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(54) **COLUMBARIUM**

(57) The columbarium comprises inner spaces defined by alcoves closed by front doors, in which said inner spaces are delimited by intersecting horizontal and vertical profiles, combined with bases that form part of the support structure of the columbarium.

The support structure comprises a lower portion positioned underground by way of foundations, while the front doors comprise a flat plate and a laminar glass body. Furthermore, the front doors are attached by means selected from a hinge and a linear guide device.

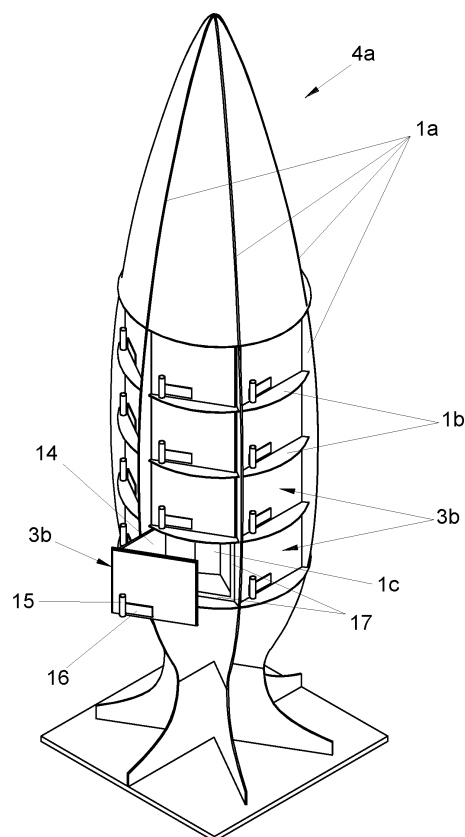


FIG. 7

Description

OBJECT OF THE INVENTION

[0001] The present invention, as expressed in the title of this specification, relates to a columbarium intended to contain the ashes of the deceased. It must be noted that the columbarium comprises various structural designs, which integrate a set of alcoves that are open at the front, which constitute funeral urns, which in turn integrate front doors providing access to these alcoves.

BACKGROUND OF THE INVENTION

[0002] Funeral urns that comprise a number of vases, inside which the ashes of the deceased are kept, are currently known, the opening of the vase being closed by means of a cover.

[0003] Niche-type columbaria located on a vertical wall are also known, on the front face of which there are horizontal rows of doors that close the entrance to the niches, in such a way that these doors are sealed hermetically, once the remains of the deceased have been deposited inside the inner space of the niche.

DESCRIPTION OF THE INVENTION

[0004] The columbarium that constitutes the object of the invention comprises inner spaces intended to host the ashes of the deceased, these spaces comprising a number of alcoves that are open at the front, which are delimited by intersecting vertical and horizontal profiles, which, when combined with a number of bases, form part of a columbarium structure provided with a lower portion positioned underground by way of foundations.

[0005] The entrances to the alcoves are closed by front doors attached by means selected from a hinge and a linear guide device.

[0006] The intersecting vertical and horizontal profiles, as well as the bases, are made of weathering steel, whereas the front doors comprise a flat plate made of a material selected from weathering steel material and phenolic material, as well as a laminar glass body glued by means of an outdoor glass adhesive material on the outer face of the flat plate.

[0007] In one embodiment, the columbarium has a structure designed in the shape of a cypress.

[0008] In another embodiment, the columbarium comprises a modular structure formed by at least one arched prismatic body with end extensions by way of legs, which are the extension of some flanks of said arched prismatic body.

[0009] The end extensions extend downwards underground as the constitutive lower portions of the columbarium foundations.

[0010] Each front door integrates a lock that ensures the closure thereof.

[0011] The linear guide device of the front doors com-

prises female profiles attached to the side of the corresponding alcove and male profiles slidably coupled to said female profiles, wherein the male profiles are attached to two parallel edges of a flank, which forms integral part of the front door model that incorporates the linear guide device, so that the flank is positioned on a parallel plane, near the side of the respective alcove.

[0012] In one embodiment, both the flank and the front door are made of weathering steel material, although the male and female guide profiles are made of stainless steel material so as to avoid blockages over time, which may even be caused by the rusting of the weathering steel itself.

[0013] The female profile comprises a C-shaped section, whereas the male profile comprises a circular section.

[0014] The two front door models, i.e. the one with a hinged attachment and the one with a linear guide device attachment, are provided with a puller, which may also be used as a flower vase. This puller is attached to the respective front door by means of a brass plate glued to the laminar glass body by means of an adhesive. One embodiment of this puller comprises a container with a cylindrical design.

[0015] In one embodiment, the entrances to the alcoves integrate flanges, which act as abutment elements when the front doors are closed.

[0016] With the aim of facilitating a better understanding of the present specification, and as an integral part thereof, a set of accompanying figures is provided below, in which, by way of non-limiting examples, the object of the invention has been represented.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017]

Figure 1.- Is an elevation view of a columbarium with a cypress-shaped structure, which integrates a set of alcoves with entrances that are closed by front doors attached by means of hinges.

