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(54) Title: DECORATION KIT AND ASSEMBLY METHOD

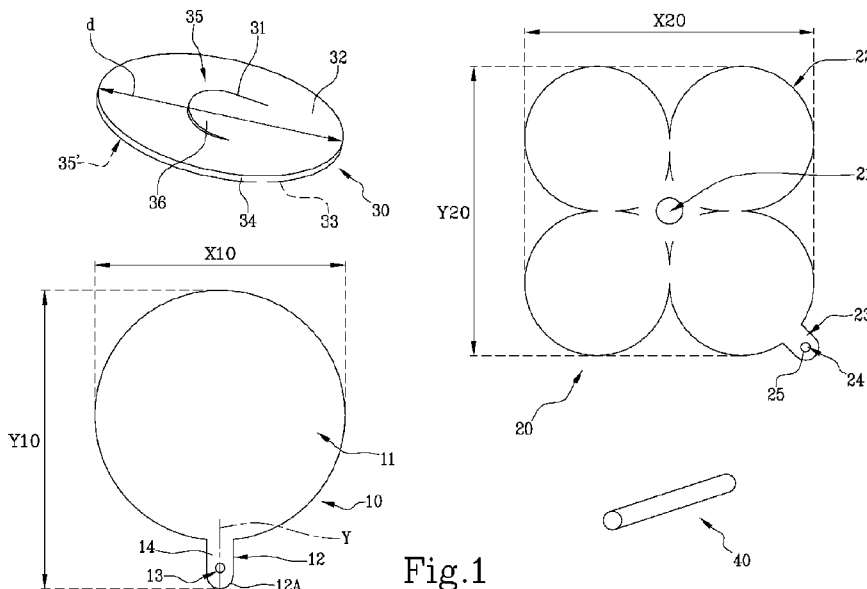


Fig.1

(57) Abstract: Described is a decoration kit which comprises: at least a first inflatable balloon (10) comprising a main body (11) and an end portion (12) which projects from the main body (11), a second inflatable balloon (20) having a through hole (21) which can be passed through by the end portion (12) of the first inflatable balloon (10) to define a coupling between the first and the second inflatable balloon (10, 20), a base element (30) having a through incision (31) which can be passed through by the end portion (12) of the first inflatable balloon (10), the base element (30) being configured to define an element for locking the coupling between the first and the second inflatable balloons (20, 30).



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DESCRIPTION

DECORATION KIT AND ASSEMBLY METHOD

Technical field

This invention relates to a decoration kit and a method for assembly of the decoration kit.

In particular, the invention is applied in the entertainment sector and
5 relates to a kit for decorating with inflatable balloons to obtain a composition of balloons.

Background art

This invention is applied in particular in the industry of balloons made of foil, for example made from polyester (Mylar®).

Typically, these balloons are filled with a gas such as helium or air by means of pneumatic guns or by blowing into them using inflating straws.

Once inflated, the balloons are connected to locking systems which give stability to the composition of inflatable balloons and ensure their blocking on the ground.

The locking systems may comprise fixed supports or counterweight which are suitably connected to the balloons by string or ribbons.

According to other solutions, the composition of inflatable balloons can be blocked on the ground and stabilised using other balloons filled with water and linked to the remaining balloons of the composition.

Disadvantageously, the prior art locking systems make the production of the compositions particularly challenging, also being not very economical and increasing the sale price of the composition.

10 **Aim of the invention**

In this technical context, the Applicant has felt the need to make a decoration kit and a method for assembly of the decoration kit comprising

the technical features described in independent claims 1 and 13, respectively.

Advantageously, this solution makes it possible to make a decoration kit which is particularly simple to assembly and at the same time inexpensive.

- 5 The dependent claims refer to preferred, advantageous embodiments of the invention.

Brief description of the drawings

The features of the invention are clearly described in the claims below and
10 its advantages are more apparent from the detailed description which follows, with reference to the accompanying drawings which illustrate a preferred, non-limiting example embodiment of the invention and in which:

- Figure 1 shows a schematic view of an embodiment of a decoration kit according to the invention;
- 15 - Figure 2 shows a schematic front view of a composition obtained following assembly of the decoration kit of Figure 1;
- Figures 3A-3D show perspective views of a schematic representation of various steps for assembling a decoration kit according to the invention.

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Detailed description of preferred embodiments of the invention

With reference in particular to Figure 1, the reference numeral 1 denotes a decoration kit according to the invention.

The kit 1 comprises at least a first inflatable balloon 10, a second inflatable
25 balloon 20 and a base element 30.

