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Remarks:
Amended claims in accordance with Rule 137(2) EPC.

(54) Christmas wreath

(57) The present invention provides a Christmas wreath, which applies a non-circular metal wire to connect bells, wherein additional positioning members are added between the adjacent bell groups for separation. The non-circular inner hole of the positioning member can obtain a refrained position between the positioning member and metal wire, and prevent arbitrary rotation of the positioning member. The outer rim of the positioning member includes at least one included angle, and formed into an inclined guiding surface to coordinate with the end. This enables the positioning member end to insert into the bell ring concave to obtain a refrained position relation between the positioning member and bell, preventing the bell from arbitrarily rotating. The present invention can truly maintain the pattern of connected bells through the mechanism of the positioning member for the bell and metal wire. It also saves the usage of unnecessary bells, reduces cost and enhances the overall appearance and using value in the industry.

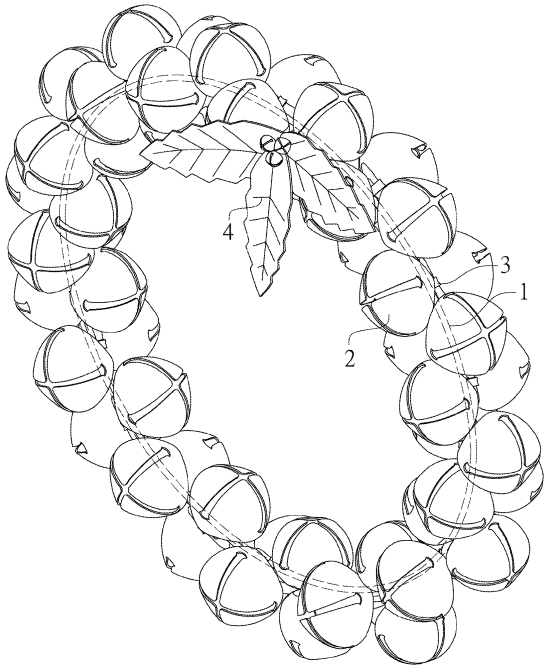

Fig.1 Prior Art

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Description

BACKGROUND OF THE INVENTION

(a) Field of the invention

[0001] The present invention relates to an improved Christmas wreath, mainly to decoration wreaths designed of connecting bells, ornaments and other decorations with metal wire. The structure of the present invention enables the connected bells with the metal wire to obtain a stable positioning so that the bells will not have the issue in arbitrary rotating. This enables the removal of additional bells which do not have decoration purpose. Not only does the overall visual appearance is enhanced and maintainable, but also hanging of the wreath becomes even more stable. In addition, the invention greatly reduces the overall cost, having practical values and economic benefits to the industry.

(b) Description of the Prior Art

[0002] Heretofore, the common decorations seen during the Christmas holiday are usually bells connected in series to a wreath, bow or other hanging decorations. Referring to FIG.**1** of a general commercial Christmas wreath, comprising of metal wire (1) as the base material, with said metal wire (1) passing through the bell rings (3) to connect and arrange decoration. In order to secure the bell (2) series with the metal wire (1) and avoid bell (2) rotation issues, four bells (2) are generally used as a set unit, which the bell (2) is arranged of a cross-connected pairs of left, right, front and rear set. This arrangement enables the adjacent bell (2) receive and appropriate balanced force to obtain a refrained position, and further to maintain the overall bell series pattern. At the same time, the end of the said metal wire (1) is flexibly connected with the bell set and the other decorations (4) as forming the whole wreath decoration.

[0003] From the structure of the previous bell and decoration arrangement, the bell set which attached directly to the metal wire relies on the balancing among the individual bells to obtain an expected limiting in position. However as a matter of fact, the arrangement can only effectively avoid the bell of sliding but unable to prevent the bells from rotation. With the situation, it will become very difficult to maintain the original direction of the designed, resulting in the wreath to have a rather disordered appearance. In addition, this results to an uneven attaching to the wall and affects the overall hanging stability and visual appearance.

[0004] Furthermore, in order to obtain a refrained position for the bell, the four-bell cross-connection of the front, rear, left and right is arranged for balance. However, the rear bell is not necessary for decoration, and the only purpose is for pairing to obtain a refrained positioning effect. This type of connecting method cannot truly achieve the expected position limiting purpose. In this way not only is the design unable to effectively solve the issues of bell rotation, but also on the contrary increased the using of unnecessary bells. This implicitly leads to a waste in production cost, which serves with none economic benefits in the industry.

SUMMARY OF THE INVENTION

[0005] Due to the existing defect in current bell decorations while connected, the inventor began research and made improvements based on the numerous years of related experience and techniques in the industry, and developed a bell hanging and decoration structure in the present invention. The main purpose is by using a structural design to effectively obtain a positioning relation between the bells and metal wire. This mechanism ensures of preventing the bell from arbitrary sliding, and further provides the bells with a stable positioning, which rotation is impossible, and maintain the original design of the hanging decoration.

[0006] In addition to the extreme stable positioning among the bells and metal wire, another objective of the invention, which even more important, is to save the usage of unnecessary bells. This enables a reduction with the overall production cost and also maintains its hanging stability.

[0007] In order to achieve the previous disclosed purposes, the structural design of the present invention applies a non-circular metal wire to connect the bells, using additional positioning members to separate adjacent bell groups. The non-circular inner hole of the positioning members can obtain a refrained positioning between the positioned bells sets and metal wire. This prevents the positioning members from arbitrary rotation. In addition, the outer rim of said positioning members is designed with at least one included angle, which the end is designed as an inclined guiding surface. The conveniently enable the positioning member end to insert and connect with the bell ring concave to obtain a refrained position relation with the positioning member and bell, and prevents arbitrary rotation of the bell. The above design forms the positioning structure for connecting bell hanging decorations for the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG.**1** is a structure illustration of the well-known bell hanging decoration.