Figure 2.- Is a similar view to that provided in the previous figure, wherein the cypress-shaped structure is shorter in height.

Figure 3.- Is a perspective view of a modular columbarium that also integrates a set of alcoves closed by hinged doors.

Figure 4.- Is a perspective view of a columbarium formed by the combination of several columbaria, like the one represented in the previous figure.

Figure 5.- Is a perspective view of another columbarium, made up of several columbaria like the one represented in figure 3.

Figure 6.- Is a perspective view of a funeral urn that comprises an alcove, which integrates a front door providing access inside at its entrance.

Figure 7.- Is a perspective view of a columbarium with a cypress-shaped structure, wherein a front door model attached by means of a linear guide device is highlighted.

Figures 8 and 9.- Are detailed views of what has been represented in the previous figure.

DESCRIPTION OF AN EXEMPLARY EMBODIMENT OF THE INVENTION

[0018] Taking the numbers adopted in the figures into account, the following nomenclature is used to describe the columbarium in the description:

1.- Alcoves

- 1 a.- Vertical profiles
- 1 b.- Horizontal profiles
- 1 c.- Bases

2.- Hinge

- 3a.- Front door
- 3b.- Front door
- 4a.- Cypress-shaped larger structure
- 4b.- Cypress-shaped smaller structure
- 5.- Modular structure
- 6.- Flanks
- 6a.- End extensions
- 7.- Access passage
- 8.- Lock
- 9.- Flat plate
- 10.- Laminar glass body
- 11.- Linear guide device
- 12.- Female profiles
- 13.- Male profiles
- 14.- Flank
- 15.- Puller
- 16.- Brass plates
- 17.- Flanges

[0019] The columbarium comprises various structural designs made of weathering steel, all of which comprise a set of alcoves 1 that are open at the front, the entrances of which are closed by front doors 3a-3b, which provide access to their inner space where the ashes of the deceased are deposited and kept. In one embodiment, the front door 3a is attached by means of a hinge 2, whereas in a second embodiment, the front door 3b is attached by means of a linear guide device 11.

[0020] In a first embodiment shown in figures 1 and 2, the columbarium comprises a cypress-shaped structure: a larger one 4a and a smaller one 4b, with several different heights, which integrates a set of radial alcoves 1,

the entrances of which are positioned such that they coincide with the outer enclosing surface of the cypress-shaped structure 4a-4b.

[0021] This cypress-shaped structure 4a-4b has foundations of approximately 40 cm deep, whereas its total height may be comprised between 330 cm and 600 cm, with a diameter of between 96 cm and 162 cm.

[0022] A second embodiment of the columbarium, shown in figure 3, comprises a modular structure 5 formed by an arched prismatic body with end extensions 6a by way of legs, which are the extension of flanks 6 of said prismatic body.

[0023] According to a plan view, the prismatic body has a curvature that provides the characteristic arched design of the prismatic body to mount different columbaria such as those described below and represented in figures 4 and 5. In one particular embodiment, each arched prismatic body measures approximately 290 cm in height.

[0024] The end extensions 6a extend downwards by approximately 40 cm underground, by way of foundations for the prismatic body.

[0025] In this second embodiment, the alcoves 1 are positioned on one or both front faces, arranged in arched vertical planes.

[0026] Figure 4 shows a columbarium that is obtained by combining various modular columbarium structures 5 such as the one represented in figure 3, forming a circumferential design open at an access passage 7 delimited by two opposite flanks 6 belonging to two modular end structures 5.

[0027] In figure 5, a columbarium that is obtained by combining various modular columbarium structures 5 such as the one represented in figure 3 is shown, forming two symmetrical designs opposite one another and shaped like an "S".

[0028] In all of the embodiments, the alcoves 1 are delimited by intersecting horizontal profiles 1 b, vertical profiles 1 a and a base 1 c positioned on a vertical plane.

[0029] The intersecting vertical 1 a and horizontal 1 b profiles and the base 1 c are made of a weathering steel material, whereas the front door 3a-3b comprises a flat plate 9 covered on its outer face by a security laminar glass body 10 glued by means of an outdoor, glass adhesive material, the surface of which is finished by means of fused glass techniques, so as to provide it with the aesthetic appearance the client desires. This laminar glass body forms the facing side of each individual housing, giving the product a certain visual and aesthetic quality.

[0030] The front doors 3a-3b integrate locks 8 to ensure the closure of said front doors 3a-3b.

[0031] Moreover, figures 7 to 9 show an embodiment of the second front door model 3b by way of drawer, which is coupled to a side of the the respective alcove 1 by means of the linear guide device 11, rather than comprising a hinging device like the one applied on the the first front door model 3a, said hinging device correspond-

ing to the hinge 2 described above.

