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(54) **Ornamental component with lining**

(57) An ornamental component (1800) for a bracelet and / or a necklace is disclosed. The ornamental component have a through hole (1850) allowing the ornamental component to be strung on an elongated member of a bracelet and / or necklace, said through hole defining a through hole axis (1804). The ornamental component comprising: a self-supporting housing (1801) having a through hole comprising a first opening at a first side of the housing and a second opening at a second side of

the housing; and a first tubular element (1802) having a through hole inserted in said through hole of said self-supporting housing through said first opening of said self-supporting housing. The ornamental component further comprises a locking element (1806) having a through hole inserted in the through hole of self-supporting housing through said second opening of the self-supporting housing. The locking element comprises an engagement portion attached to said first tubular element.

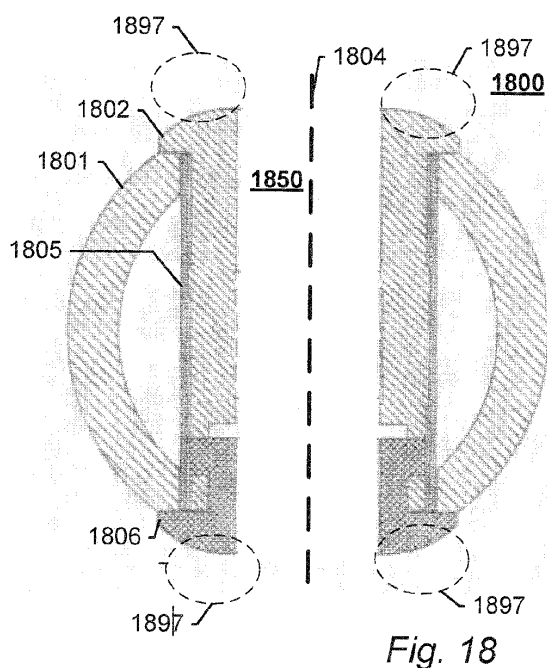


Fig. 18

Description

Field

[0001] The present invention relates to an ornamental component for a bracelet or necklace, and to a method of manufacturing an ornamental component.

Background

[0002] Jewellery, such as necklaces and bracelets, often consists of a plurality of freely movable ornamental components e.g. beads strung on an elongated member e.g. chain, wire, or string. The through holes of the ornamental components may be provided with a lining to improve their strength. Typically, a metal lining is used. The lining may additionally provide additional creative opportunities for jewellery designers as the lining itself may be decorated, e.g. a decorative pattern may be edged on the openings of the lining.

[0003] The metal lining may be inserted using a pressing method. In a first step of the method, a metal tubular element is inserted into the through hole of the ornamental component. Next, the ornamental component is positioned in a press having two specially designed rams, wherein a first opening of the metal tubular element engages with a first ram, and a second opening of the metal tubular element engages with a second ram. By moving the two rams together the metal tubular element may be deformed in manner whereby it attaches a metal lining to the ornamental component.

[0004] However, as the metal tubular element is deformed it may be difficult to use the pressing method with complex linings such as pre decorated linings and linings composed of a plurality of elements.

[0005] Thus, it remains a problem to provide a method for providing beads with more complex linings.

Summary

[0006] According to a first aspect, the invention relates to an ornamental component for a bracelet and / or a necklace, said ornamental component having a through hole allowing said ornamental component to be strung on an elongated member of a bracelet and / or necklace, said through hole defining a through hole axis; said ornamental component comprising:

- a self-supporting housing having a through hole comprising a first opening at a first side of the self-supporting housing and a second opening at a second side of the self-supporting housing; and
- an insert assembly inserted in said through hole of said self-supporting housing;

wherein said insert assembly is assembled from a first tubular element having a through hole that forms at least a part of said through hole of said ornamental component

and a gripping element for frictionally gripping a part of said bracelet and / or necklace; wherein said first tubular element is configured to secure said gripping element inside said through hole of said ornamental component.

[0007] Consequently, by using an insert assembly to provide an ornamental component with a gripping element, the production costs may be lowered. Additionally, by using a tubular element to secure the gripping element inside the self-supporting housing, the gripping element may be more efficiently protected from damage.

[0008] An ornamental component may be any component that can be strung on a bracelet and / or necklace for ornamental purposes such as a bead. An ornamental component according to the first aspect of the invention may be used to organize freely movable beads on a bracelet or necklace, e.g. two ornamental components may be pulled to a desired position on an elongated member of a bracelet or necklace and released, whereby they resiliently grip the elongated member. Consequently, the bracelet or necklace is divided into three distinct zones for freely movable beads. This may be used to prevent all the freely movable beads from grouping together.

[0009] The self-supporting housing may constitute the outer surface of the ornamental component or may be covered with another layer or element constituting the outer surface of the ornamental component. The self-supporting housing may have any shape such as approximately spherical, cylindrical or cubical. The self-supporting housing has a structural strength allowing it to be securely handled during the manufacturing process of the ornamental component. The self-supporting housing may provide the primary structural strength of the ornamental component. The self-supporting housing may be made of metal, glass, wood, plastic or a combination thereof. The through hole of the self-supporting housing may have a constant width or may have a varying width (measured in planes being perpendicular to the through hole axis), e.g. the through hole of the self-supporting housing may be wider in the central part of self-supporting housing than at the first opening and the second opening. The inner surface of the through hole of the self-supporting housing may be spaced apart from the insert assembly by another element or a fluid e.g. air. At least a part of the self-supporting housing may be transparent or semi-transparent.

[0010] The individual element of the insert assembly may be permanently attached or non-permanently attached. The insert assembly may be inserted into the through hole of the housing through the first opening of the housing, i.e. the insert assembly may have a size and shape allowing it to be insertable through the first opening of the self-supporting housing.

[0011] The first tubular element may have any outer shape such as round or rectangular. Correspondingly, the through hole of the first tubular element may have any shape such as round or rectangular. The first tubular element may be integrally molded, i.e. made from a single mold. The first tubular element may be made of metal

and / or plastic.

[0012] The gripping element may be made of a material configured to establish a high frictional connection with an elongated member of a bracelet and / or necklace, e.g. a chain, band, or strand of a necklace or bracelet. The gripping element may be made of a deformable material such as a silicone material.

[0013] In some embodiments, said gripping element is made of a first material and said first tubular element is made of a second material, wherein said coefficient of friction of said first material is higher than said coefficient of friction of said second material relative to sterling silver.

[0014] The coefficient of friction of the first material may be at least 10%, 20%, 40% or 60% higher than the coefficient of friction of the second material relative to sterling silver.

[0015] In some embodiments of the invention, the gripping element is positioned in a central part of the ornamental component and have a width along the through hole axis of less than 95%, 90%, 80%, 70%, 60% or 50% of the width of the self-supporting housing along the through hole axis.

[0016] Consequently, the gripping element is better protected. Thus, a more robust ornamental component is provided.

[0017] In some embodiments, said first tubular element comprises a first circumferential opening extending along the through hole axis, and wherein said gripping element comprises a first gripping portion for frictionally gripping said elongated member of said bracelet and / or necklace, wherein said first gripping part extends through said first circumferential opening.

[0018] In some embodiments, said gripping element comprises a tubular portion, said first gripping portion protrudes from an interior surface of said tubular portion, and wherein said tubular portion of said gripping element surrounds a part of said first tubular element.

[0019] Consequently, said tubular element may in an efficient manner secure said gripping element inside said through hole of said ornamental component.

[0020] The entire gripping element may be integrally molded, i.e. made from a single mold.

[0021] In some embodiments, said first tubular element comprises a second circumferential opening extending along the through hole axis and said gripping element comprises a second gripping portion protruding from an interior surface of said tubular portion of said gripping element, wherein said second gripping portion extends through said second circumferential opening.

[0022] In some embodiments, said first tubular element comprises a third circumferential opening extending along the through hole axis and said gripping element comprises a third gripping portion protruding from an interior surface of said tubular portion of said gripping element, and wherein said third gripping portion extends through said third circumferential opening.

[0023] In some embodiments, the first circumferential opening, the second circumferential opening and / or the

third circumferential opening have a width along the through hole axis of less than 95%, 90%, 80%, 70%, 60% or 50% of the width of the first tubular element along the through hole axis.

[0024] In some embodiments, each of the first circumferential opening, the second circumferential opening and / or the third circumferential opening extends between 5% and 33% of the circumference of the first tubular element in a plane being perpendicular to the through hole axis.

[0025] In some embodiments, the first tubular element comprises a first portion and a second portion, wherein the second portion has a lower widest width than the widest width of the first portion, and wherein the tubular portion of the gripping element is arranged to fit snugly around the second portion of the first tubular element, and abutting the first portion of the first tubular element whereby the gripping element is prevented from moving in a first direction along the through hole axis relative to the first tubular element.

[0026] In some embodiments, the first tubular element further comprises a third portion, and wherein the second portion has a lower widest width than the widest width of the first portion and the third portion, and wherein the tubular portion of the gripping element further abuts the third portion of the first tubular element thereby preventing the gripping element from moving in any direction along the through hole axis relative to the first tubular element.

[0027] The widest width is measured in a plane being perpendicular to the through hole axis.

[0028] In some embodiments, said tubular portion of said gripping element has a widest width approximately equal to the widest width of the first portion and /or third portion of the first tubular element.

[0029] In some embodiments, the ornamental component further comprises a second tubular element, and wherein said first tubular element is positioned inside said second tubular element.

[0030] This may make it easier to insert the insert assembly into the self-supporting housing. The second tubular element may additionally hide non-decorative elements of the ornamental component, when the self-supporting housing is transparent or semi-transparent.

[0031] The second tubular element may have a width along the through hole axis being approximately equal to the width of the self-supporting housing. The second tubular element may be fully inserted into the through hole of the self-supporting housing.

[0032] In some embodiments, said first tubular element of said insert assembly at a first end further comprises a collar, wherein said collar is positioned outside said self-supporting housing at the first opening of said self-supporting housing and comprises a surface abutting an outer surface of said self-supporting housing thereby preventing said first tubular element of said insert assembly from moving in a first direction along said through hole axis relative to said ornamental component.

[0033] The outer surface may be an outer surface of said self-supporting housing. The collar may be an integral portion of the first tubular element or may be attached to the first tubular element.

[0034] In some embodiments, said ornamental component further comprises a locking element having a through hole wherein said locking element comprises an engagement portion positioned inside said self-supporting housing and a collar positioned outside said self-supporting housing at the second opening of said self-supporting housing, wherein said engagement portion is attached to said first tubular element and said collar comprises a surface abutting an outer surface of said self-supporting housing thereby preventing said first tubular element of said insert assembly from moving in a second direction along said through hole axis relative to said ornamental component.

[0035] Consequently, the insert assembly is in an effective manner secured to the self-supporting housing.

[0036] The outer surface may be an outer surface of said self-supporting housing.

[0037] The engagement portion and the collar of the locking element may be integrally formed. The locking element may be attached to the first tubular element by the use of glue or a mechanical locking mechanism.

[0038] In some embodiments, said engagement part of said locking element is inserted into said first tubular element whereby said through hole of said locking element and said through hole of said first tubular element together forms the through hole of said ornamental component.

[0039] In some embodiments, said engagement portion is attached to said first tubular element by a male / female locking mechanism, wherein the male part comprises a protruding portion and the female part comprises a recess and / or opening.

[0040] The engagement portion may be the male part and the first tubular element may be the female part, i.e. the engagement portion may comprise a protruding portion configured to engage with recess and / or opening in the first tubular element. Alternatively, the first tubular element may be the male part and the engagement portion may be the female part.

[0041] In some embodiments, the male / female locking mechanism is of the snap lock type wherein a translation and / or rotation from a free rotational orientation and / or position of the male and female part to a locked rotational orientation and / or position of the male and female part requires less force than a translation and / or rotation from a locked rotational orientation and / or position of the male and female part to a free rotational orientation and / or position of the male and female part.

[0042] This may be beneficial as the locking element and the first tubular element typically are permanently attached.

[0043] In some embodiments, the male / female locking mechanism may be of the rotational lock type, wherein the female part (the engagement portion or the first

tubular element) comprises a recess and / or opening configured to allow the protruding portion of the male part to translate inside the recess and / or opening along the through hole axis when the locking element is in a free rotational orientation relative to the first tubular element, and to be prevented from moving in at least a first direction along the through hole axis when the locking element is in a locked position relative to the first tubular element and the locking element is in a locked rotational orientation relative to the first tubular element.

[0044] In some embodiments, the male part comprises a plurality of protruding portions and the female part comprises a plurality of recess and / or openings.

[0045] When the male / female locking mechanism is of the rotational type the locking element may be attached to the first tubular element by firstly rotationally orienting the locking element in the free rotational orientation relative to the first tubular element, next translating the first tubular element and / or the locking element along the through hole axis until the locking element is in the locked position relative to the first tubular element, and finally rotating the first tubular element and / or the locking element from the free rotational orientation to the locked rotational orientation.

[0046] The protruding portion of the male part and / or the recess and / or opening of the female part may be configured so that a rotation from the free rotational orientation to the locked rotational orientation requires less force than a rotation from the locked rotational orientation to the free rotational orientation.