[0009] FIG.**2** is a structural view of the present invention in accordance with a preferred embodiment;

[0010] FIG.**3** is a local structural view of the above preferred embodiment;

[0011] FIG.**4** is a local structural view of the above preferred embodiment;

[0012] FIG.**5** is an actuation view of the above preferred embodiment;

[0013] FIG.**6** is a cross-sectional view of the above preferred embodiment from line A-A';

[0014] FIG.**7** is a cross-sectional view of the above preferred embodiment from line B-B';

[0015] FIG.**8** is a cross-sectional view of the above preferred embodiment from line C-C';

[0016] FIG.**9** is a structural view of even of the above preferred embodiment;

[0017] FIG.**10** is a referred implementation view of the above preferred embodiment;

[0018] FIG.**11** is a secondary referred implementation view of the above preferred embodiment;

[0019] FIG.**12** is another referred implementation view of the above preferred embodiment

DESCRIPTION OF MAIN COMPONENT SYMBOLS

[0020]

(1)	Metal wire	(2)	Bell
(3)	Ring	(4)	Decoration
(10)	Metal wire	(11)	Even surface
(12)(13)	Hook	(20)	Bell
(21)	Ring section	(22)	Concave
(30)	Positioning member	(31)	Inner hole
(32)	Even surface	(33)	Inclined guiding surface
(34)	Included angle	(35)	Inclined guiding surface
(40)	Plastic tube	(50)	Decoration

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0021] The previous description of the present invention and its other technological descriptions, characteristics and performances are described in detail with the drawings and further described of an embodiment:

[0022] Referring to the structural view in FIG.**2**, the structural exploded view in FIG.**3**, the local structural view in FIG. **4**, the actuation view in FIG.**5**, the structure relation view in **FIGS.6**~**8**, the structure of the even surface in FIG.**9**, and referred embodiments in **FIGS.10**~**12**, the present invention applies a metal wire (10) with a certain length to connect the bell (20) series members. The outer diameter of the metal wire (10) includes at least one even surface (11) to form a non-circular pattern (illustrated herein as a flat shape pattern) for the cross-section, wherein the metal wire (10) still has appropriate flexibility. The said bell (20) members include a ring section (21), which the shape of the ring section (21) is concave (22) to the corresponding sides. The ring section (21) of the bell (20) allows the metal wire (10) to connect the bells. The grouping of bells (20) are arranged of using every three bells (20) as one set, which positioning members (30) are used between adjacent bell groups (20). The positioning member (30) is made with plastic material, and the inner hole (31) is produced with at least one even surface (32) to form a non-circular hole shape. The size of the inner hole (31) matches with the outer shape design of the metal wire (10). At the same time, at least the inner rim of one end (or both ends) of the inner hole (31) is made into an inclined guiding surface (33) shape to easily insert the positioning members (30) onto the metal wire (10). The non-circular status forms an appropriate position limiting effect, which the positioning members (30) cannot arbitrarily rotate. In addition, the outer rim of the said positioning member (30) is designed to have at least one or more included angles (34), so that the cross-section forms a multi-angular pattern (illustrated herein as a tetragon). The included angle (34) is further treated to guide the two ends of the positioning (30) set as an inclined guiding surface (35). The design allows the positioning member (30) end to easily insert into the ring section (21) concave (22) of the previous bell (20) to obtain a secured positioning from the positioning member (30) to the bell (20), preventing the bell (20) of arbitrary rotation. The above consists of the Christmas wreath mechanism of this invention;

[0023] With the disclosed structure of the design, the mechanism applies a metal wire (10) end folded into a hook (12), inserted into a plastic tube (40), and inserts the left and right bells (30) from the other metal wire (10) end. At the same time the said plastic tube (40) is pushed, which deforms and tightly works against the side of the ring section (21).

The positioning member (30) is then inserted, wherein two included angles (34) of the positioning member (30) is inserted into the concave (22) of the ring section (21). The front bell (20) is then connected to the metal wire (10), and then inserted with another positioning member (30). The inserting sequence of left, right and front bells (20) and applying positioning members (20) for separation into the metal wire (10) simultaneously provides appropriate flexibility with the metal wire (10) to obtain the pattern and design for the hanging decoration. When the insertion is completed, another plastic tube (40) is then inserted, and the other end of the metal wire (10) is bended to form another hook (13) to connect with the previous hook (12). The connection site of the two hooks (12) (13) is then tied with the selected decoration (50) to complete the overall designed Christmas wreath connection;

[0024] In the described structure design of above, the non-circular inner hole (31) of the positioning member (30) coordinates with the non-circular outer shape of the metal wire (10) to achieve a limiting position relation and prevent arbitrary rotation of the positioning member (30). Furthermore, the external included angle (34) end of the positioning member (30) is designed as an inclined guiding surface (35) to insert and hold the bell (20) in its concave (22), which prevents the bell (20) from arbitrary sliding. As the very same time, the refrained position relation of the positioning member (30) and metal wire (10) makes the positioning member (30) become the interfacial positioning structure for the bell (20) and metal wire (10), which therefore also prevents the bell (20) from arbitrary rotation. Under this connected structure relation, the positioning member (30) achieves the desired bell (20) positioning performance. As a result, the connection can save the original rear bell which is unnecessary. As the number of bells (20) is reduced, this may effectively reduce the overall production cost, and also maintain the flatness of its back side for hanging. The hanging decoration on the wall is closely attached, providing a better overall hanging performance and appearance. The invention can effectively resolve the issue and defects of these types of hanging decorations;

[0025] In conclusion with the above description, the present invention relates to the positioning issues of the connected bells on a Christmas wreath, wherein the non-circular design pattern of the metal wire coordinates with the designed positioning member structure design to obtain a positioning member holding the bell concave, and achieving an indirect positioning performance between the bell and metal wire. The design enables the connected bell and metal wire to maintain an extremely stable connection, which effectively prevents arbitrary rotation of the bell and affecting the original hanging decoration design. At the same time, the invention can also reduce production cost, and enhance hanging stability and appearance. From an overall perspective view, the invention is deeply applicable to the industry, having practical value, and is an outstanding innovative design.

Claims

1. A Christmas wreath comprising:

a metal wire bended into a circle, multiple bells each having a ring section for connecting to the metal wire, concave section on both sides of the ring, wherein the bell is grouped with a left and right side bell connected to the metal wire, and the adjacent left and right bells are inserted with a single front bell for separation, and said Christmas wreath including:

at least one or more positioning members, wherein the inner hole size is proportional to the outer shape of the metal wire so that the positioning member end can fit into the said bell ring concave, and serve for separation and position tightening for the left, right and front bells, which the bell will not create movement and maintain the design of the wreath.

2. The Christmas wreath according to claim **1**, wherein the outer shape of the metal wire includes at least one even surface so that the cross-section forms a non-circular pattern, which the inner hole of the positioning member also includes at least one or more even surfaces to form a non-circular pattern, and therefore to obtain positioning performance when the positioning member is inserted to the metal wire.

3. The Christmas wreath according to claim **1**, wherein at least one ends of the inner hole of the positioning member includes an inclined guiding surface, so that the positioning member may conveniently connect to the metal wire.

4. The Christmas wreath according to claim **1**, wherein the two ends of the metal wire are folded into hooks to connect together, which a plastic tube is used as the refrained position member between the bell and metal wire.

5. The Christmas wreath according to claim **1**, wherein the metal wire forms a flat-shape pattern, wherein the inner hole of the positioning member matches with the said pattern.

6. The Christmas wreath according to claim **1**, wherein the included angle of the positioning member serves as an angle guide.

7. The Christmas wreath according to claim **1**, wherein the outer rim of the positioning member includes at least one or more included angles, wherein the cross-section form multiple sides, and forms as an inclined guiding surface for the two outer ends of the positioning member.