[0032] This second front door model 3b also incorporates the lock 8. The second linear guide device 11 comprises female profiles 12 attached to one side of the alcove 1 and male profiles 13 coupled so as to slide into said female profiles 12, wherein the male profiles 13 are attached to two parallel edges of a flank 14 that forms an integral part of the second front door model 3b, so that said flank 14 is positioned on a parallel plane and near the respective side of the alcove 1.

[0033] In one embodiment, both the flank 14 and the second front door model 3b are made of weathering steel material, although the male 13 and female 12 guide profiles are made of stainless steel material so as to avoid blockages over time, which may be caused by the rusting of the weathering steel itself.

[0034] In one embodiment, the female profile 12 comprises a C-shaped section, whereas the male profile 13 comprises a circular section.

[0035] Both front door models 3a and 3b comprise the flat plate 9 and the laminar glass body 10, wherein the flat plate 9 comprises a material selected from a phenolic material and a weathering steel material.

[0036] Both front door models 3a and 3b are provided with a puller 15, which can also be used as flower vase. This puller 15 is attached to the front door 3a-3b by means of a brass plate 16 glued to the laminar glass body 10 by an adhesive. One embodiment of this puller 15a by way of flower vase comprises a container with a cylindrical design.

[0037] In one embodiment, the entrances to the alcoves 2 include flanges 17, which act as abutment elements when the front doors 3a-3b are closed.

Claims

1. A columbarium comprising:

- a number of inner spaces defined by a number of alcoves, which are open at the front through a number of entrances closed by means of front doors, wherein these inner spaces are intended to house the ashes of the deceased;
- the inner spaces containing the ashes are delimited by intersecting vertical and horizontal profiles combined with bases, which together, form part of a support structure for the columbarium;

characterized in that:

- the support structure for the columbarium comprises a lower portion positioned underground by way of foundations;
- the intersecting vertical (1 a) and horizontal (1 b) profiles, as well as the bases (1 c), are made of weathering steel;

- the front doors (3a, 3b) comprise a flat plate (9) made of a material selected from weathering steel material and phenolic material; and a laminar glass body (10) glued by means of an out-door glass adhesive material to the outer face of the flat plate (9);
- wherein the front doors (3a, 3b) are attached by means selected from a hinge (2) and a linear guide device (11).

2. The columbarium according to the preceding claim, **characterised in that** it comprises a structure designed in the shape of a cypress (4a-4b).

3. The columbarium according to claim 1 **characterized in that:**

- it comprises a modular structure (5) formed by at least one arched prismatic body with end extensions (6a) by way of legs, which are the extension of flanks (6) of said arched prismatic body;
- the end extensions (6a) extend downwards, underground as the constitutive lower parts of the columbarium foundations.

4. The columbarium according to any one of the preceding claims **characterised in that** the front doors (3a, 3b) providing access to the alcoves (1) include locks (8).

5. The columbarium according to any one of the preceding claims, **characterised in that** the linear guide device (11) comprises female profiles (12) attached to one side of the alcove (1) and male profiles (13) coupled so as to slide into said female profiles (12); wherein the male profiles (13) are attached to two parallel edges of a flank (14) that forms an integral part of the front door (3b); the flank (14) being positioned on a parallel plane and near the side of the respective alcove (1).

6. The columbarium according to claim 5, **characterised in that** both the flank (14) and the front door (3b) are made of a weathering steel material, although the female profile (12) and the male profile (13) are made of stainless steel material.

7. The columbarium according to any one of the preceding claims 5 or 6, **characterised in that** the female profile (12) comprises a C-shaped section, whereas the male profile (13) comprises a circular section.

8. The columbarium according to any one of the preceding claims **characterised in that** the front doors (3a, 3b) are provided with a puller (15) which also serves as flower vase.

9. The columbarium according to claim 8, **characterised in that** the pullers (15) also serving as flower vases are joined to the glass laminar bodies (10) of the front doors (3a, 3b) by means of brass plates (16) combined with an adhesive material. 5
10. The columbarium according to any one of the preceding claims **characterised in that** the entrances to the alcoves (1) include flanges (17) which act as abutment elements when the front doors (3a, 3b) are closed. 10