The first inflatable balloon 10 and the second inflatable balloon 20 are, for example, balloons made of foil made from polyester, BoPET (in particular Mylar®).

The first inflatable balloon 10 comprises a main body 11 and an end portion 12 which projects from the main body 11.

The end portion 12 preferably has a main direction of extension Y and an end 12A with a "U" shape.

The end portion 12 preferably has a gas passage opening 13.

According to an aspect, the passage opening 13 is provided with a closing valve 14 which is configured to prevent an escape of gas.

The closing valve 14 allows the passage opening 13 to be closed without knots or ties.

After inflating the balloon, the closing valve thus prevents the escape of the gas with which the balloon has been inflated.

10 The second inflatable balloon 20 comprises a respective main body 22 and a respective end portion 23.

The end portion 23 of the second balloon 20 has a respective opening 24 for passage of a gas provided with a closing valve 25 which is configured to prevent an escape of gas.

15 The closing valve 25 acts substantially as a non-return valve allowing the movement of the gas in a single direction, that is to say, from the passage opening 24 in the direction of the main body 22.

The second balloon 20 has a through hole 21 which can be passed through by the end portion 12 of the first inflatable balloon 10, to define a coupling between the first inflatable balloon 10 and the second inflatable balloon 20.

The base element 30 has a through incision 31.

The through incision 31 can be passed through by the end portion 12 of the first inflatable balloon 10.

25 The base element 30 is configured to define an element for locking the coupling between the first inflatable balloon 10 and the second inflatable balloon 20.

Advantageously, the base element 30 guarantees that the coupling of the two balloons 10, 20 is firmly stationary.

30 The base element 30 allows a composition C to be made formed by the first and the second balloons 10, 20.

Advantageously, the base element 30 gives stability to the composition C without using further weights or complex locking systems.

According to an aspect, the base element 30 is defined by a disc having a first face 32, a second face 33 and an edge 34 contiguous with the first face 32 and the second face 33.

Preferably, the disc has a diameter d of between 5 cm and 40 cm, preferably 20 cm.

According to an aspect, the through incision 31 is positioned in a central portion 35 of the first face 32 and a central portion 35' of the second face 33.

As illustrated in the preferred embodiment of Figure 1, the through incision of the base element is curvilinear.

Preferably, the through incision is C-shaped.

The through incision 31 has a radius of curvature of between 2 cm and 8 cm, preferably equal to 4 cm.

The through incision 31 defines a tab 36 in the base element 30.

As illustrated for example in Figure 3B, the tab 36 may be moved away from the second face 33, for passing the end portion 12 of the first inflatable balloon 10 through the through incision 31.

After inserting the end portion 12 in the through incision 31, the tab 36 is free to move towards the second face 33 blocking the end portion 12.

According to an embodiment, the base element 30 is made of polyester.

According to an embodiment, the base element 30 is made of plastic or paper material.

The base element 30 is therefore a particularly simple element to produce and can be made of inexpensive materials.

The first inflatable balloon 10 and the second inflatable balloon 20 are inflatable with helium or with air.

For example, pneumatic guns or inflating straws can be used to inflate the balloons or they can be inflated by blowing into them.

According to an embodiment, illustrated for example in Figure 1, the kit 1

comprises an inflating straw 40 for inflating the first inflatable balloon 10 and the second inflatable balloon 20.

According to an aspect, the first and second inflatable balloons 10, 20 each have a longitudinal dimension Y_{10} , Y_{20} of between 20 cm and 130 cm.

The first and second inflatable balloons 10, 20 each have a transversal dimension X_{10} , X_{20} , with respect to the longitudinal dimension Y_{10} , Y_{20} , of between 20 cm and 130 cm.

According to an embodiment not illustrated, the kit comprises a third inflatable balloon which also comprises a main body and an end portion which projects from the main body.

The end portion of the third balloon may be coupled to the through hole of the second balloon, together with that of the first balloon, and may then be inserted in the through incision of the base element to block the coupling.

The description relates to a method for assembling a decoration kit according to any of the features described above, comprising the steps of:

- preparing the first inflatable balloon 10,
- preparing the second inflatable balloon 20,
- coupling the first and second inflatable balloons (10, 20), in a respective configuration in which they are free of gas or rather deflated, inserting the end portion (12) of the first inflatable balloon (10) in the through hole (21) of the second inflatable balloon (20).

As illustrated in Figure 3A, by inserting the first inflatable balloon 10 in the hole 21 of the second inflatable balloon 20 the coupling of the first and second inflatable balloons 10, 20 is obtained.