[0047] In some embodiments, the male part (the engagement portion or the first tubular element) comprises a flexible member configured to deform from a first shape to a second shape when the male part comes into contact with the female part, and further to snap back into approximately the first shape when the flexible member is aligned with the recess and / or opening of the female part, whereby the flexible member engages with the recess and / or opening and locks the male part to the female part, allowing the locking element to be attached to the first tubular element by a pure translation between the two.

[0048] In some embodiments, the male part comprises two flexible members, and the female part comprises two recesses and / or openings.

[0049] The two flexible members may be arranged at opposite sides of the male part. Correspondingly, the two recesses and / or openings may be arranged at opposite sides of the female part.

[0050] In some embodiments, the ornamental component has a length along the through hole axis between 2 mm and 5 cm.

[0051] According to a second aspect, the invention relates to a bracelet or a necklace comprising:

- an elongated member; and
- a first ornamental component as disclosed in relation to the first aspect of the invention, strung on said

elongated member;

wherein the first ornamental component is configured so that the gripping element resiliently grips the elongated member to fix the first ornamental component along the elongated member until a particular force is acting on said first ornamental component, whereby the first ornamental component can be moved along the elongated member.

[0052] The elongated member may be any elongated member suitable for jewellery such as a metal chain, leather string, a fabric string, or an anchor type chain.

[0053] In some embodiments, the particular force is higher than the maximum gravitational force gravity acting on the ornamental component.

[0054] In some embodiments, the bracelet or necklace further comprises at least one freely movable ornamental component strung on said elongated member.

[0055] In some embodiments, the bracelet or necklace further comprises a plurality of freely movable ornamental components strung on said elongated member.

[0056] In some embodiments, the bracelet or necklace further comprises a second ornamental component as disclosed in relation to the first aspect of the invention strung on said elongated member; wherein the second ornamental component is configured so that the gripping element resiliently grips the elongated member to fix the second ornamental component along the elongated member until a particular force is acting on said second ornamental component, whereby the second ornamental component can be moved along the elongated member.

[0057] According to a third aspect, the invention relates to a method for manufacturing an ornamental component, said ornamental component having a through hole allowing said ornamental component to be strung on an elongated member of a bracelet and / or necklace, said through hole defining a through hole axis, comprising the steps of:

- providing a self-supporting housing, having a through hole, wherein said through hole comprises a first opening at a first side of the self-supporting housing and a second opening at a second side of the self-supporting housing;
- assembling an insert assembly comprising a first tubular element having a through hole that at least partly forms said through hole of said ornamental component, and a gripping element for frictionally gripping said elongated member of a bracelet and / or a necklace; and
- inserting said insert assembly in said through hole of said housing.

[0058] Consequently, an efficient method of producing an ornamental component comprising a gripping element is provided.

[0059] In some embodiments, the insert assembly is inserted in said through hole of said self-supporting housing

through said first opening of said self-supporting housing.

[0060] In some embodiments, the ornamental component is an ornamental component as disclosed in relation to the first aspect of the invention.

[0061] In some embodiments, said insert assembly is assembled before it is inserted into said through hole of said self-supporting housing.

[0062] In some embodiments, said first tubular element comprises a first circumferential opening extending along the through hole axis, and wherein said gripping element comprises a first gripping portion, for frictionally gripping said elongated member of said bracelet and / or necklace, and a tubular portion, wherein said first gripping portion is protruding from an inner surface of said tubular portion, and wherein the step of assembling said insert assembly comprises pulling said gripping element around said first tubular element until said first gripping portion is aligned with said first circumferential opening, whereby said first gripping portion extends through said first circumferential opening and a part of said inner surface of said tubular portion rests upon a part of the outer surface of said first tubular element thereby securing said gripping element to said first tubular element.

[0063] In some embodiments, said first tubular element further comprises a second circumferential opening extending along the through hole axis, and wherein said gripping element further comprises a second gripping portion for frictionally gripping said elongated member of said bracelet and / or necklace, wherein said second gripping portion is protruding from an inner surface of said tubular portion, and wherein the step of assembling said insert assembly comprises pulling said gripping element around said first tubular element until said first gripping portion is aligned with said first circumferential opening and said second gripping portion is aligned with said second circumferential opening, whereby said first gripping portion extends through said first circumferential opening, said second gripping portion extends through said second circumferential opening, and a part of said inner surface of said tubular portion rests upon a part of the outer surface of said first tubular element thereby attaching said gripping element to said first tubular element.

[0064] In some embodiments, said first tubular element further comprises a third circumferential opening extending along the through hole axis, and wherein said gripping element further comprises a third gripping portion for frictionally gripping said elongated member of said bracelet and / or necklace, wherein said third gripping portion is protruding from an inner surface of said tubular portion, and wherein the step of assembling said insert assembly comprises pulling said gripping element around said first tubular element until said first gripping portion is aligned with said first circumferential opening, said second gripping portion is aligned with said second circumferential opening, and said third gripping portion is aligned with said third circumferential opening, whereby said first gripping portion extends through said first

circumferential opening, said second gripping portion extends through said second circumferential opening, said third gripping portion extends through said third circumferential opening, and a part of said inner surface of said tubular portion rests upon a part of the outer surface of said first tubular element thereby attaching said gripping element to said first tubular element.

[0065] In some embodiments, said ornamental component further comprises a locking element having a through hole, wherein said locking element comprises an engagement part for engaging with said insert assembly and a collar for being positioned outside said self-supporting housing, said method further comprising the step of:

- inserting said engagement part of said locking element into said second opening of said self-supporting housing, and
- attaching said engagement part to said insert assembly.

[0066] In some embodiments, said engagement part is attached to said insert assembly by a male / female locking mechanism.

[0067] According to a fourth aspect, the invention relates to a tubular element for securing a gripping element, for gripping an elongated member of a bracelet and / necklace, in a through hole of an ornamental component, said tubular element having a through hole defining a tubular element through hole axis, wherein said tubular element comprises a first circumferential opening extending along the tubular element through hole axis for receiving a first gripping portion of said gripping element allowing said first gripping portion to extend through said first circumferential opening.

[0068] In some embodiments, said tubular element further comprises a second circumferential opening extending along the tubular element through hole axis for receiving a second gripping portion of said gripping element allowing said second gripping portion to extend through said second circumferential opening.

[0069] In some embodiments, said tubular element further comprises a third circumferential opening extending along the tubular element through hole axis for receiving a third gripping portion of said gripping element allowing said third gripping portion to extend through said third circumferential opening.

[0070] In some embodiments, the first circumferential opening, the second circumferential opening and / or the third circumferential opening have a width along the tubular element through hole axis of less than 95%, 90%, 80%, 70%, 60% or 50% of the width of the tubular element along the tubular element through hole axis.

[0071] In some embodiments, each of the first circumferential opening, the second circumferential opening and / or the third circumferential opening extends between 5% and 33% of the circumference of the tubular element in a plane being perpendicular to the tubular

element through hole axis.

[0072] In some embodiments, said tubular element is insertable in a through hole of a self-supporting housing of said ornamental component through a first opening of said through hole of said self-supporting housing.

[0073] In some embodiments, the tubular element comprises a first portion and a second portion, wherein the first portion is positioned next to the second portion, the second portion has a lower widest width than the widest width of the first portion measured in a plane being perpendicular to the tubular element through hole axis, and wherein the first circumferential opening is positioned at the second portion of the tubular element.

[0074] In some embodiments, the second circumferential opening is positioned at the second portion of the tubular element.

[0075] In some embodiments, the third circumferential opening is positioned at the second portion of the tubular element.

[0076] In some embodiments, the tubular element further comprises a third portion positioned next to the second portion, and wherein the second portion has a lower widest width than the widest width of the first portion and the third portion, measured in a plane being perpendicular to the tubular element through hole axis.

[0077] In some embodiments, the first circumferential opening extends approximately the entire length, along the tubular element through hole axis, of the second portion of the tubular element.

[0078] In some embodiments, the second circumferential opening extends approximately the entire length, along the tubular element through hole axis, of the second portion of the tubular element.

[0079] In some embodiments, the third circumferential opening extends approximately the entire length, along the tubular element through hole axis, of the second portion of the tubular element.

[0080] In some embodiments, said tubular element further comprises a collar for being positioned outside said self-supporting housing said collar comprising a surface for abutting an outer surface of said self-supporting housing for preventing said tubular element from moving in a first direction along said tubular element through hole axis relative to said self-supporting housing.

[0081] The collar may be an integral portion of the first tubular element or may be attached to the first tubular element. The collar may be arranged at a first opening of the through hole of the tubular element.

[0082] In some embodiments, said engagement portion is attached to said first tubular element by a male / female locking mechanism, wherein the male part comprises a protruding portion and the female part comprises a recess and / or opening.

[0083] The engagement portion may be the male part and the first tubular element may be the female part, i.e. the engagement portion may comprise a protruding portion configured to engage with recess and / or opening in the first tubular element. Alternatively, the first tubular

element may be the male part and the engagement portion may be the female part.

[0084] In some embodiments, the male / female locking mechanism is of the snap lock type wherein a translation and / or rotation from a free rotational orientation and / or position of the male and female part to a locked rotational orientation and / or position of the male and female part requires less force than a translation and / or rotation from a locked rotational orientation and / or position of the male and female part to a free rotational orientation and / or position of the male and female part.

[0085] This may be beneficial as the locking element and the first tubular element typically are permanently attached.

[0086] In some embodiments, the male / female locking mechanism may be of the rotational lock type, wherein the female part (locking element or the tubular element) comprises a recess and / or opening configured to allow the protruding portion of the male part to translate inside the recess and / or opening along the tubular element through hole axis when the locking element is in a free rotational orientation relative to the first tubular element, and to be prevented from moving in at least a first direction along the tubular element through hole axis when the locking element is in a locked position relative to the first tubular element and the locking element is in a locked rotational orientation relative to the first tubular element.

[0087] In some embodiments, the male part comprises a plurality of protruding portions and the female part comprises a plurality of recesses and / or openings.

[0088] The protruding portion of the male part and / or the recess and / or opening of the female part may be configured so that a rotation from the free rotational orientation to the locked rotational orientation requires less force than a rotation from the locked rotational orientation to the free rotational orientation.

[0089] In some embodiments, the tubular element has a length along the tubular element through hole axis between 2 mm and 3 cm.

[0090] According to a fifth aspect, the invention relates to an ornamental component for a bracelet and / or a necklace said ornamental component having a through hole allowing said ornamental component to be strung on an elongated member of a bracelet and / or necklace, said through hole defining a through hole axis; said ornamental component comprising:

- a self-supporting housing having a through hole comprising a first opening at a first side of the housing and a second opening at a second side of the housing; and
 - a first tubular element having a through hole inserted in said through hole of said self-supporting housing through said first opening of said self-supporting housing; and
- wherein said ornamental component further comprises a locking element having a through hole inserted in said through hole of self-supporting housing

through said second opening of said self-supporting housing, and said locking element comprises a engagement portion attached to said first tubular element.

[0091] Consequently, by providing an ornamental component with a lining by using two parts inserted from two sides of the ornamental component, the lining (the first tubular element and the locking element) may be attached to the bead without deforming it. This allows more complex insert elements to be used such as pre decorated linings and lining composed of a plurality of elements.

[0092] An ornamental component may be any component that can be strung on a bracelet and / or necklace for ornamental purposes such as a bead. An ornamental component according to the fifth aspect of the invention may be an freely movable ornamental component or an ornamental component used to organize freely movable beads on a bracelet or necklace. The self-supporting housing may constitute the outer surface of the ornamental component or may be covered with another layer or element constituting the outer surface of the ornamental component. The self supporting housing may have any shape such as approximately spherical, cylindrical or cubical. The self-supporting housing has a structural strength allowing it to be securely handled during the manufacturing process of the ornamental component. The self-supporting housing may provide the primary structural strength of the ornamental component. The self-supporting housing may be made of metal, glass, wood, plastic or a combination thereof. The through hole of the self-supporting housing may have a constant width or may have a varying width (measured in planes being perpendicular to the through hole axis), e.g. the through hole of the self-supporting housing may be wider in the central part of self-supporting housing than at the first opening and the second opening. The inner surface of the through hole of the self-supporting housing may be spaced apart from the insert assembly by another element or a fluid e.g. air. At least a part of the self-supporting housing may be transparent or semi-transparent.

[0093] The engagement portion and the first tubular element may be permanently attached or non-permanently attached.

[0094] The first tubular element may have any outer shape such as round or rectangular. Correspondingly, the through hole of the first tubular element may have any shape such as round or rectangular. The first tubular element may be integrally molded, i.e. made from a single mold. The first tubular element may be made of metal and / or plastic.

[0095] The engagement portion of the locking element may be attached to the first tubular element by the use of an adhesive or a mechanical locking mechanism.

[0096] In some embodiments, said engagement portion is attached to said first tubular element by a male / female locking mechanism, wherein the male part com-

prises a protruding portion and the female part comprises a recess and / or opening.

[0097] The engagement portion may be the male part and the first tubular element may be the female part, i.e. the engagement portion may comprise a protruding portion configured to engage with recess and / or opening in the first tubular element. Alternatively, the first tubular element may be the male part and the engagement portion may be the female part.

[0098] In some embodiments, the ornamental component further comprises a second tubular element, and wherein said first tubular element and said engagement portion of said locking element is positioned inside said second tubular element.

[0099] This may make it easier to insert the insert assembly into the self-supporting housing. The second tubular element may additionally hide non-decorative elements of the ornamental component, when the self-supporting housing is transparent or semi-transparent. The second tubular element may additionally protect the attachment between the first tubular element and the engagement portion.