Amended claims in accordance with Rule 137(2) EPC.

1. A Christmas wreath comprising:

a metal wire (10) bended into a circle, wherein the outer shape of the metal wire (10) includes at least one even surface (11) so that the cross-section forms a non-circular pattern;
multiple bells (20) each having a ring section (21) for connecting to the metal wire (10), said ring section (21) comprising concave section on both sides, said bells (20) being arranged in groups of three bells comprising a left and right side bell combined with a single front bell for separation, said bells (20) being connected to the metal wire (10);
at least one or more positioning members (30) having an inner hole (31), wherein the inner hole (31) size is proportional to the outer shape of the metal wire (10) and including at least one even surface (32) to form a non-circular pattern to obtain positioning performance when the at least one or more positioning members (30) are inserted to the metal wire (10), said at least one or more positioning members (30) being positioned between adjacent groups of bells (20) so that a positioning member end (35) can fit into the concave section (22) of said ring section (21) and serve for separation and position tightening for the left, right and front bells, so that the bells (20) will not move and maintain the design of the wreath.

2. The Christmas wreath according to claim 1, wherein at least one ends of the inner hole of the positioning member (30) includes an inclined guiding surface (35), so that the positioning member (30) may conveniently connect to the metal wire (10).

3. The Christmas wreath according to claim 1, wherein the two ends of the metal wire (10) are folded into hooks (12, 13) to connect together, which a plastic tube (40) is used as the refrained position member between the bell (20) and metal wire (10).

4. The Christmas wreath according to claim **1**, wherein the metal wire (10) forms a flat-shape pattern, wherein the inner hole (31) of the positioning member (30) matches with the said pattern.

5. The Christmas wreath according to claim **1**, wherein the included angle of the positioning member (30) serves as an angle guide.

6. The Christmas wreath according to claim **1**, wherein the outer rim of the positioning member (30) includes at least one or more included angles, wherein the cross-section form multiple sides, and forms as an inclined guiding surface (35) for the two outer ends of the positioning member (30).