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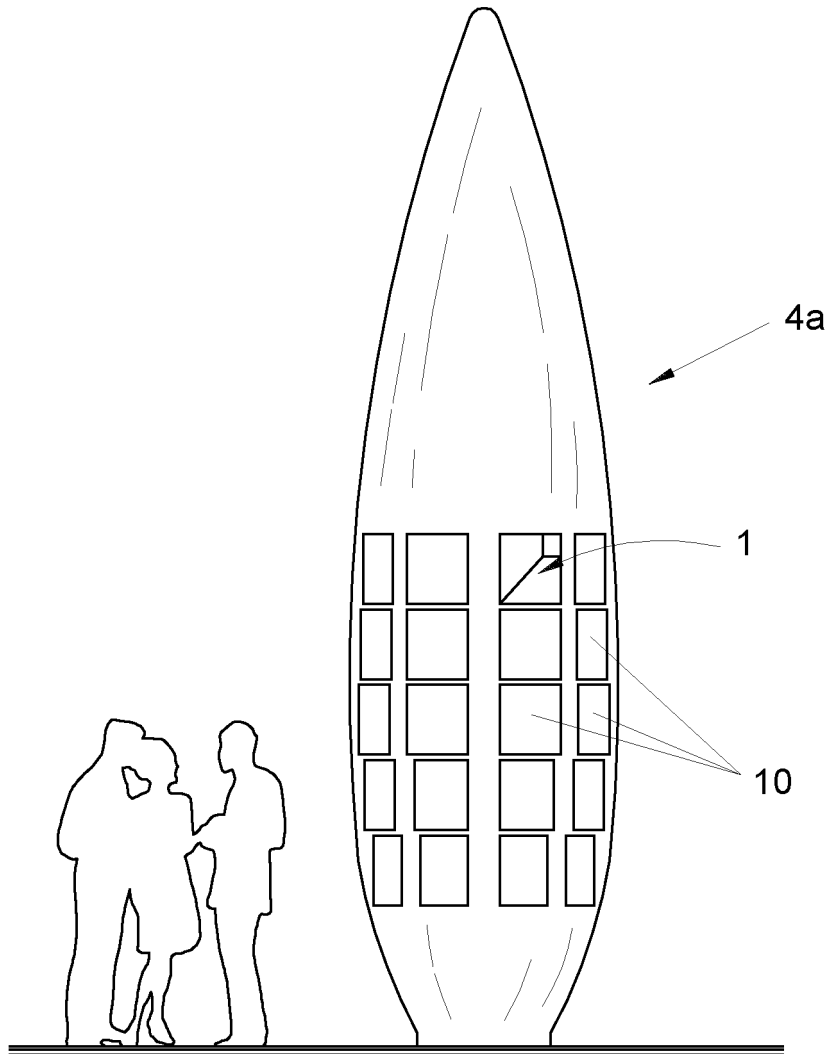