[0100] The second tubular element may have a length along the through hole axis being approximately equal to the length of the self-supporting housing. The second tubular element may be fully inserted into the through hole of the self-supporting housing. The engagement portion of the locking element may be fully inserted into the second tubular element.

[0101] In some embodiments, the male / female locking mechanism is of the snap lock type wherein a translation and / or rotation from a free rotational orientation and / or position of the male and female part, to a locked rotational orientation and / or position of the male and female part, requires less force than a translation and / or rotation from a locked rotational orientation and / or position of the male and female part to a free rotational orientation and / or position of the male and female part.

[0102] This may be beneficial as the locking element and the first tubular element typically are permanently attached.

[0103] In some embodiments, the male / female locking mechanism is of the rotational lock type, wherein the female part (the engagement portion or the first tubular element) comprises a recess and / or opening configured to allow the protruding portion of the male part to translate inside the recess and / or opening along the through hole axis when the locking element is in a free rotational orientation relative to the first tubular element, and to be prevented from moving in at least a first direction along the through hole axis when the locking element is in a locked position relative to the first tubular element and the locking element is in a locked rotational orientation relative to the first tubular element.

[0104] In some embodiments, the male part comprises a plurality of protruding portions and the female part comprises a plurality of recesses and / or openings.

[0105] When the male / female locking mechanism is

of the rotational type the locking element may be attached to the first tubular element by firstly rotationally orienting the locking element in the free rotational orientation relative to the first tubular element, next translating the first tubular element and / or the locking element along the through hole axis until the locking element is in the locked position relative to the first tubular element, and finally rotating the first tubular element and / or the locking element from the free rotational orientation to the locked rotational orientation.

[0106] The protruding portion of the male part and / or the recess and / or opening of the female part may be configured so that a rotation from the free rotational orientation to the locked rotational orientation requires less force than a rotation from the locked rotational orientation to the free rotational orientation.

[0107] In some embodiments, the male part (the engagement portion or the first tubular element) comprises a flexible member configured to deform from a first shape to a second shape when the male part comes into contact with the female part, and further to snap back into approximately the first shape when the flexible member is aligned with the recess and / or opening of the female part, whereby the flexible member engages with the recess and / or opening and locks the male part to the female part, allowing the locking element to be attached to the first tubular element by a pure translation between the two.

[0108] In some embodiments, the male part comprises two flexible members, and the female part comprises two recesses and / or openings.

[0109] The two flexible members may be arranged at opposite sides of the male part. Correspondingly, the two recesses and / or openings may be arranged at opposite sides of the female part.

[0110] In some embodiments, said engagement part of said locking element is inserted into said first tubular element whereby said through hole of said locking element and said through hole of said first tubular element together forms the through hole of said ornamental component.

[0111] In some embodiments, said first tubular element at a first end further comprises a collar, wherein said collar is positioned outside said self-supporting housing at the first opening of said self-supporting housing and comprises a surface abutting an outer surface of said self-supporting housing thereby preventing said first tubular element from moving in a first direction along said through hole axis relative to said ornamental component.

[0112] In some embodiments, said locking element further comprises a collar positioned outside said self-supporting housing at the second opening of said self-supporting housing, said collar comprising a surface abutting an outer surface of said self-supporting housing thereby preventing said first tubular element from moving in a second direction along said through hole axis relative to said ornamental component.

[0113] In some embodiments, the first tubular element

is part of an insert assembly inserted in said through hole of said self-supporting housing through said first opening of said self-supporting housing, wherein said insert assembly is assembled from said first tubular element and a gripping element for frictionally gripping a part of said bracelet and / or necklace; wherein said first tubular element is configured to secure said gripping element inside said through hole of said ornamental component.

[0114] According to a sixth aspect, the invention relates to a method for manufacturing an ornamental component, said ornamental component having a through hole allowing said ornamental component to be strung on an elongated member of a bracelet and / or necklace, said through hole defining a through hole axis, the method comprising the steps of:

- providing a self-supporting housing, having an through hole, wherein said through hole comprises a first opening at a first side of the self-supporting housing and a second opening at a second side of the self-supporting housing;
- inserting through said first opening of said self-supporting housing a first tubular element having a through hole;
- inserting through said second opening of said self-supporting housing a locking element having a through hole, said locking element comprising an engagement portion for being positioned inside said through hole of said self-supporting housing; and
- attaching said engagement portion of said locking element to said first tubular element.

[0115] Consequently, by using two parts inserted from two sides of the ornamental component, the lining (the first tubular element and the locking element) may be attached to the bead without deforming it. This allows more complex insert elements to be used such as pre decorated linings and linings composed of a plurality of elements.

[0116] In some embodiments, the engagement portion is attached to said tubular element by a male / female locking mechanism.

[0117] In some embodiments, the method further comprises the step of inserting a second tubular element into the through hole of the self-supporting housing, either through said first opening or said second opening of said self-supporting housing, wherein said first tubular element and said engagement portion of said locking element is inserted into said second tubular element.

[0118] In some embodiments, the ornamental component is an ornamental component as disclosed in relation to the fifth aspect of the invention.

[0119] The different aspects of the present invention can be implemented in different ways including as ornamental components, bracelets or necklaces comprising ornamental components, tubular elements for ornamental components, and methods for manufacturing ornamental components described above and in the follow-

ing, each yielding one or more of the benefits and advantages described in connection with at least one of the aspects described above, and each having one or more preferred embodiments corresponding to the preferred embodiments described in connection with at least one of the aspects described above and / or disclosed in the dependant claims.

[0120] Furthermore, it will be appreciated that embodiments described in connection with one of the aspects described herein may equally be applied to the other aspects. Aspects of the first tubular element disclosed in relation to the first aspect of the invention may be applied to the tubular element disclosed in relation to the fourth aspect of the invention and vice versa. Similarly, aspects disclosed in relation to the ornamental component disclosed in relation to the first aspect of the invention may be applied to the method disclosed in relation to the third aspect of the invention and vice versa. Further aspects disclosed in relation to the ornamental component disclosed in relation to the fifth aspect of the invention may be applied to the method disclosed in relation to the sixth aspect of the invention and vice versa.

Brief description of the drawings

[0121] The above and / or additional objects, features and advantages of the present invention will be further elucidated by the following illustrative and non-limiting detailed description of embodiments of the present invention, with reference to the appended drawings, wherein:

Figs. 1a-c show an ornamental component according to an embodiment of the present invention.

Fig. 2 shows an ornamental component according to an embodiment of the present invention.

Fig. 3 shows an ornamental component according to an embodiment of the present invention.

Figs. 4a-d show a first tubular element according to an embodiment of the present invention.

Fig. 5a-b show a gripping element according to an embodiment of the present invention.

Fig. 6a-b show a self-supporting housing according to an embodiment of the present invention.

Fig. 7a-b show a second tubular element according to an embodiment of the present invention.

Fig. 8a-c show a locking element according to an embodiment of the present invention.

Fig. 9 shows an ornamental component according to an embodiment of the present invention.

Figs. 10a-d show a first tubular element according to an embodiment of the present invention.

Fig. 11a-c show a locking element according to an embodiment of the present invention.

Fig. 12 shows an ornamental component according to an embodiment of the present invention.

Figs. 13a-d show a first tubular element according to an embodiment of the present invention.

Fig. 14a-c show a locking element according to an embodiment of the present invention.

Fig. 15 shows an ornamental component according to an embodiment of the present invention.

Fig. 16a-c show an ornamental component according to an embodiment of the present invention.

Figs. 17a-b show a first tubular element according to an embodiment of the present invention.

Fig. 18 shows an ornamental component according to an embodiment of the present invention.

Detailed description

[0122] In the following description, reference is made to the accompanying figures, which show by way of illustration how the invention may be practiced.

[0123] Figs. 1a-c show an ornamental component 100 for a bracelet and / or a necklace having a through hole defining a through hole axis 104, according to an embodiment of the present invention. Fig. 1a shows a side view, Fig. 1b shows a front view, and Fig. 1c shows a cross-section along the line A shown in Fig. 1b. The ornamental component 100 comprises a self-supporting housing 101 having a through hole 150 comprising a first opening at a first side of the self-supporting housing 151 and a second opening at a second side of the self-supporting housing 152, and an insert assembly 102 103 inserted in said through hole 150 of said self-supporting housing 101. The insert assembly 102 103 comprises a first tubular element 102 and a gripping element 103 (only schematically shown). The gripping element 103 is configured for frictionally gripping a part of a bracelet and / or necklace. The first tubular element 102 has a through hole 140 which in this embodiment forms the full through hole of the ornamental component 100. However, in other embodiments of the invention the through hole of the first tubular element 140 forms only a limited part of the through hole of the ornamental component 100. The through hole of the ornamental component allows it to be strung on an elongated member of a bracelet and / or necklace. The through hole of the self-supporting housing 150 has a varying width (measured in planes being perpendicular to the through hole axis), i.e. the through hole of the self-supporting housing 150 is wider in the central part of self-supporting housing than at the first opening 151 and the second opening 152. The inner surface of the through hole of the self-supporting housing 150 is spaced apart from the insert assembly 102 103 by a fluid e.g. air. The first tubular element 102 is configured to secure said gripping element 103 inside the through hole 150 of said ornamental component. This may be achieved by attaching said gripping element 103 to the first tubular element 102 e.g. by adhering the two elements together or by positioning the gripping element 103 in a recess of the first tubular element 102 e.g. as shown in Fig. 2. The first tubular element 102 may alternatively secure the gripping element 103 inside the through hole 150 of said ornamental component by hav-

ing a part of the gripping element wrapped around its outer surface as disclosed in relation to Figs. 3-5.

Fig. 2 shows a cross-section of an ornamental component 200 for a bracelet and / or a necklace having a through hole defining a through hole axis 204 according to an embodiment of the present invention. The ornamental component 200 comprises a self-supporting housing 201 having a through hole 250 comprising a first opening at a first side of the self-supporting housing 251 and a second opening at a second side of the self-supporting housing 252, and an insert assembly 202 203 inserted in said through hole 250 of said self-supporting housing 201. The insert assembly 202 203 comprises a first tubular element 202 and a gripping element 203. The gripping element 203 is configured for frictionally gripping a part of a bracelet and / or necklace. The gripping element 203 has a tubular shape. The first tubular element 202 is configured to secure said gripping element 203 in said through hole of said ornamental component by having recess 290 in the central part of the inner wall of its through hole 240, where the gripping element 203 is positioned. Optionally, the gripping element 203 may further be adhered to the inner wall of the first tubular element 202. The through hole of the first tubular element 240 forms the full through hole of the ornamental component 200.

Fig. 3 shows an exploded view of an ornamental component 300 according to an embodiment of the present invention. The ornamental component 300 comprises an insert assembly 370, a second tubular element 305, a self-supporting housing 301, and a locking element 306. The insert assembly 370 comprises a first tubular element 302 and a gripping element 303. Shown is also the through hole axis 304. The first tubular element 302 has a through hole and comprises a collar 324, a first part 321, a second part 322, and a third part 323, as will be more detailed explained in relation to Figs. 4a-d. The locking element 306 has a through hole, and comprises an engagement part 361 for engaging with the insert assembly 370 and a collar 362 for being positioned outside the self-supporting housing 301. The ornamental component 300 may be manufactured / assembled by firstly assembling the insert assembly 370. The insert assembly 370 may be assembled by arranging the gripping element 303 around the second portion 322 of the first tubular element 302, so that gripping portions of the gripping element 303 (not shown) extends through circumferential openings of the first tubular element 302. Next, the insert assembly 370 may be inserted into the second tubular element 305. Then the insert assembly 370 with the second tubular element may be inserted into a through hole of the self-supporting housing 350 in a

manner so that the collar 324 is positioned outside the self-supporting housing 301. The second tubular element 305 may alternatively be inserted into the through hole of the self-supporting housing 350 before the insert assembly 370 is inserted. The insert assembly 370 and / or the second tubular element 305 may be inserted into the through hole of the self-supporting housing 350 through a first opening 351. The insert assembly 370 and / or the second tubular element 305 may alternatively be inserted into the through hole of the self-supporting housing 350 before the self-supporting housing 301 is fully formed / assembled e.g. the insert assembly 370 and / or the second tubular element may be inserted into a first half of the self supporting housing 301, whereafter a second half of the self-supporting housing 301 is attached to the first half, thereby forming the finished self-supporting housing 301 with the insert assembly 370 inserted in its through hole 350. Finally, the locking element 306 is inserted in a second opening 352 of the through hole of the self-supporting housing 350, and the engagement part 361 is attached to the first tubular element 302.