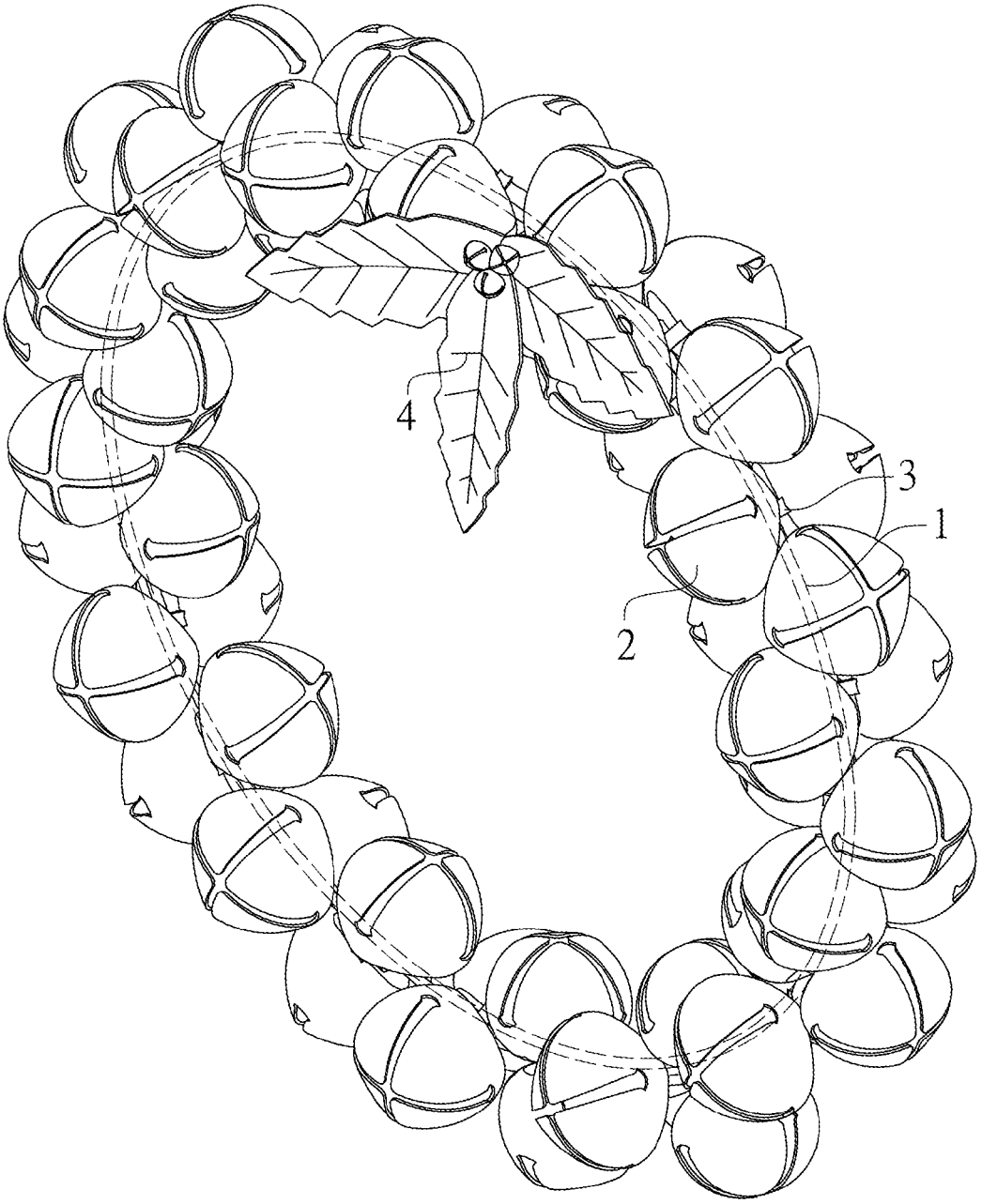

Fig.1 Prior Art

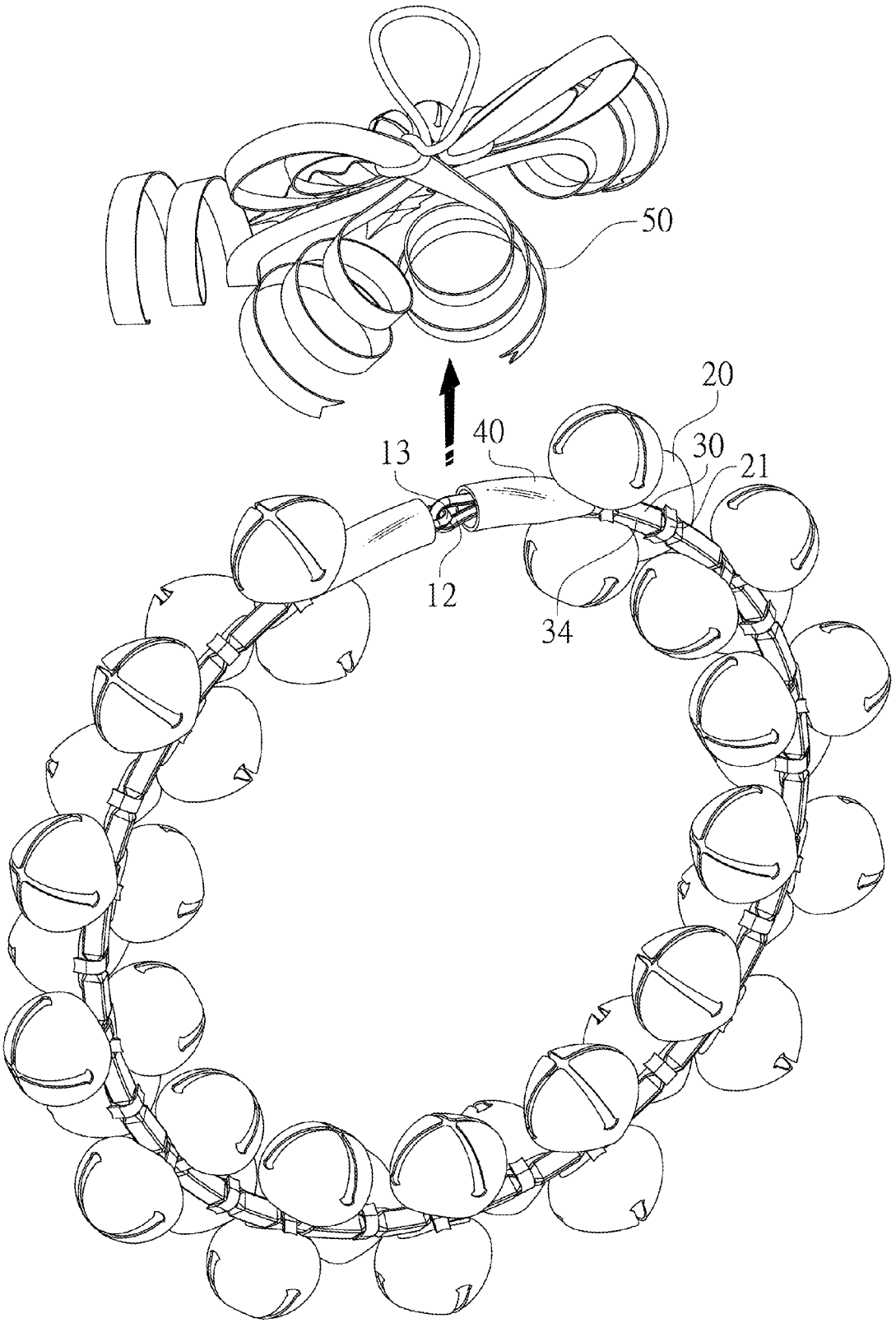

Fig.2

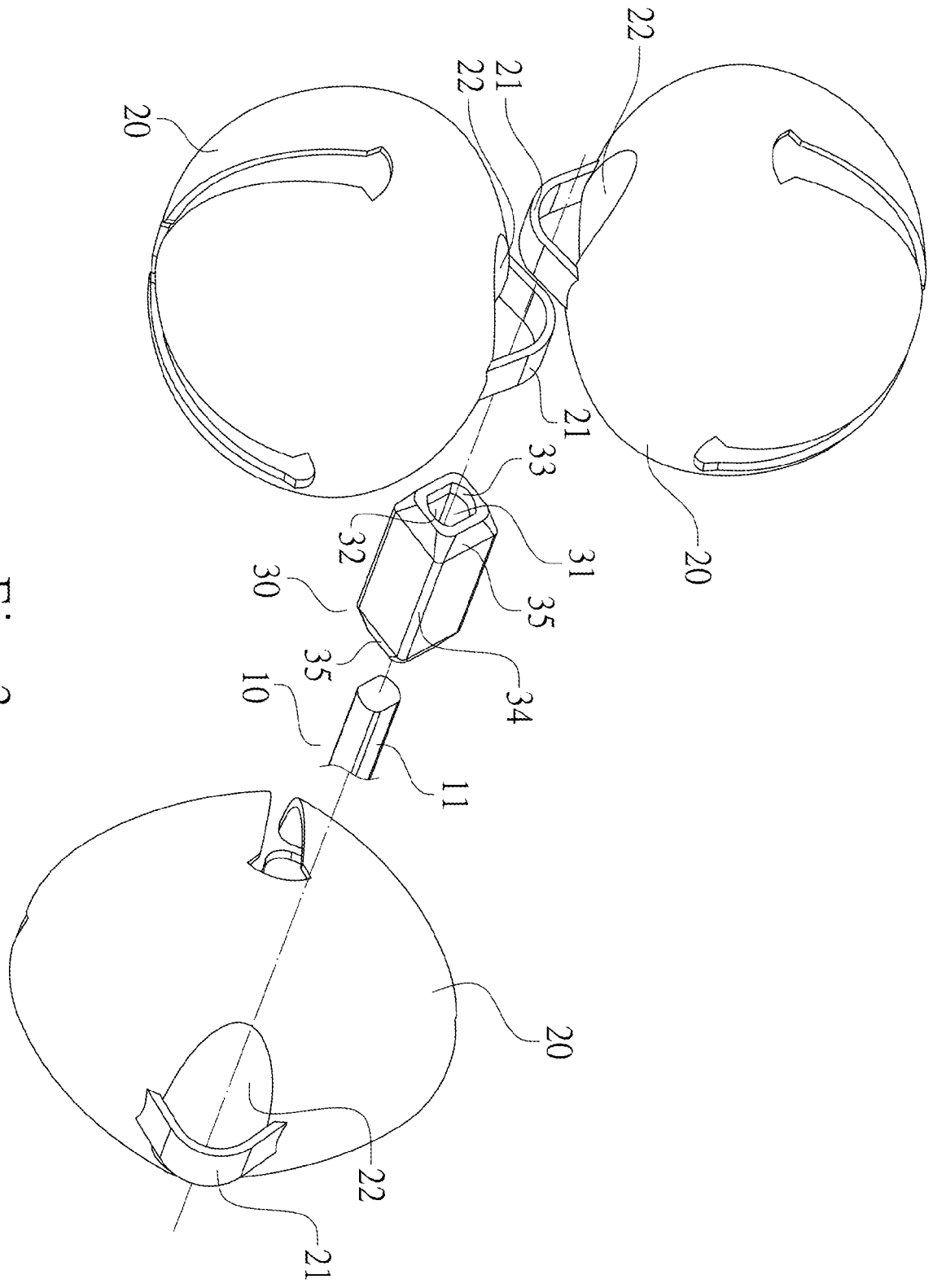

Fig.3

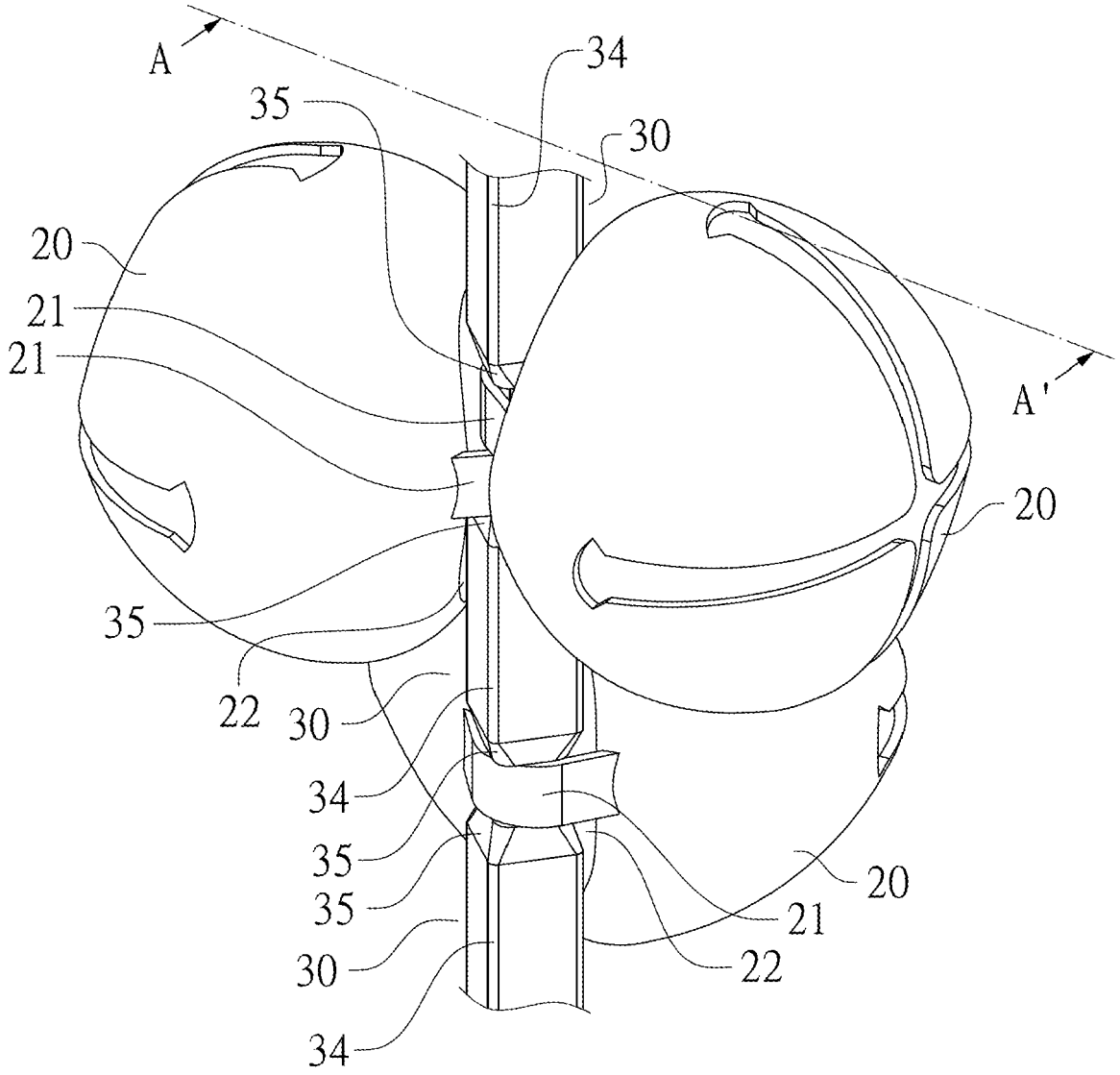

Fig.4

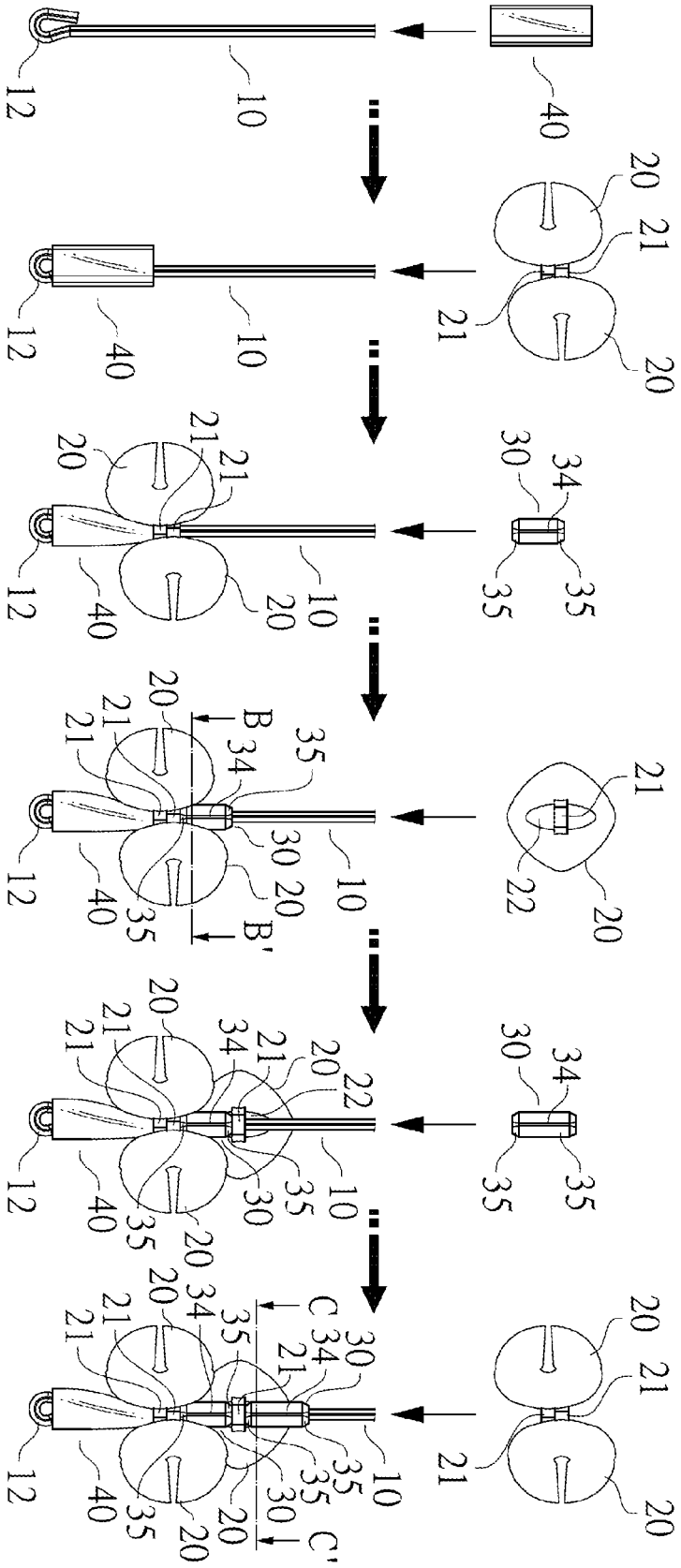

Fig.5

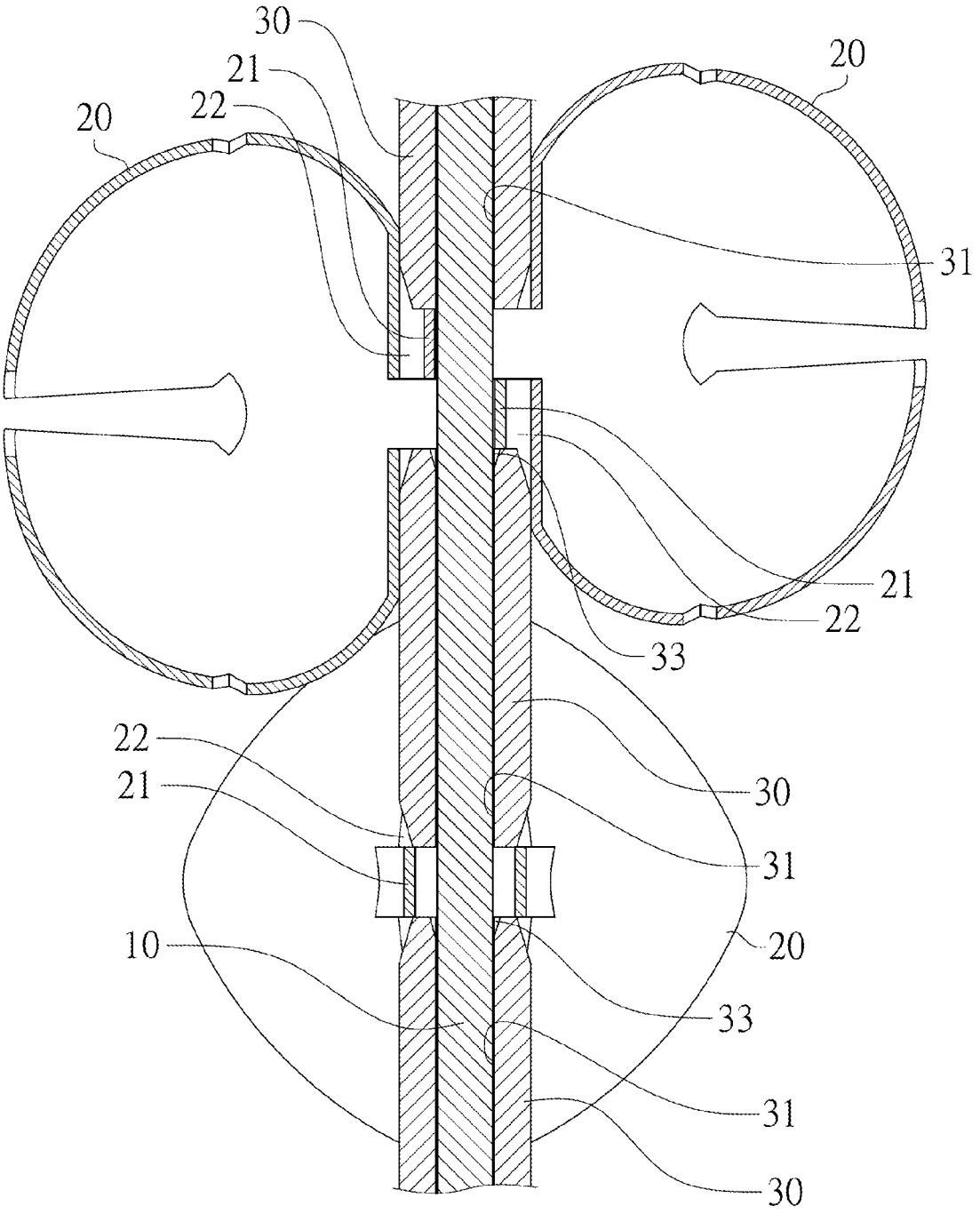

Fig.6