FIG. 1

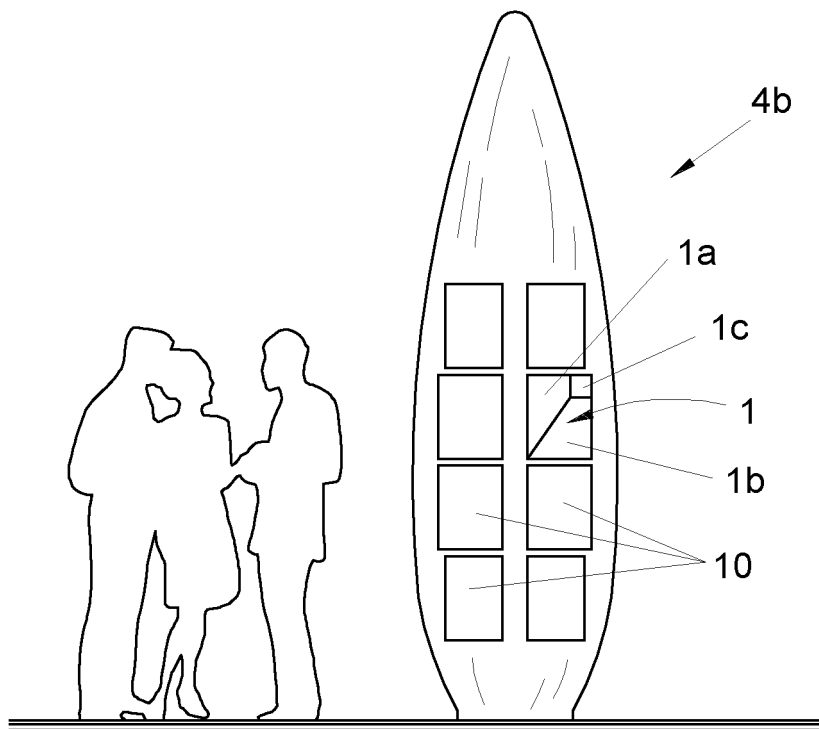
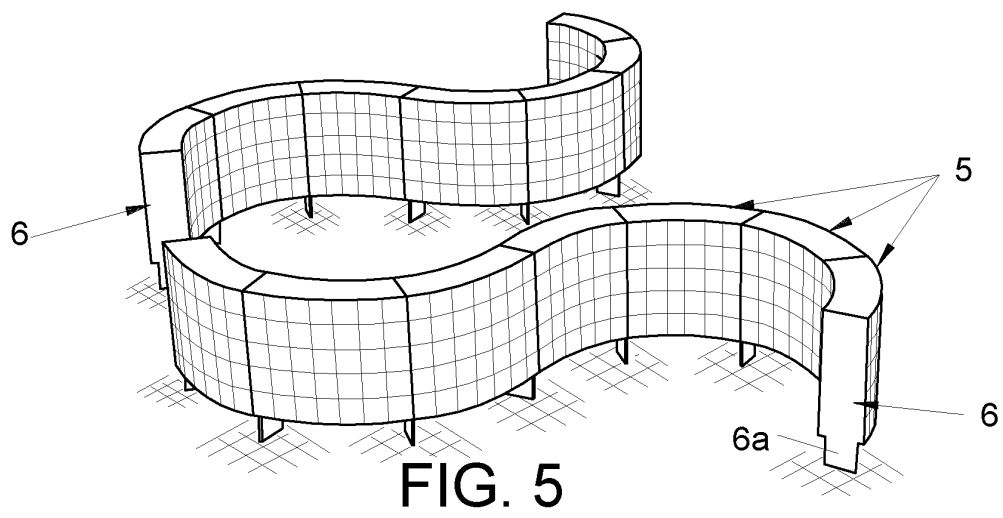
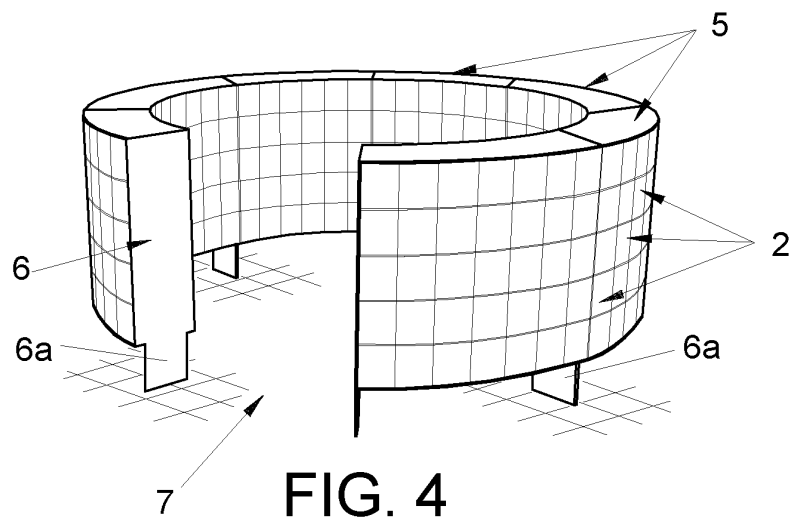
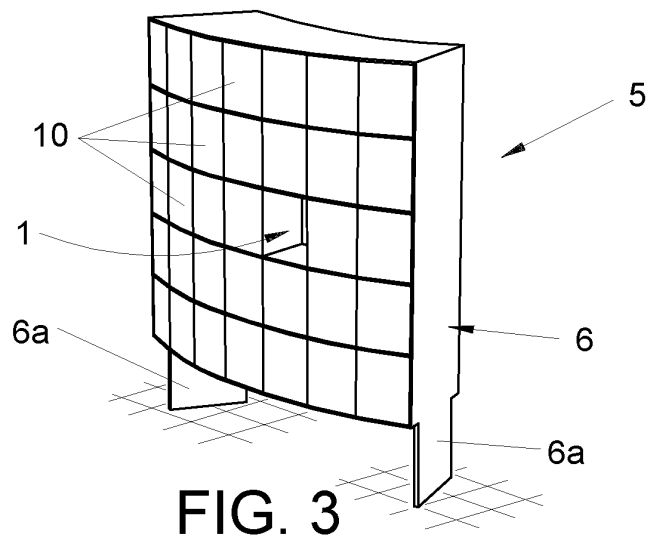