Figs. 4a-d show a first tubular element comprising a through hole according to an embodiment of the present invention. The first tubular element shown in Fig. 4-d may correspond to the first tubular element 302 shown in Fig. 3. Fig. 4a shows a side view, Fig. 4b shows a cross-section along the line A, Fig. 4c shows a front view, and Fig. 4d shows a back view. The first tubular element 402 comprises a through hole 474 defining a tubular element through hole axis 404. When the first tubular element 402 is positioned in a ornamental component according the invention, the tubular element through hole axis 404 and the ornamental component through hole axis will be co-incident. The first tubular element 402 comprises a first portion 421, a second portion 422, and a third portion 423. The width of the second portion 422 is lower than the widest width of the first portion 421 and the third portion 423. The first tubular element 402 further comprises a collar 424, a first circumferential opening 426, a second circumferential opening 427, and a third circumferential opening 428. Each of the circumferential openings 426 427 428 extends along the tubular element through hole axis 404. The circumferential openings 426 427 428 are spaced apart by walls 471 472 473 extending along to tubular element through hole axis 404. Each of the circumferential openings 426 427 428 extends B percentage of the circumference of the first tubular element. In the embodiment shown B is equal to 20.8%, i.e. 75 degrees. Correspondingly, each of the walls 471 472 473 extends C percentage of the circumference of the first tubular element. In the embodiment shown C is equal to 12.5%. The circumferential openings 426 427 428 are used to allow

gripping parts of the gripping element to extend through, into the through hole 474 of the first tubular element 402, thereby allowing the gripping parts to grip an elongated member of a bracelet and / or necklace. The collar 424 comprises a surface 474 for abutting an outer surface of a self-supporting housing for preventing the first tubular element 402 from moving in a first direction along the through hole axis relative to the self-supporting housing. The width of the through hole 474 is slightly extended in a part of the third portion 423, as illustrated by the broken line in Fig. 4a. This may allow an engagement portion of a locking element to be received, whereby a through hole of the locking element and the through hole 474 of the first tubular element 402 together can form a through hole of an ornamental component. The first tubular element 402 may optionally further comprise mechanical locking means 425 for mechanically attaching the first tubular element 402 with an engagement portion of a locking element e.g. a male / female locking mechanism. In some embodiments, the first tubular element 402 has a length along the tubular element through hole axis 404 between 1 mm and 3 cm.

Figs. 5a-b show a gripping element according to an embodiment of the present invention. Fig. 5a shows a side view, and Fig. 5b shows a front view. The gripping element 503 shown in Fig 5a-b may correspond to the gripping element 303 shown in Fig. 3. The gripping element comprises a tubular portion 531 having an outer surface 532 and an inner surface 536. The gripping element 503 further comprises a first gripping portion 533, a second gripping portion 534, and a third gripping portion 535 protruding from the inner surface 536 of the tubular portion 531. Each of the gripping portions 533 534 535 protrudes from A percentage of the inner surface 536 of the tubular portion 531. In the embodiment shown A is equal to 19.4%, i.e. 70 degrees. The gripping portions 533 534 535 are used to resiliently grip an elongated member of a bracelet and / or necklace. The gripping element 503 may be made of a flexible material e.g. a silicone like material. The gripping element 503 may be attached with a first tubular element 402 as shown in Fig. 4a-d by pulling the gripping element 503 around the first tubular element 402 until the first gripping portion 533 is aligned with the first circumferential opening 426, the second gripping portion 534 is aligned with the second circumferential opening 427, and the third gripping portion 535 is aligned with the third circumferential opening 428, whereby the first gripping portion 533 extends through the first circumferential opening 426, the second gripping portion 534 extends through the second circumferential opening 427, the third gripping portion 535 extends through the third circumferential opening 428, and a part of the inner surface 536 of the tubular

portion 531 rests upon a part of the outer surface 471 472 473 of the first tubular element 402 thereby attaching the gripping element 503 to the first tubular element 502. The gripping element 503 may have a length C along the through hole axis, being approximately equal to the length of the circumferential openings of a first tubular element.

Figs. 6a-b show a self-supporting housing according to an embodiment of the present invention. Fig. 6a shows a side view and Fig. 6b shows a front view. The self-supporting housing 601 shown in Figs. 6a-b may correspond to the self-supporting housing 301 shown in Fig. 3. The self-supporting housing 601 has a through hole 650 comprising a first opening at a first side of the self-supporting housing 651 and a second opening at a second side of the self-supporting housing 652. The through hole of the self-supporting housing 650 has a varying width (measured in planes being perpendicular to the through hole axis), i.e. the through hole of the self-supporting housing 650 is wider in the central part of self-supporting housing than at the first opening 651 and the second opening 652. The self-supporting housing 601 comprises a planar surface 653 at the first opening 651 for abutting a surface of a collar of a first tubular element. Correspondingly, the self supporting housing 601 comprises a planar surface 654 for abutting a surface of a collar of a locking element.

Figs. 7a-b show a second tubular element according to an embodiment of the present invention. Fig. 7a shows a side view and Fig. 7b shows a front view.

The second tubular element 705 shown in Figs. 7a-b may correspond to the second tubular element 305 shown in Fig. 3. The second tubular element comprises a through hole 755, wherein a first tubular element with a gripping element attached may be positioned.

Figs. 8a-b show a locking element according to an embodiment of the present invention. Fig. 8a shows a top view, Fig. 8b shows a back view and

Fig. 8c shows a front view. The locking element 806 shown in Figs 8a-c may correspond to the locking element 306 shown in Fig. 3. The locking element 806 comprises an engagement portion 861 for being attached with a part of a first tubular element, a collar for being positioned outside a self-supporting housing, and a through hole 865. The engagement portion 861 may optionally comprise mechanical locking means 864 for mechanically attaching the engagement portion 861 with a first tubular element 402 e.g. a male / female locking mechanism. The collar 862 comprises a planar surface 863 for abutting with a surface of a self-supporting housing.

Fig. 9 shows an exploded perspective view of an ornamental component with possible dimensions according to an embodiment of the present invention. The ornamental component 900 comprises a first tubular element 902, a gripping element 903, a self-supporting housing 901, a second tubular element 905, and a locking element 906.

Fig. 10a-d show a first tubular element according to an embodiment of the present invention. Fig. 10a shows a top view, Fig. 10b shows a side view, Fig. 10c shows a front view and Fig. 10d shows a back view. The first tubular element 1002 has a through hole 1074 and comprises a collar 1024, a first portion 1021, a second portion 1022, and a third portion 1023. The collar 1024, the first portion 1021, and the second portion 1022 may be identical to the corresponding parts of the first tubular element shown in Fig. 4a-d. The third portion 1023 comprises mechanical locking means in the form of a female part of male / female locking mechanism 1075 1076. The female part 1075 1076 comprises a first opening 1075 and a second opening 1076 extending along the through hole axis. The first opening 1075 and the second opening 1076 are positioned opposite to each other.

Fig. 11a-d show a locking element 1106 according to an embodiment of the present invention. Fig. 11a shows a top view, Fig. 11b shows a front view and Fig. 11c shows a back view. The locking element 1106 has a through hole 1165 and comprises a collar 1162 and an engagement portion 1161. The collar 1162 may be identical to the collar of the locking element shown in Fig. 8. The engagement portion 1161 comprises mechanical locking means in the form of the male part 1166 1167 of a male / female locking mechanism. The male part 1166 1167 comprises a first flexible member 1166 and a second flexible member 1167. The first and second flexible member 1166 1167 each comprises a protruding portion 1168 1169. The male / female locking mechanisms shown in Figs. 10a-c and Figs. 11a-c are configured to function together, thus the protruding portions 1168 1169 are configured to fit the openings 1075 1076. The locking element 1106 may be attached to the first tubular element 1002 by moving the two elements together until the male part comes into contact with the female part, whereby the first and second flexible member 1166 1167 are deformed from a first shape to a second shape, i.e. the first and second flexible member 1166 1167 are both progressively bent inwards. This is a result of an interaction between the rounded front surface of the two flexible members 1166 1167 and the rim 1077 of the through hole 1074 of the first tubular element 1002. When the two flexible members 1166 1167 are aligned with the two openings 1075 1076 of the

first tubular element 1002, the two flexible members 1166 1667 snap back into approximately the first shape, whereby the protruding portions of the two flexible members 1168 1669 engages with the openings 1075 1076 and locks the locking element 1106 to the first tubular element 1002. Thus, the locking element 1106 can be attached to the first tubular element 1002 by a pure translation between the two. The male / female locking mechanism 1075 1076 1166 1167 is of the snap lock type wherein a translation from a free position of the male and female part, to a locked position of the male and female part, requires less force than a translation from a locked position of the male and female part to a free position of the male and female part. This is a result of the special shape of the protruding portions 1168 1669 and the openings 1075 1076. This may be beneficial as the locking element 1106 and the first tubular element 1002 typically are permanently attached.

Fig. 12 shows a central cross-section of a fully assembled ornamental component comprising a first tubular element and a locking element as disclosed in relation to Figs. 10a-d and Figs. 11a-c according to an embodiment of the present invention. The ornamental component 1200 comprises a self-supporting housing 1201, a first tubular element 1202, a gripping element 1203, a locking element 1206 and a second tubular element 1205. The ornamental component 1200 has a through hole 1250 defining a through hole axis 1204. The gripping element 1203 may be identical to the gripping element shown in Figs. 5a-b, the self-supporting housing 1201 may be identical to the self-supporting housing shown in Figs. 6a-b, and the second tubular element 1205 may be identical to the second tubular element shown in Figs. 7a-b. It can be seen how gripping portions of the gripping element 1203 protrudes into the through hole 1250 of the ornamental component 1200 allowing the gripping portions to frictionally grip an elongated member of an bracelet and / or necklace e.g. a chain of a bracelet and / or necklace.

Fig. 13a-d show a first tubular element according to an embodiment of the present invention. Fig. 13a shows a top view, Fig. 13b shows a side view, Fig. 13c shows a front view, and Fig. 13d shows a back view. The first tubular element 1302 has a through hole 1374 and comprises a collar 1324, a first portion 1321, a second portion 1322, and a third portion 1323. The collar 1324, the first portion 1321, and the second portion 1322 may be identical to the corresponding parts of the first tubular element shown in Fig. 4a-d. The third portion 1323 comprises mechanical locking means in the form of a female part of male / female locking mechanism 1375 1376. The female part 1075 1076 comprises a first opening / or recess 1375 and a second opening or recess 1376.

The first opening 1375 and the second opening 1376 are positioned opposite to each other.

Fig. 14a-d show a locking element 1406 according to an embodiment of the present invention. Fig. 14a shows a top view, Fig. 14b shows a front view, and Fig. 14c shows a back view. The locking element 1406 has a through hole 1465, and comprises a collar 1462 and an engagement portion 1461. The collar 1462 may be identical to the collar of the locking element shown in Fig. 8. The engagement portion 1461 comprises mechanical locking means in the form of the male part 1468 1469 of a male / female locking mechanism. The male part 1468 1469 comprises a first protruding portion 1468 and a second protruding portion 1169. The male / female locking mechanisms shown in Fig. 13a-c and Fig. 14-c are configured to function together, thus the protruding portions 1468 1469 are configured to fit the openings 1375 1376. The male / female locking mechanism is of the rotational type. The locking element 1406 may be attached to the first tubular element 1302 by firstly rotationally orienting the locking element 1406 in a free rotational orientation relative to the first tubular element 1302 (with the protruding portions 1468 1469 aligned with the openings 1375 1376), next translating the locking element 1406 along the through hole axis, and finally rotating the locking element 1406 from the free rotational orientation to a locked rotational orientation.

Fig. 15 shows a central cross-section of a fully assembled ornamental component comprising a first tubular element and a locking element as disclosed in relation to Fig 13a-d and Fig. 14a-c, according to an embodiment of the present invention. The ornamental component 1500 comprises a self-supporting housing 1501, a first tubular element 1502, a gripping element 1503, a locking element 1506, and a second tubular element 1505. The ornamental component 1500 has a through hole 1550 defining a through hole axis 1504. The gripping element 1503 may be identical to the gripping element shown in Fig. 5a-b, the self-supporting housing 1501 may be identical to the self-supporting housing shown in Fig. 6a-b, and the second tubular element 1505 may be identical to the second tubular element shown in Fig. 7a-b.

Fig. 16a-c show an ornamental component according to an embodiment of the present invention. Fig. 16a shows a side view, Fig. 16b shows a front view, and Fig. 16c shows a cross-section along the line A shown in Fig. 16b. The ornamental component 1600 is an ornamental component for use with a bracelet and / or necklace e.g. a bead. The ornamental component 1600 has a through hole 1698 allowing the ornamental component 1600 to be strung on an elon-

gated member of a bracelet and / or necklace, the through hole 1698 defines a through hole axis 1604. The ornamental component 1600 comprises a self-supporting housing 1601, a first tubular element 1602, and a locking element 1606. The self-supporting housing 1601 has a through hole 1650 comprising a first opening 1651 at a first side of the housing, and a second opening 1652 at a second side of the housing. The first tubular element 1602 has a through hole 1640, and is inserted in the through hole of said self-supporting housing 1650 through the first opening of said self-supporting housing 1651. The locking element 1606 has a through hole 1655 and is inserted in the through hole of the self-supporting housing 1650 through the second opening of said self-supporting housing 1652. The locking element 1606 and the first tubular element 1602 are attached as schematically shown by the box 1699. The through hole of the first tubular element 1640 and the through hole of the locking element 1665 together form the through hole of the ornamental component 1698. The ornamental component 1600 may be a freely movable ornamental component or an ornamental component configured to resiliently grips an elongated member of a bracelet and / or necklace.