The method comprises the steps of:

- preparing the base element 30,
- locking the coupling of the first and second inflatable balloons (10, 20) by inserting the end portion (12) of the first inflatable balloon (10) through the through incision (31) of the base element (30).

As illustrated in Figure 3B, the base element 30 defines a locking element

for coupling the first and second inflatable balloons 10, 20, thanks to the end portion 12 which is inserted in the through incision 31.

Advantageously, locking the coupling of the first balloon 10 and of the second balloon 20 simplifies the assembly and avoids the use of fixed supports or weights which can make the assembly more challenging as well as increasing the cost.

The method comprises the steps of inflating the first inflatable balloon 10 and the second inflatable balloon 20, obtaining a composition C.

According to an aspect, the step of inflating the first inflatable balloon 10 and the second inflatable balloon 20 comprises a step of inflating the first balloon 10 and the second inflatable balloon 20 with helium or air.

According to an embodiment, the step of inflating the first inflatable balloon 10 and the second inflatable balloon 20 comprises a step of inflating the first inflatable balloon 10 and the second inflatable balloon 20 using an inflating straw 40 (as illustrated, for example, in Figures 3C and 3D) or by means of a pneumatic gun (not illustrated).

- 5 According to an aspect, the first inflated balloon 10 of the composition C has a mainly vertical extension.

According to an aspect, the second inflated balloon 20 of the composition C has a mainly horizontal extension, defining a base of the composition C.

- 10 Advantageously, the second inflated balloon 20 and the base element 30 give the composition C stability.

CLAIMS

1. A decoration kit comprising:
 - 5 - at least a first inflatable balloon (10) comprising a main body (11) and an end portion (12) which projects from the main body (11),
 - a second inflatable balloon (20) having a through hole (21) which can be passed through by the end portion (12) of the first inflatable balloon (10) to define a coupling between the first and the second inflatable
10 balloon (10, 20),
 - a base element (30) having a through incision (31) which can be passed through by the end portion (12) of the first inflatable balloon (10), the base element (30) being configured to define an element for locking the coupling between the first and the second inflatable balloons (20, 30).
- 15 2. The kit according to claim 1, characterised in that the base element (30) is defined by a disc having a first face (32), a second face (33) and an edge (34) contiguous with the first face (32) and the second face (33).
3. The kit according to claim 2, characterised in that the disc has a
20 diameter (d) of between 5 cm and 40 cm, preferably equal to 20 cm.
4. The kit according to any one of the preceding claims, characterised in that the through incision (31) is positioned in a central portion (35) of the first face (32) and in a central portion (35') of the
25 second face (33).
5. The kit according to any one of the preceding claims, characterised in that the through incision (31) is curvilinear, preferably the through incision (31) having the shape of a "C".
- 30 6. The kit according to any one of the preceding claims, characterised in that the through incision (31) has a radius of curvature of

between 2 cm and 8 cm, preferably 4 cm.

- 5
7. The kit according to any one of the preceding claims, characterised in that the end portion (12) has an opening (13) for passage of gas provided with a closing valve (14) which is configured to prevent escape of gas.
8. The kit according to any one of the preceding claims, characterised in that it comprises an inflating straw (40) for inflating the first and the second inflatable balloons (10, 20).
- 10
9. The kit according to any one of the preceding claims, characterised in that the first and the second inflatable balloons (10, 20) each have a longitudinal dimension (Y10, Y20) of between 20 cm and 130 cm and a transversal dimension (X10, X20) of between 20 cm and 130 cm.
- 15
10. The kit according to any one of the preceding claims, characterised in that the base element (30) is made of polyester.
11. The kit according to any one of claims 1 to 9, characterised in that the base element (30) is made of plastic or paper material.
12. The kit according to any one of the preceding claims, characterised in that the first and the second inflatable balloons (10, 20) are
- 20
- inflatable with helium or with air.
13. A method for assembling a decoration kit according to any one of claims 1 to 12, comprising the steps of:
- preparing the first inflatable balloon (10),
 - preparing the second inflatable balloon (20),
 - coupling the first and second inflatable balloons (10, 20), in a respective configuration in which they are free of gas or rather deflated, inserting the end portion (12) of the first inflatable balloon (10) in the through hole (21) of the second inflatable balloon (20),
 - preparing the base element (30),
 - locking the coupling of the first and second inflatable balloons (10, 20) by inserting the end portion (12) of the first

inflatable balloon (10) through the through incision (31) of the base element (30),

- inflating the first inflatable balloon (10) and the second inflatable balloon (20), obtaining a composition (C).