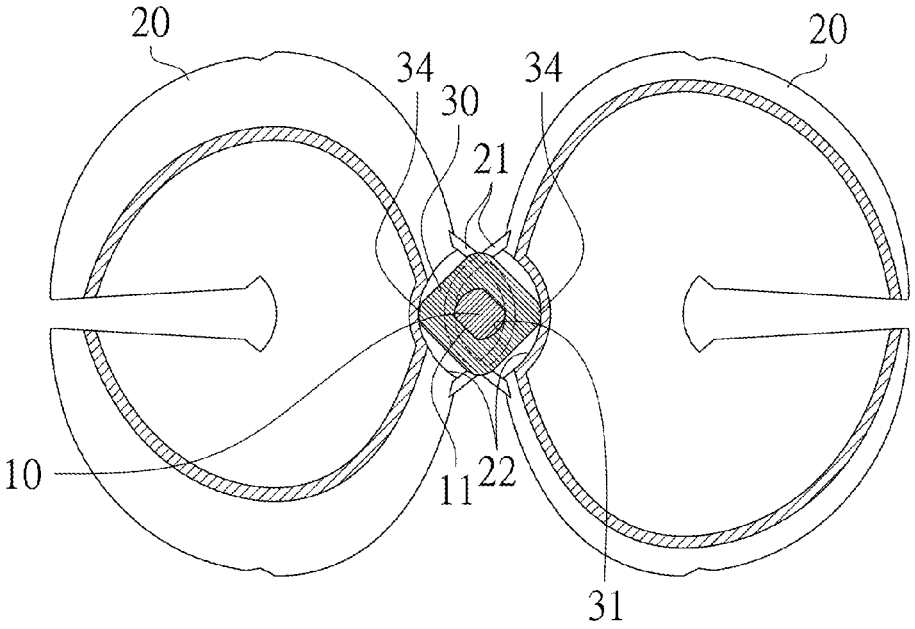

Fig.7

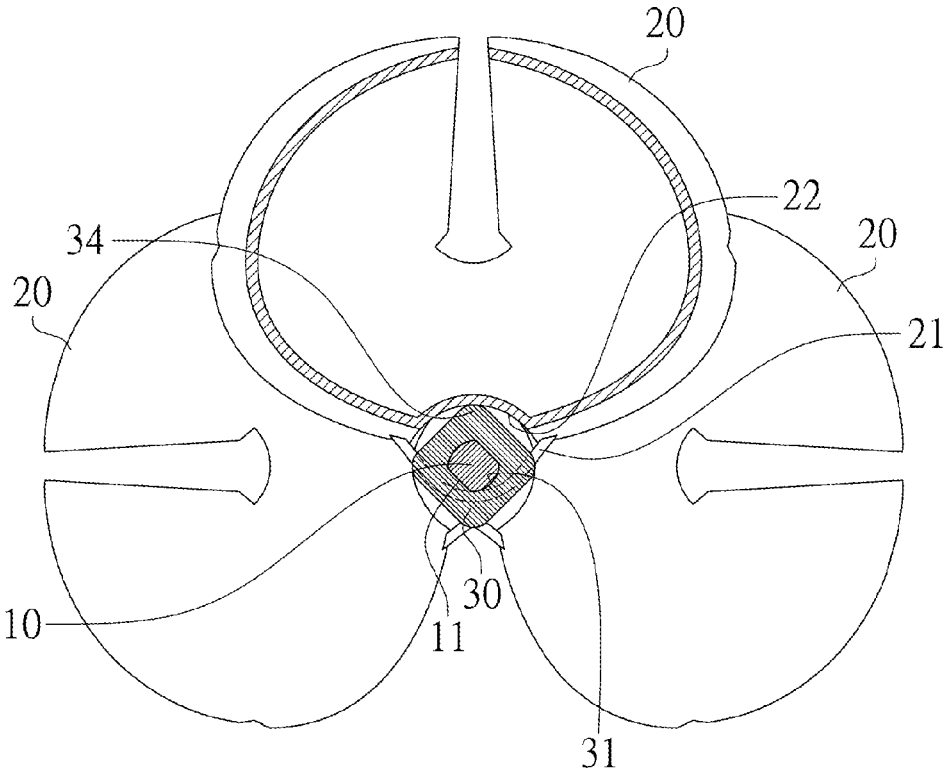

Fig.8

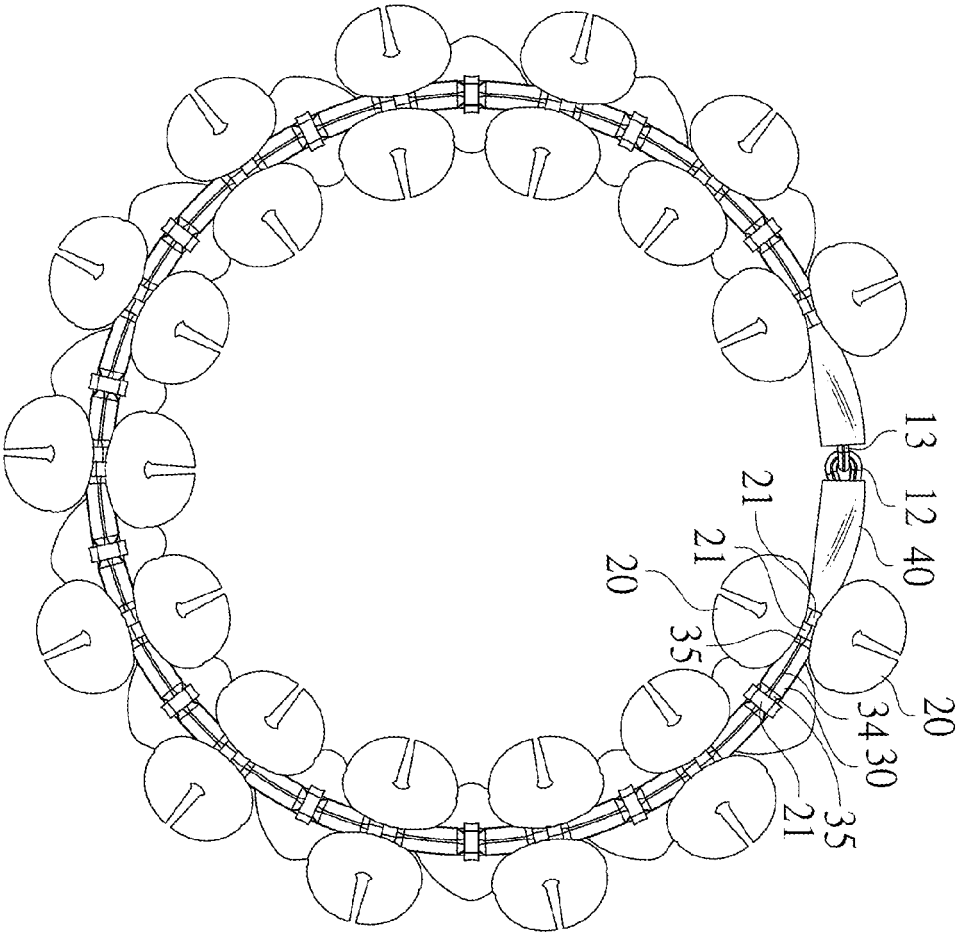

Fig.9

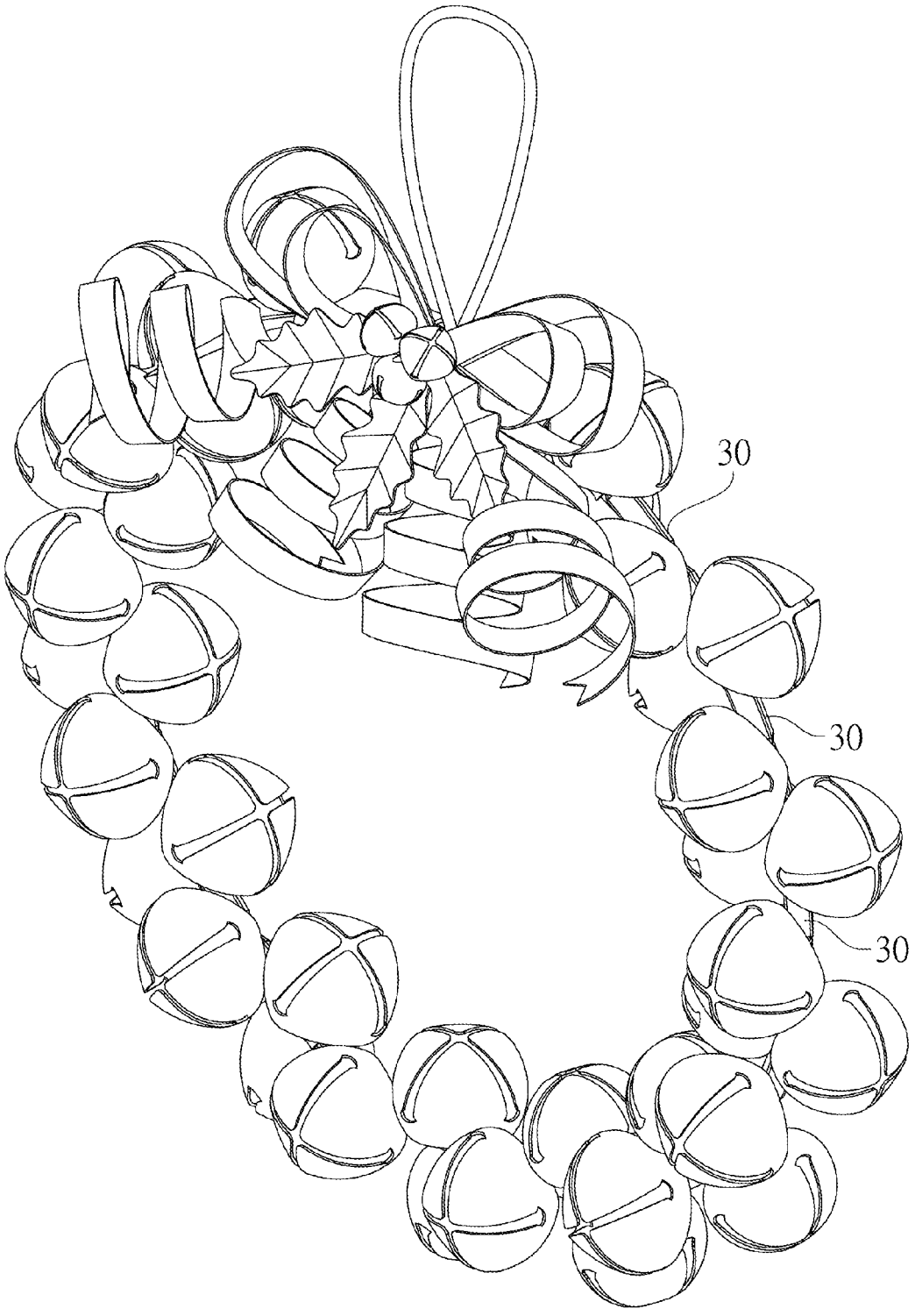

Fig.10

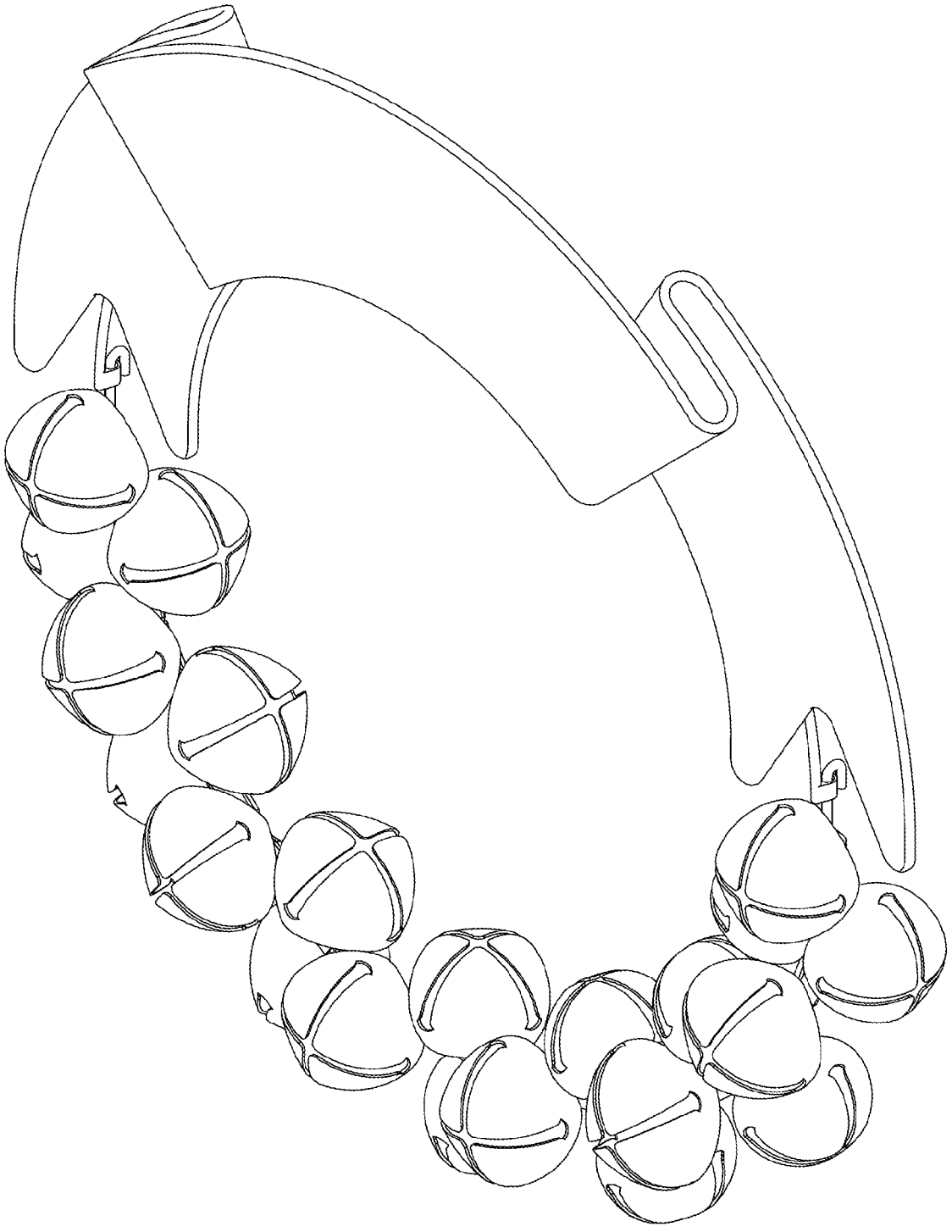

Fig.11

Fig.12

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EUROPEAN SEARCH REPORT

Application Number
EP 10 19 6648

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2010/062190 A1 (CHEN TSUNG-WEI) 11 March 2010 (2010-03-11) * abstract; figure 1 * -----	1	INV. A47G33/08 B44C5/04
A	US 2010/075072 A1 (CHEN TSUNG-WEI) 25 March 2010 (2010-03-25) * abstract; figures 1,3 * -----	1	
A	US 1 853 305 A (FREI JR JOHN) 12 April 1932 (1932-04-12) * figure 1 * -----	1	

TECHNICAL FIELDS SEARCHED (IPC)

B44C
A47G

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	16 March 2011	Tempels, Marco

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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1

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 10 19 6648

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16-03-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2010062190 A1	11-03-2010	NONE	
US 2010075072 A1	25-03-2010	NONE	
US 1853305 A	12-04-1932	NONE	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82