Fig. 17a-b show an first tubular element for a freely movable ornamental component according to an embodiment of the present invention. Fig. 17a shows a top view and Fig. 17b shows a side view. The first tubular element 1702 has a through hole 1774. The first tubular element comprises a collar 1724 for being positioned outside a self-supporting housing, and mechanical locking means in the form of a female part of male / female locking mechanism 1775 1776. The female part 1775 1776 comprises a first opening 1775 and a second opening 1776 extending along the through hole axis. The first opening 1775 and the second opening 1776 are positioned opposite to each other. The male / female locking mechanism may be configured to function together with the male / female locking mechanism of the locking element 1106 shown in Fig. 11a-d i.e. the locking 1106 may be attached to the first tubular element 1702 by their respective male / female locking mechanisms.

Fig. 18 shows a central cross-section of a fully assembled ornamental component configured to be freely movable, according to an embodiment of the present invention. The ornamental component 1800 comprises a self-supporting housing 1801, a first tubular element 1802, a locking element 1806, and a second tubular element 1505. The ornamental component 1800 has a through hole 1850 defining a through hole axis 1804. The second tubular element 1805 may be identical to the second tubular element shown in Fig. 7a-b. The first tubular element 1802 is

a first tubular element as disclosed in relation to Figs. 17a-b, and the locking element 1806 is a locking element as disclosed in relation to Figs. 11a-c. The openings of the first tubular element 1802 and / or the openings of the locking element 1806 may optionally be pre-decorated e.g. comprise decorative engravings as schematically illustrated by the circles 1897.

[0124] Although some embodiments have been described and shown in detail, the invention is not restricted to them, but may also be embodied in other ways within the scope of the subject matter defined in the following claims. In particular, it is to be understood that other embodiments may be utilised and structural and functional modifications may be made without departing from the scope of the present invention.

[0125] In device claims enumerating several means, several of these means can be embodied by one and the same item of hardware. The mere fact that certain measures are recited in mutually different dependent claims or described in different embodiments does not indicate that a combination of these measures cannot be used to advantage.

[0126] It should be emphasized that the term "comprises/comprising" when used in this specification is taken to specify the presence of stated features, integers, steps or components but does not preclude the presence or addition of one or more other features, integers, steps, components or groups thereof.

Claims

1. An ornamental component (1600) for a bracelet and / or a necklace said ornamental component having a through hole (1698) allowing said ornamental component to be strung on an elongated member of a bracelet and / or necklace, said through hole defining a through hole axis (1650); said ornamental component comprising:

- a self-supporting housing (1601) having a through hole (1650) comprising a first opening at a first side of the housing (1651) and a second opening at a second side of the housing (1652); and
 - a first tubular element (1602) having a through hole inserted in said through hole of said self-supporting housing (1650) through said first opening of said self-supporting housing (1651); and
- wherein said ornamental component (1600) further comprises a locking element (1606) having a through hole inserted in said through hole of self-supporting housing (1650) through said second opening of said self-supporting housing (1652), and said locking element (1606) com-

prises an engagement portion (1699) attached to said first tubular element (1602).

2. An ornamental component according to claim 1, wherein the ornamental component further comprises a second tubular element, and wherein said first tubular element and said engagement portion of said locking element is positioned inside said second tubular element. 5
3. An ornamental component according to claim 1 or claim 2, wherein said engagement portion is attached to said first tubular element by a male /female locking mechanism, wherein the male part comprises a protruding portion and the female part comprises a recess and / or opening. 10
4. An ornamental component according to any one of claims 3 to 5, wherein the male part comprises a plurality of protruding portions and the female part comprises a plurality of recesses and / or openings. 15
5. An ornamental component according to claim 3 or claim 4, wherein the male / female locking mechanism is of the snap lock type wherein a translation and / or rotation from a free rotational orientation and / or position of the male and female part, to a locked rotational orientation and / or position of the male and female part, requires less force than a translation and / or rotation from a locked rotational orientation and / or position of the male and female part to a free rotational orientation and / or position of the male and female part. 20 25 30
6. An ornamental component according to any one of claims 3 to 5, wherein the male / female locking mechanism is of the rotational lock type, wherein the female part (the engagement portion or the first tubular element) comprises a recess and / or opening configured to allow the protruding portion of the male part to translate inside the recess and / or opening along the through hole axis when the locking element is in a free rotational orientation relative to the first tubular element, and to be prevented from moving in at least a first direction along the through hole axis when the locking element is in a locked position relative to the first tubular element and the locking element is in a locked rotational orientation relative to the first tubular element. 35 40 45
7. An ornamental component according to any one of claims 3 to 5, wherein the male part (the engagement portion or the first tubular element) comprises a flexible member configured to deform from a first shape to a second shape when the male part comes into contact with the female part, and further to snap back into approximately the first shape when the flexible member is aligned with the recess and / or opening 50
- of the female part, whereby the flexible member engages with the recess and / or opening and locks the male part to the female part, allowing the locking element to be attached to the first tubular element by a pure translation between the two.
8. An ornamental component according to claim 7, wherein the male part comprises two flexible members, and the female part comprises two recesses and / or openings.
9. An ornamental component according to any one of claims 1 to 8, wherein said first tubular element at a first end further comprises a collar, wherein said collar is positioned outside said self-supporting housing at the first opening of said self-supporting housing and comprises a surface abutting an outer surface of said self-supporting housing thereby preventing said first tubular element from moving in a first direction along said through hole axis relative to said ornamental component.
10. An ornamental component according to any one of claims 1 to 9, wherein said locking element further comprises a collar positioned outside said self-supporting housing at the second opening of said self-supporting housing, said collar comprising a surface abutting an outer surface of said self-supporting housing thereby preventing said first tubular element from moving in a second direction along said through hole axis relative to said ornamental component.
11. An ornamental component according to any one of claims 1 to 10, wherein the first tubular element is part of an insert assembly inserted in said through hole of said self-supporting housing through said first opening of said self-supporting housing, wherein said insert assembly is assembled from said first tubular element and a gripping element for frictionally gripping a part of said bracelet and / or necklace; wherein said first tubular element is configured to secure said gripping element inside said through hole of said ornamental component.
12. A method for manufacturing an ornamental component, said ornamental component having a through hole allowing said ornamental component to be strung on an elongated member of a bracelet and / or necklace, said through hole defining a through hole axis, the method comprising the steps of:
 - providing a self-supporting housing, having an through hole, wherein said through hole comprises a first opening at a first side of the self-supporting housing and a second opening at a second side of the self-supporting housing;
 - inserting through said first opening of said self-supporting housing a first tubular element hav-

ing a through hole;

- inserting through said second opening of said self-supporting housing a locking element having a through hole, said locking element comprising an engagement portion for being positioned inside said through hole of said self-supporting housing; and
- attaching said engagement portion of said locking element to said first tubular element.

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13. A method according to claim 12, wherein the engagement portion is attached to said tubular element by a by a male / female locking mechanism.

14. A method according to claim 12 or 13, wherein the method further comprises the step of inserting a second tubular element into the through hole of the self-supporting housing, either through said first opening or said second opening of said self-supporting housing, wherein said first tubular element and said engagement portion of said locking element is inserted into said second tubular element.

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15. A method according to any one of claims 12 to 14, wherein the ornamental component is an ornamental component according to any one of claims 1 to 11.

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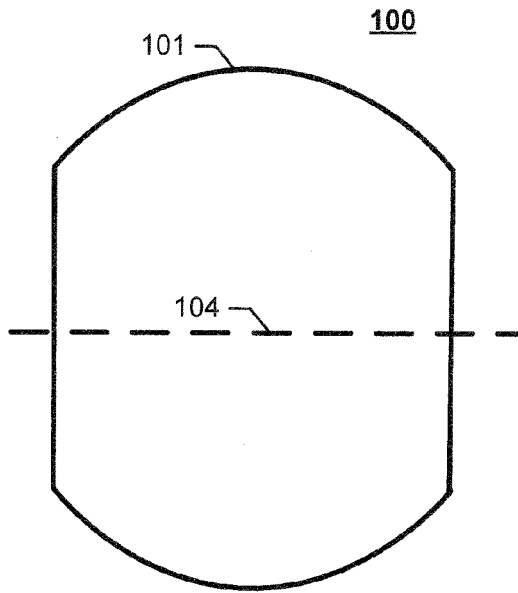


