SEARCHED (IPC)
			A47K
The present search report has been drawn up for all claims			

1

EPO FORM 1503 03.82 (P04C01)

Place of search	Date of completion of the search	Examiner
The Hague	7 September 2022	Boyer, Olivier
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