FIG. 2



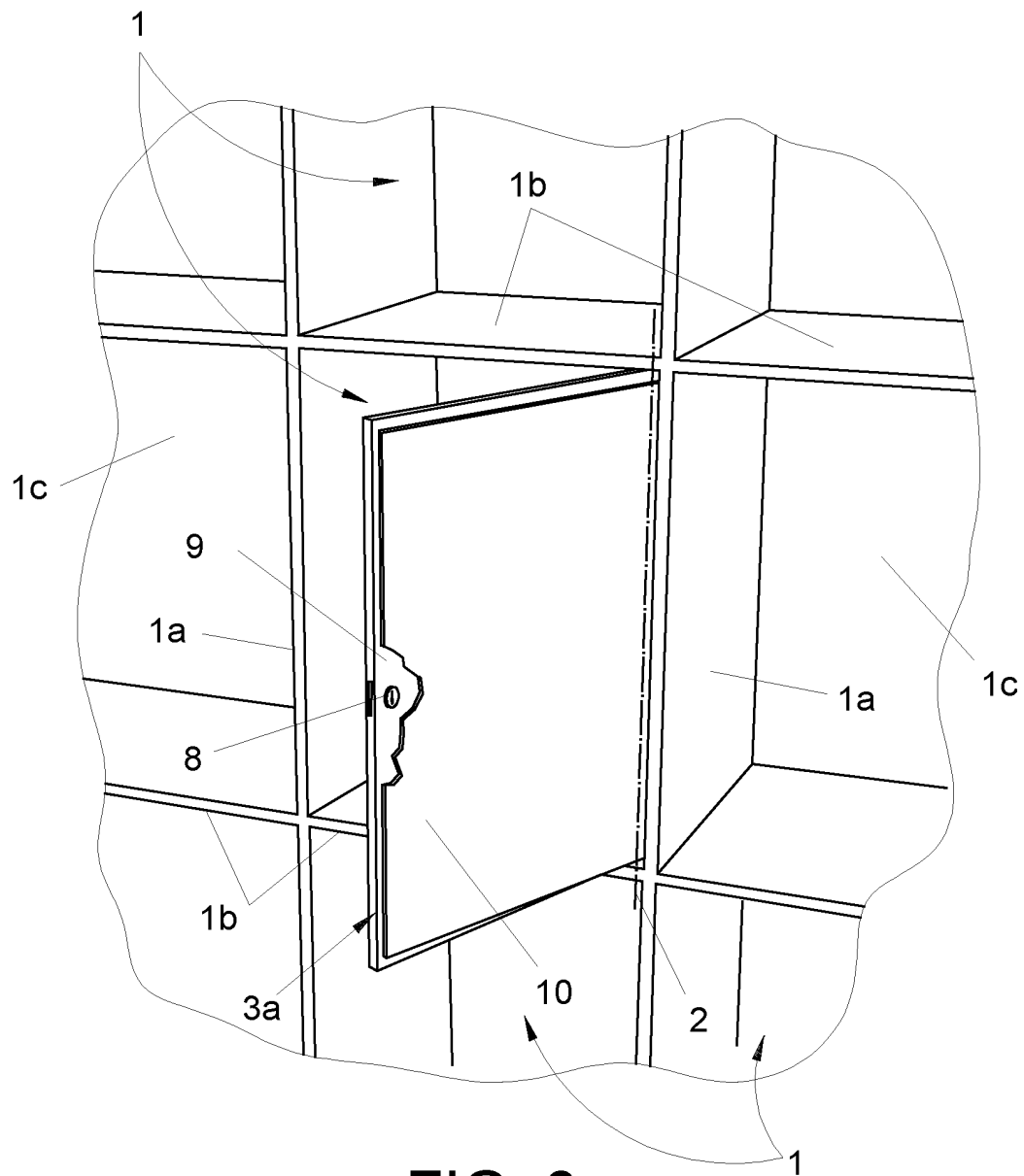


FIG. 6

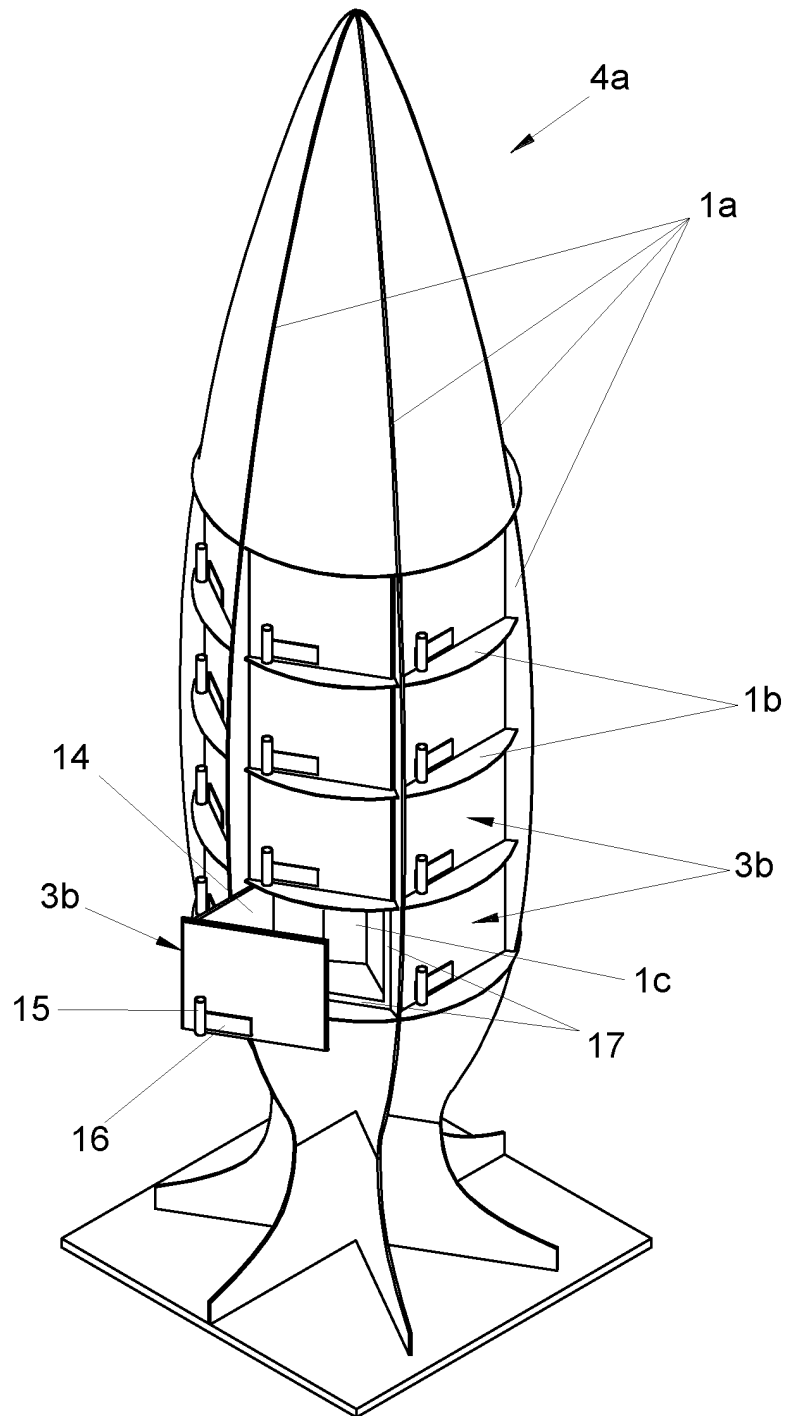


FIG. 7

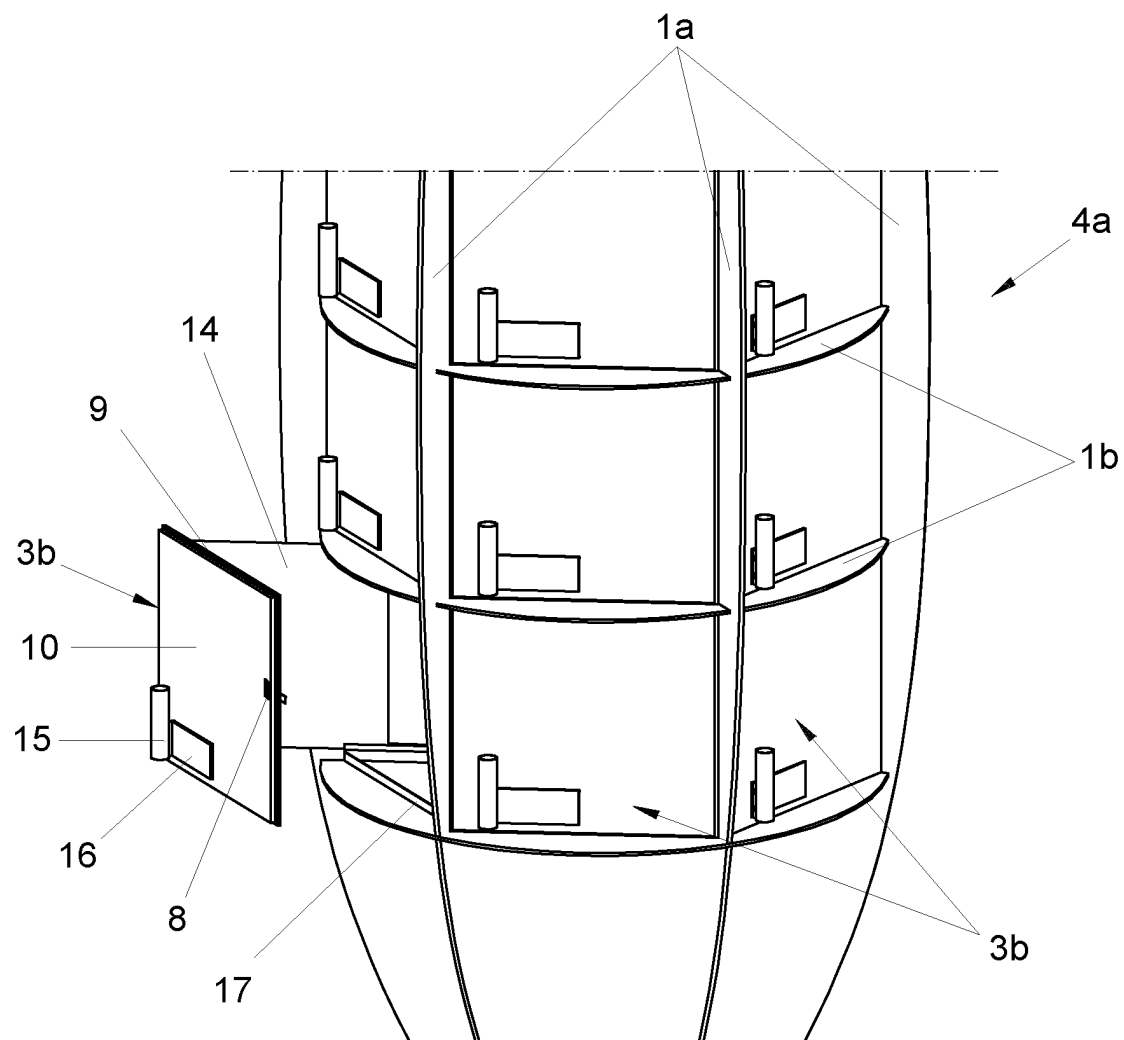
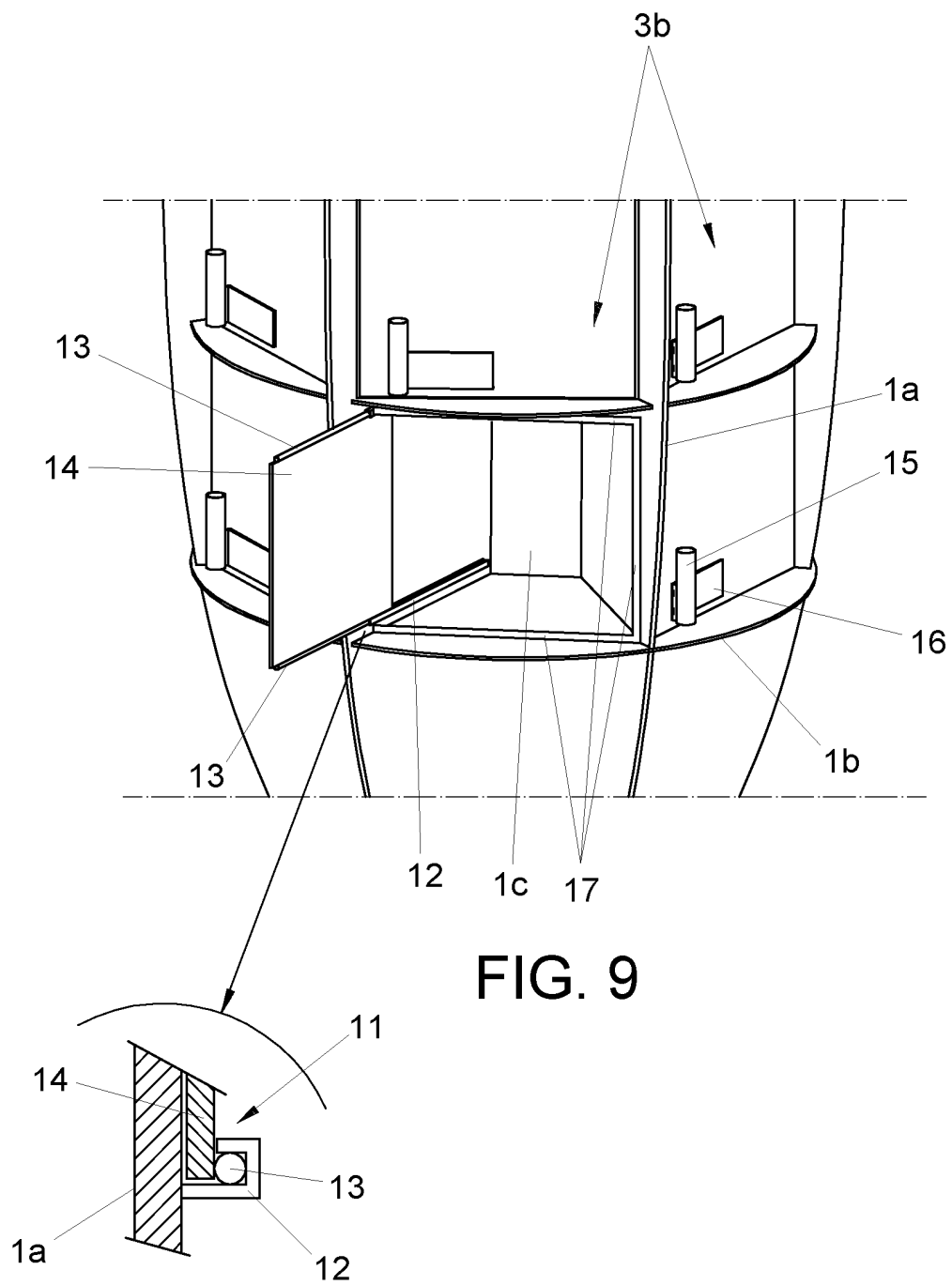


FIG. 8



INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES2013/070472

A. CLASSIFICATION OF SUBJECT MATTER

E04H13/00 (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

E04H, A61G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC, INVENES

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	US 2010162639 A1 (ADAIR CAMERON ET AL.) 01/07/2010, paragraphs[0037 - 0050]; figures 7 - 11, 14 - 17.	1-4
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A	US 6324737 B1 (CHAMNESS CLARENCE ET AL.) 04/12/2001, column 1, line 57 - column 2, line 64; figures 1 - 4.	1, 4-7

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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05/12/2013

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International application No.

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