Fig. 1a

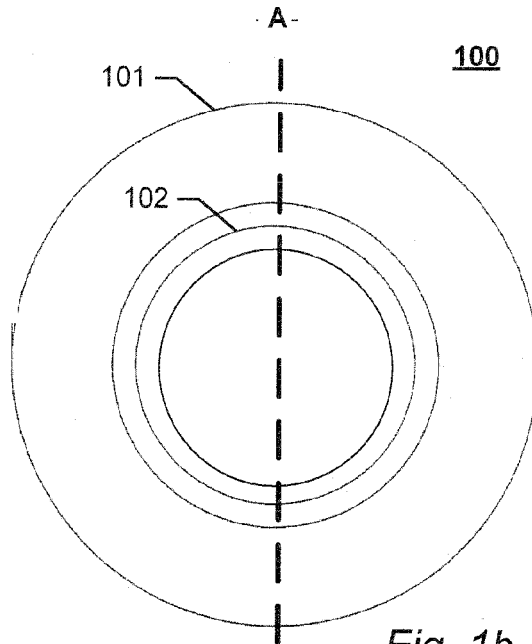


Fig. 1b

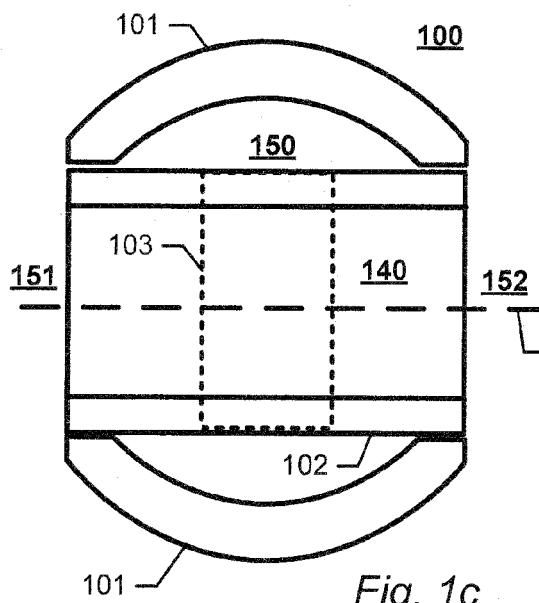


Fig. 1c

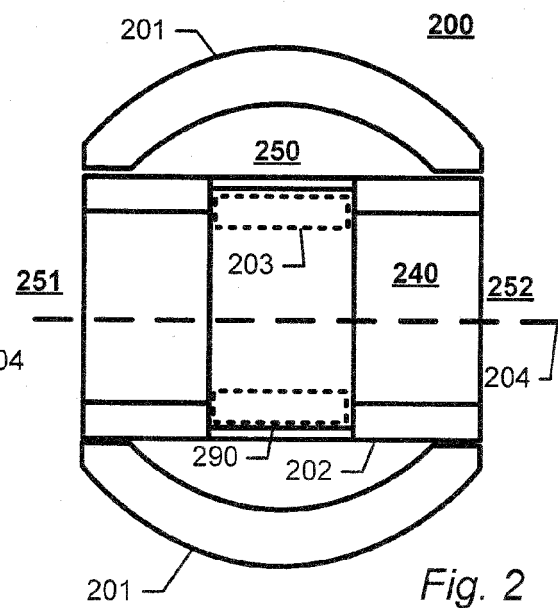


Fig. 2

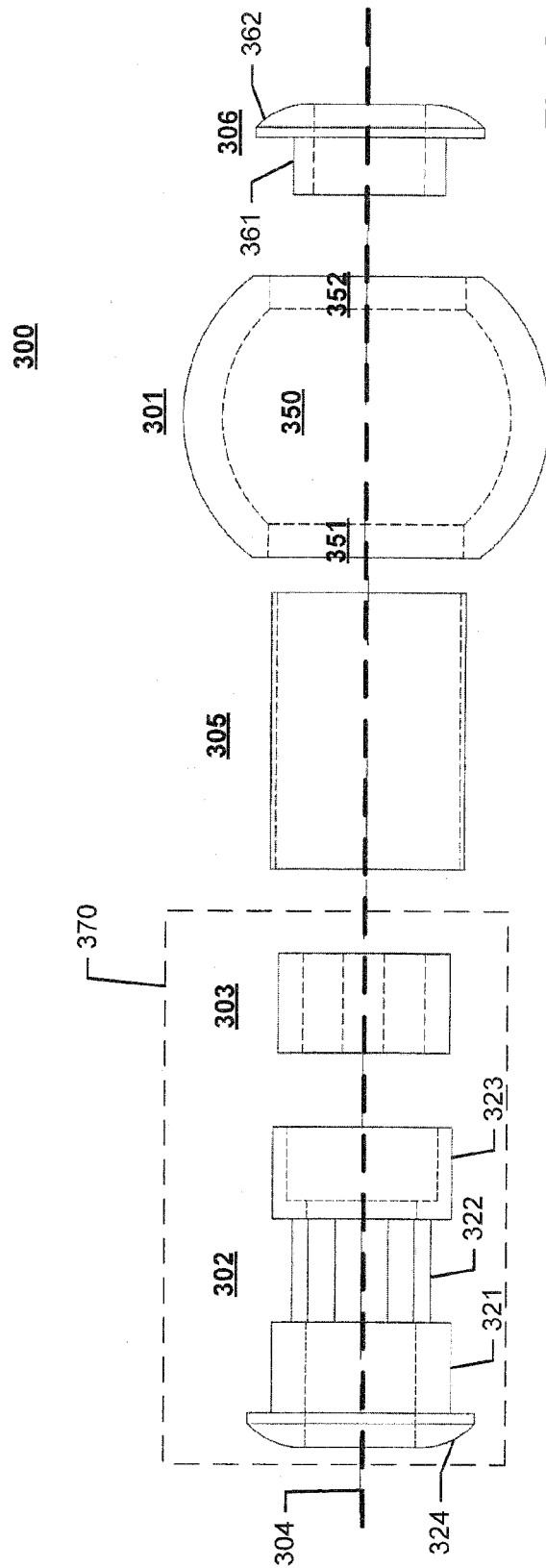


Fig. 3

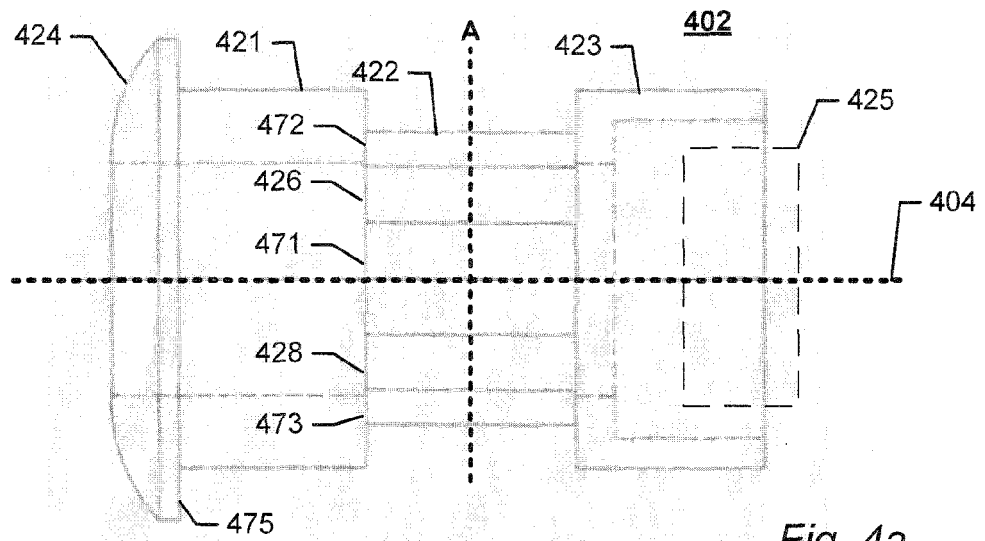


Fig. 4a

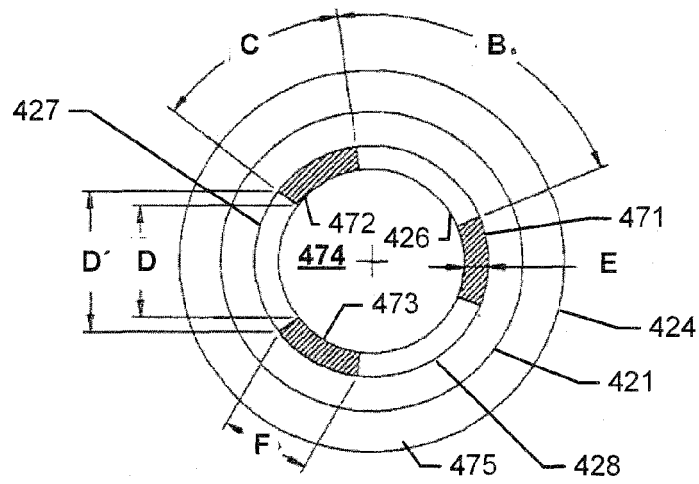


Fig. 4b

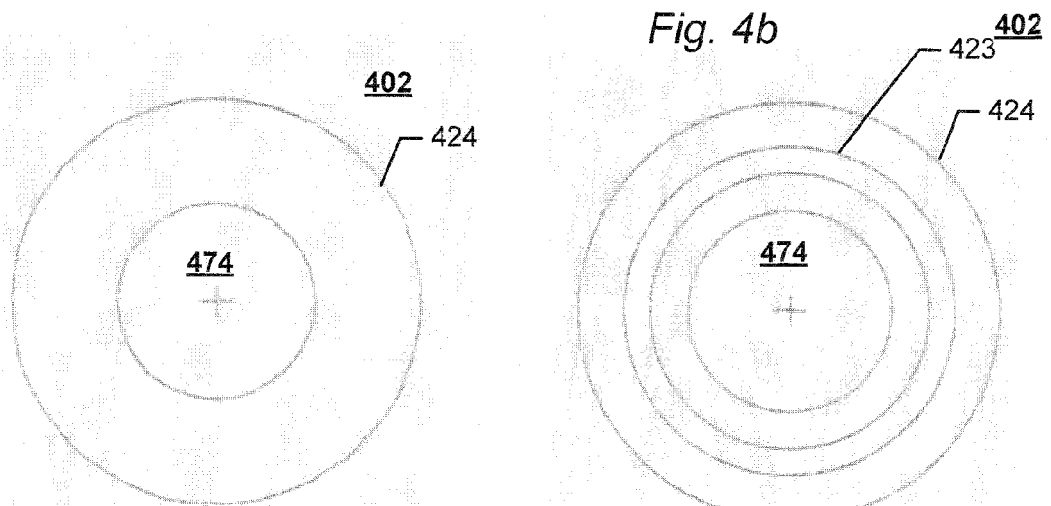


Fig. 4c

Fig. 4d

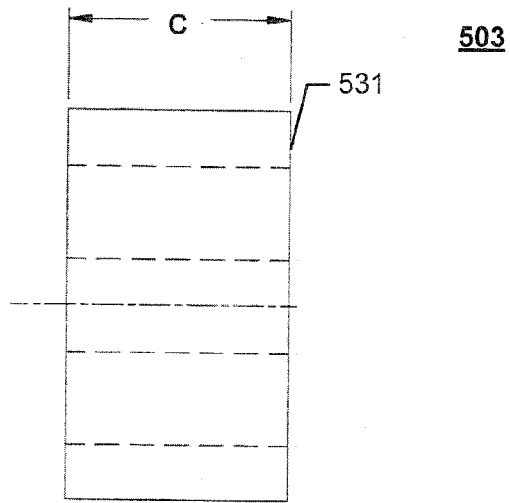


Fig. 5a

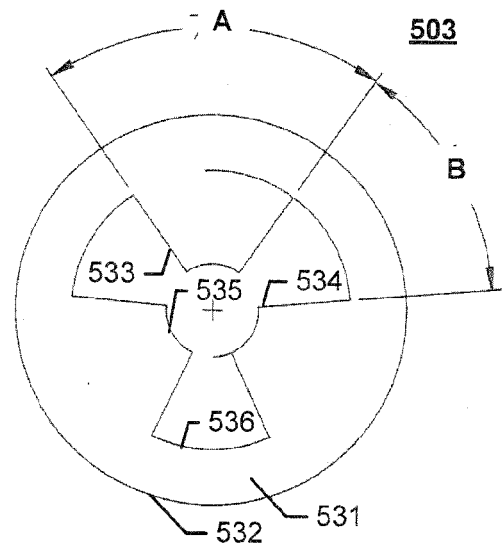


Fig. 5b

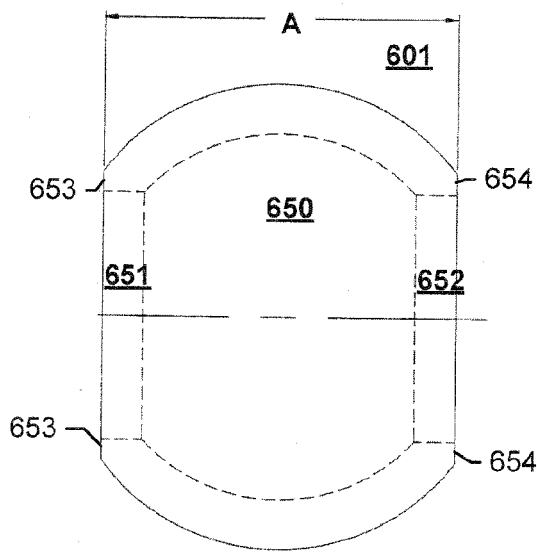


Fig. 6a

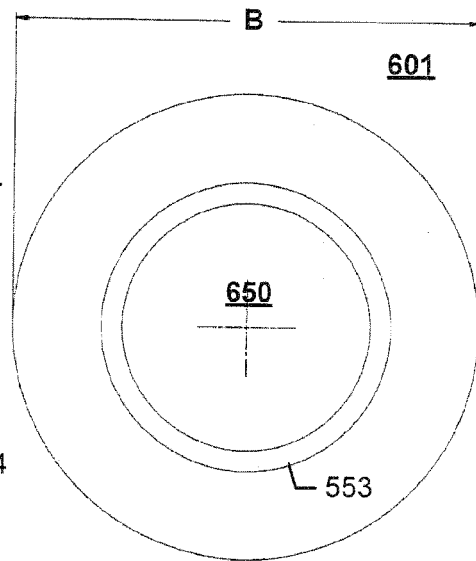


Fig. 6b

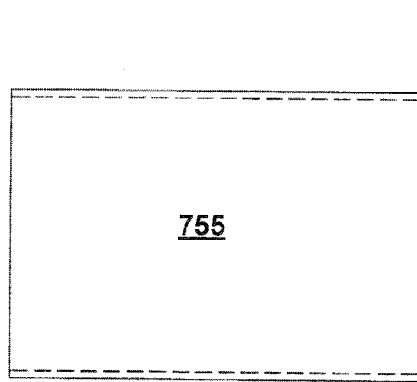


Fig. 7a

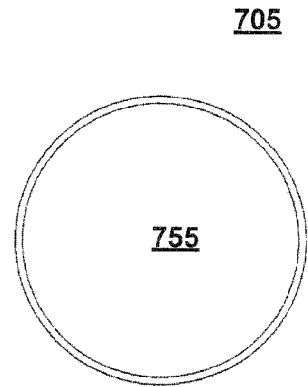


Fig. 7b

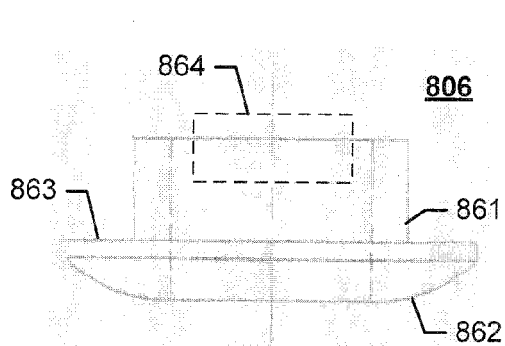


Fig. 8a

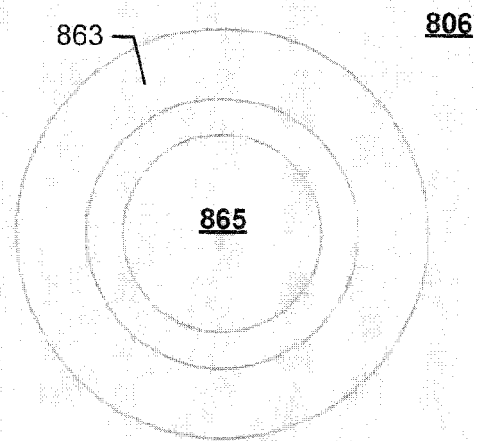


Fig. 8b

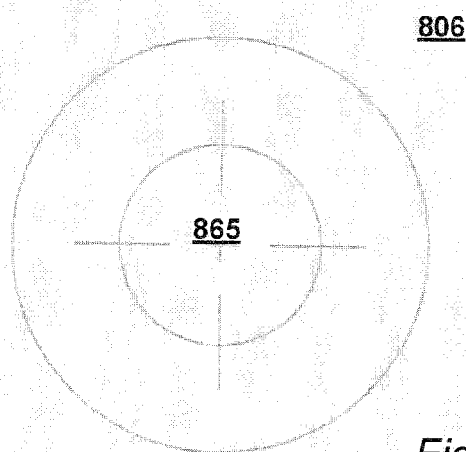


Fig. 8c

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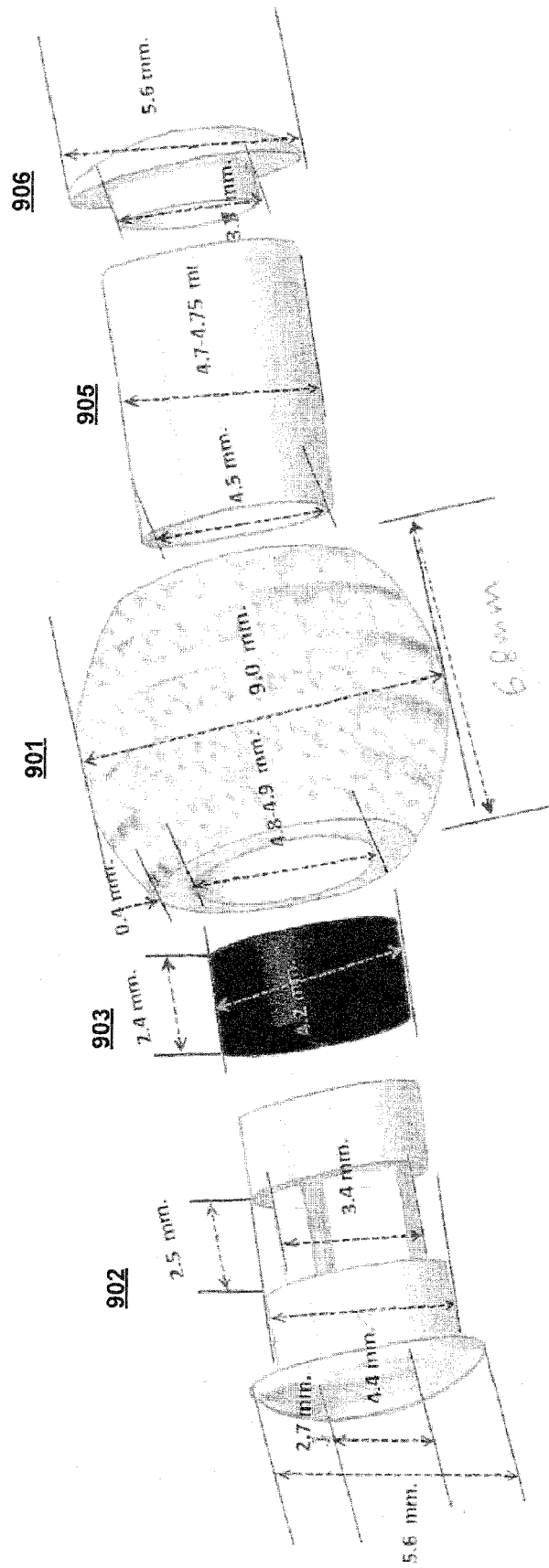


Fig. 9

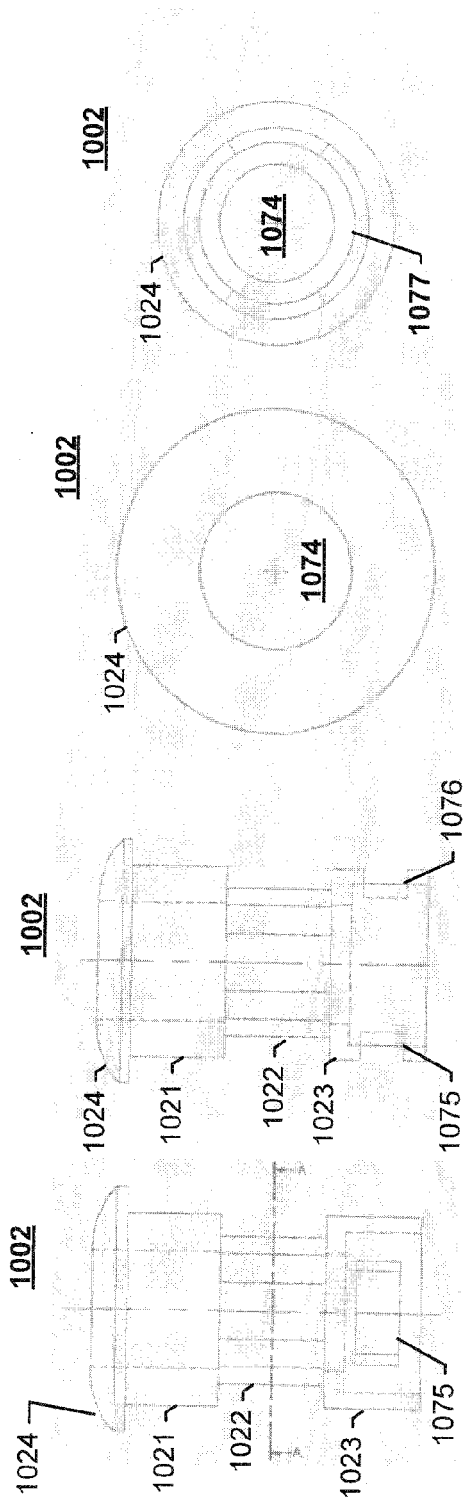


Fig. 10a

Fig. 10b

Fig. 10c

Fig. 10d

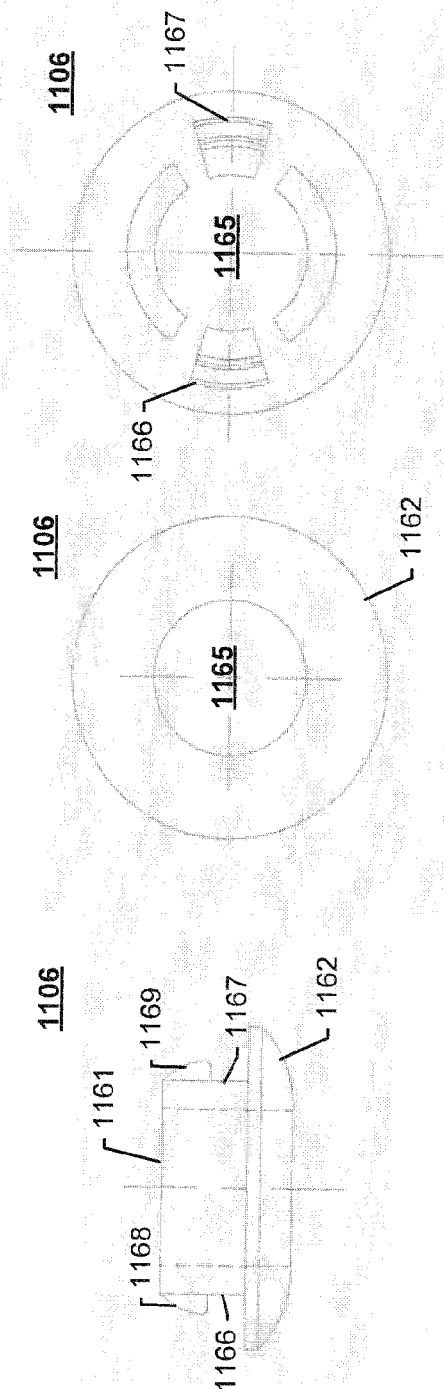


Fig. 11a

Fig. 11b

Fig. 11c

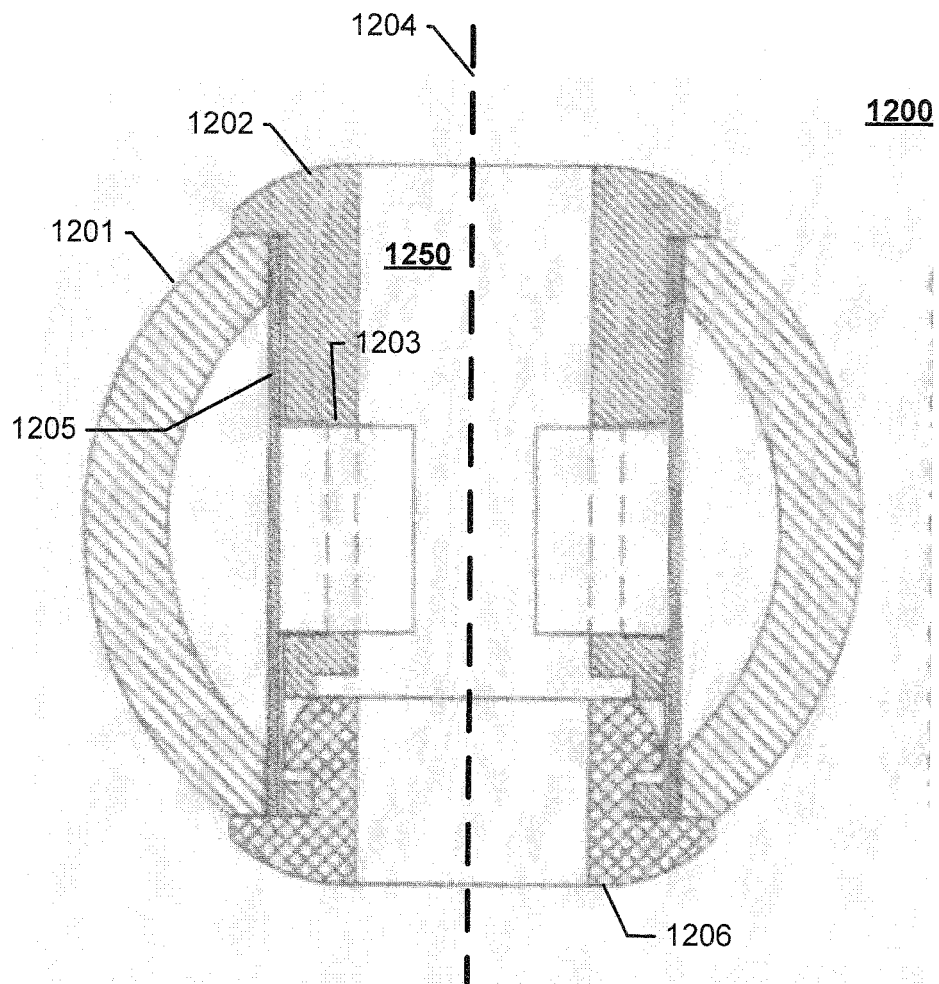


Fig. 12

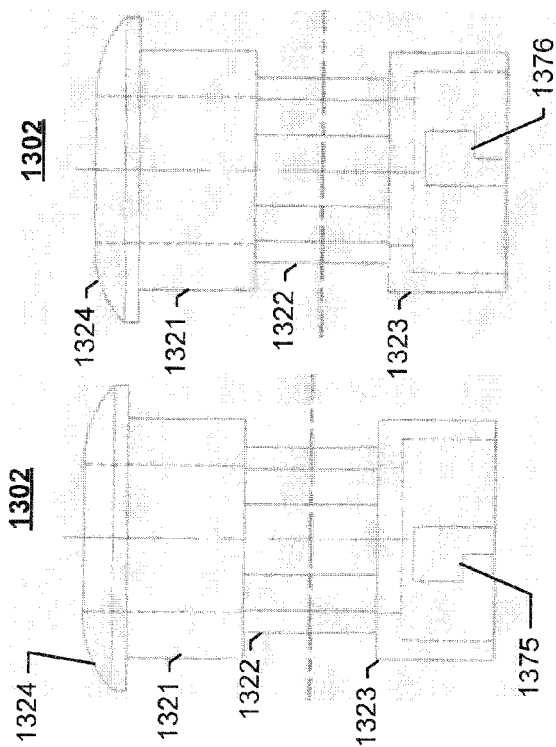


Fig. 13a

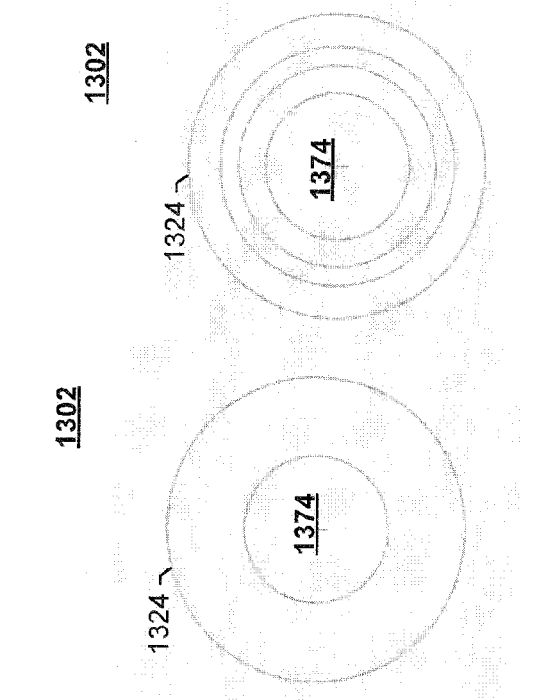


Fig. 13b

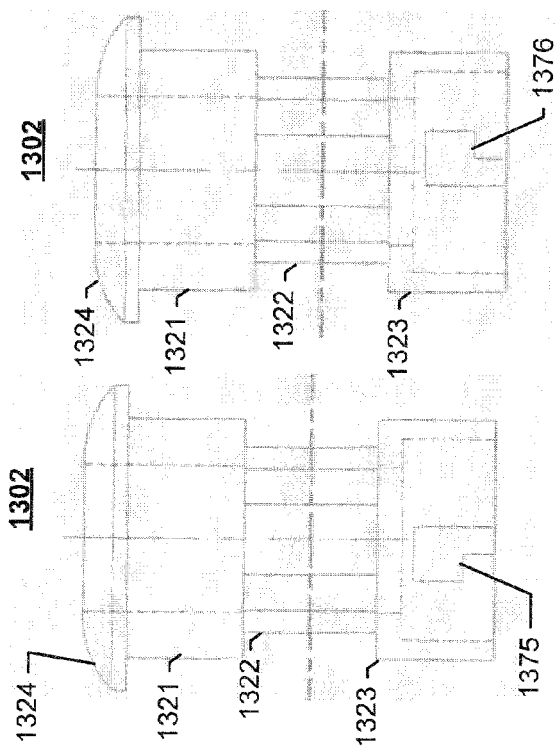


Fig. 13c

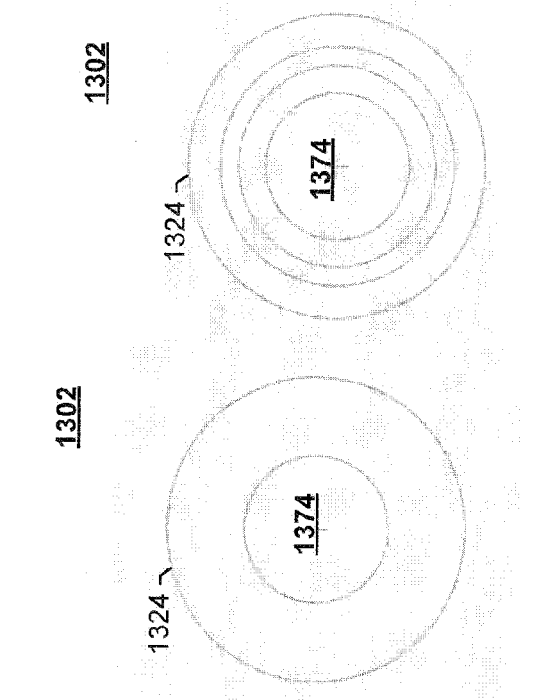


Fig. 13d

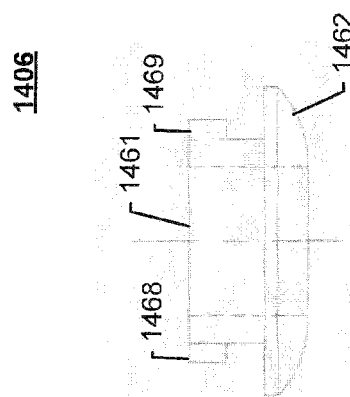


Fig. 14a

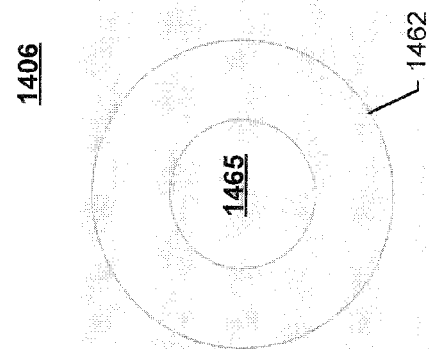


Fig. 14b

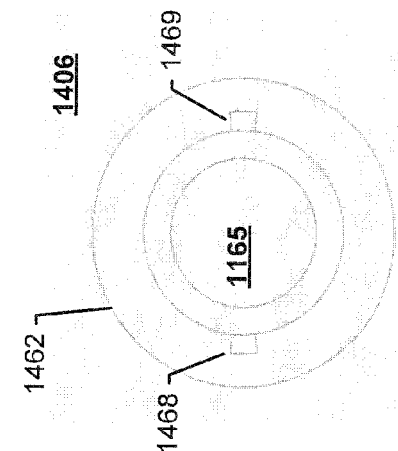


Fig. 14c

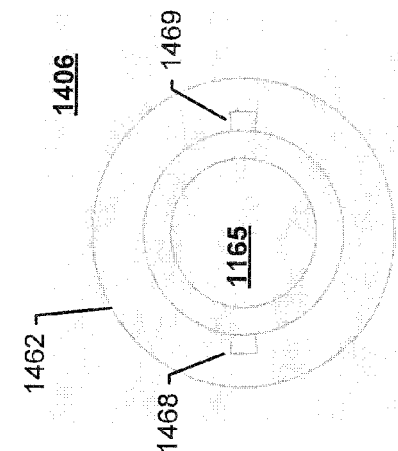


Fig. 14d

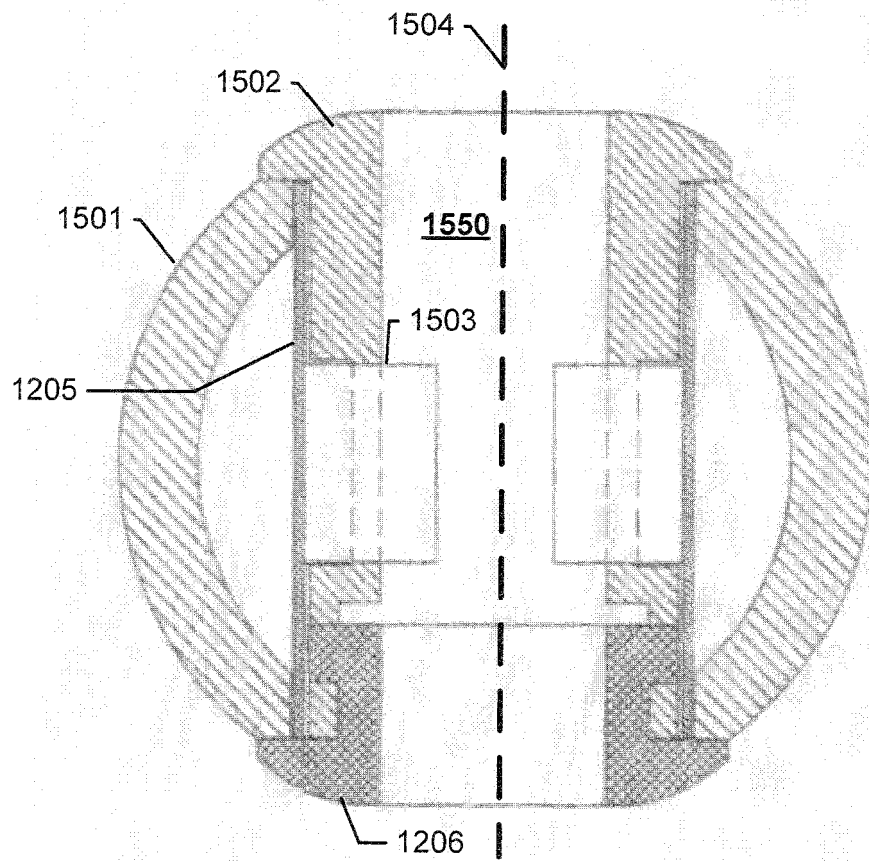
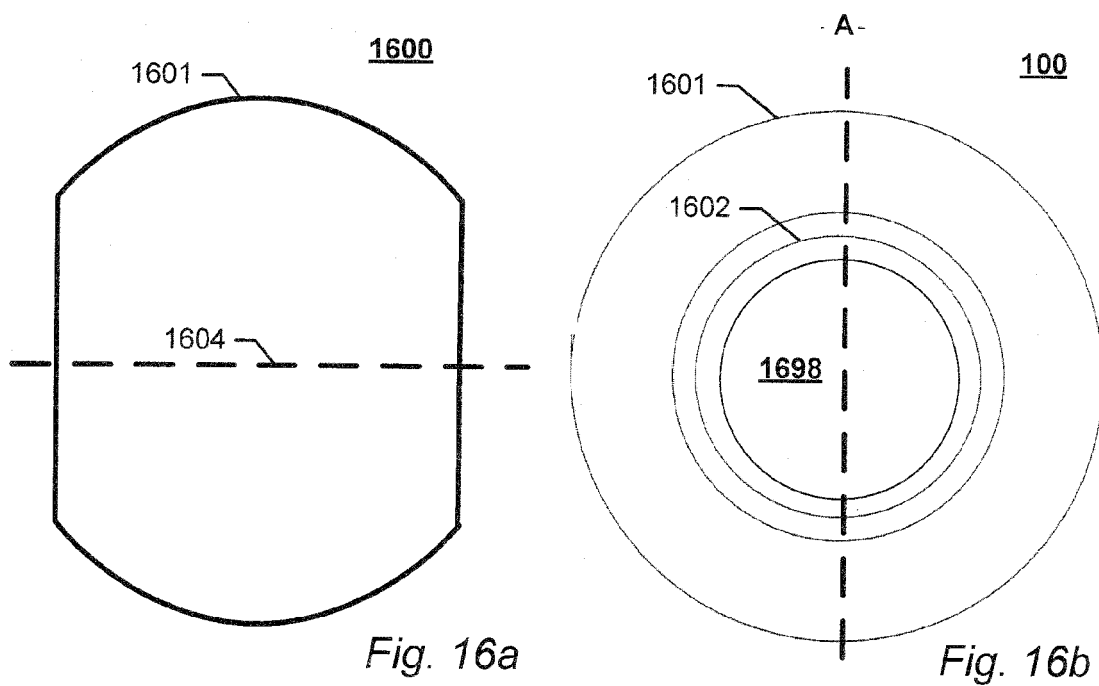


Fig. 15



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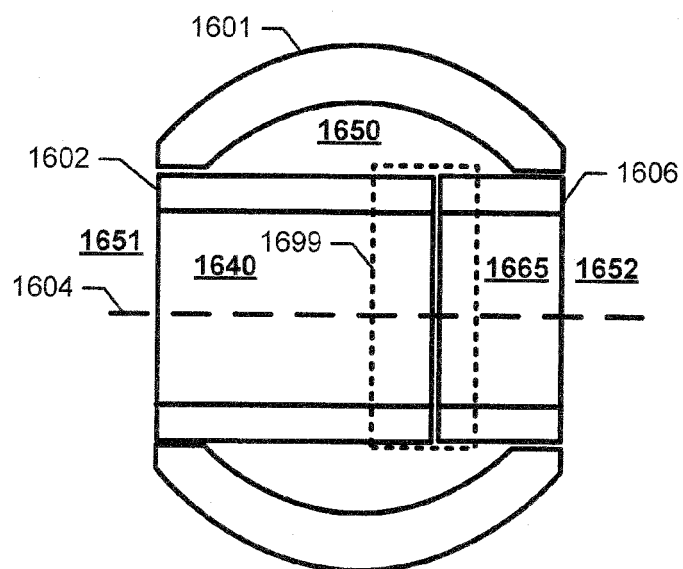
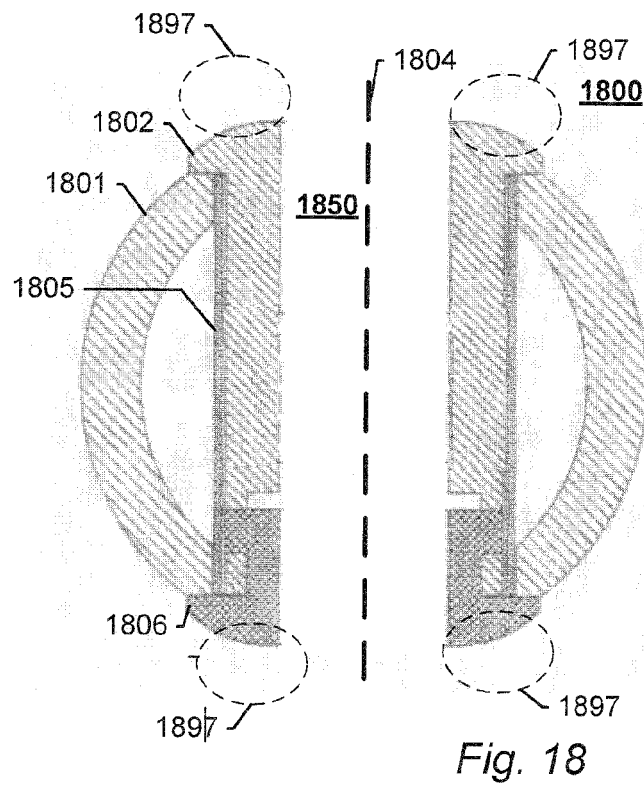
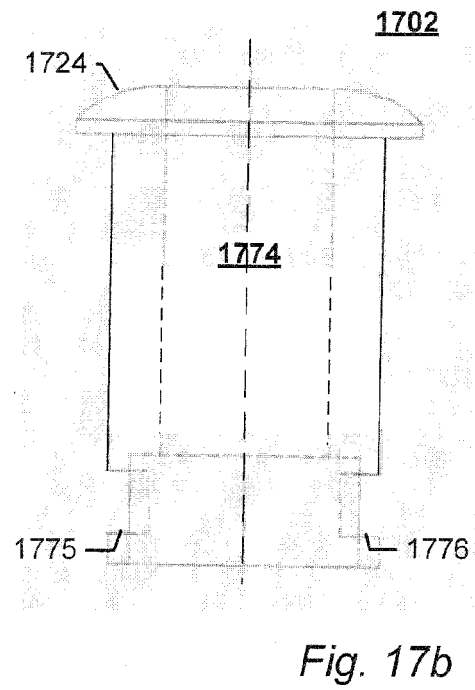
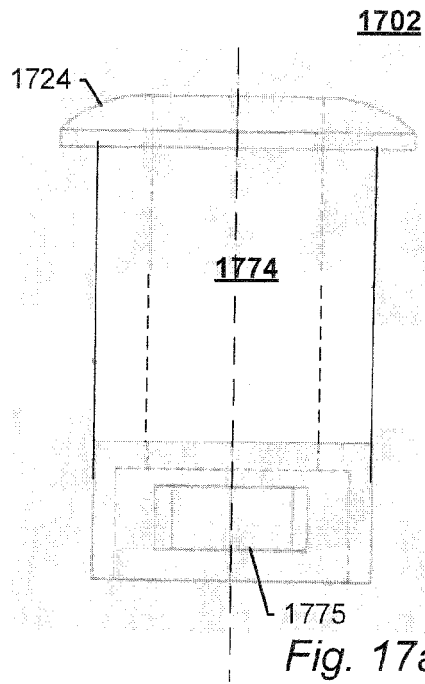


Fig. 16c





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 Application Number
 EP 13 15 4844

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			TECHNICAL FIELDS SEARCHED (IPC)
			A44C
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 3 July 2013	Examiner Simpson, Estelle
CATEGORY OF CITED DOCUMENTS 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		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	

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