14. The method according to claim 13, characterised in that the step of inflating the first inflatable balloon (10) and the second inflatable balloon (20) comprises a step of inflating the first inflatable balloon (10) and the second inflatable balloon (20) with helium or air.

5

15. The method according to claim 13 or 14, characterised in that the step of inflating the first inflatable balloon (10) and the second inflatable balloon (20) comprises a step of inflating the first inflatable balloon (10) and the second inflatable balloon (20) by means of an inflating straw (40) or by means of a pneumatic gun.

10

16. The method according to any one of the preceding claims, characterised in that the first inflated balloon (10) of the composition has a mainly vertical extension.

15

17. The method according to any one of the preceding claims, characterised in that the second inflated balloon (20) of the composition has a mainly horizontal extension defining a base of the composition (C).

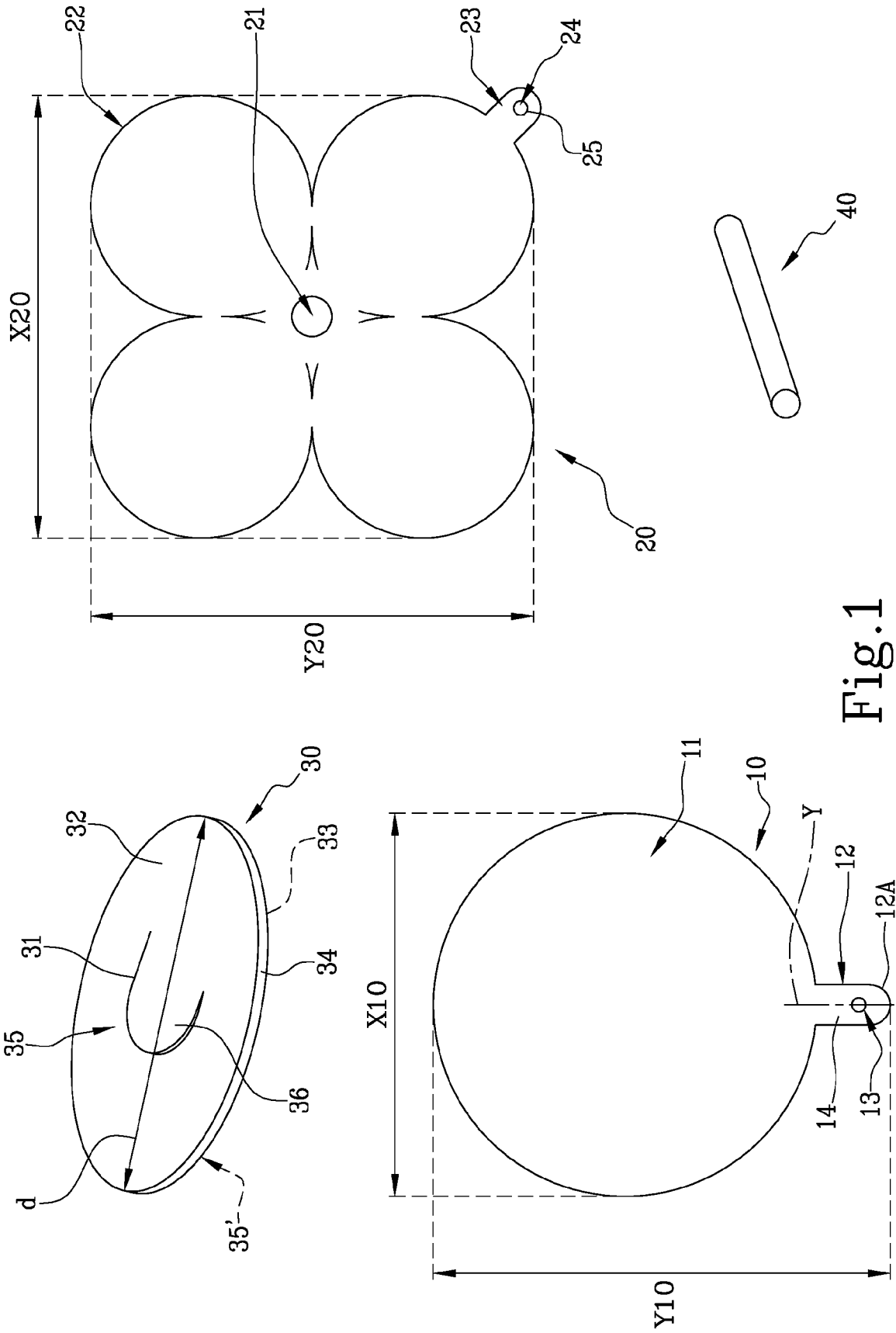


Fig.1

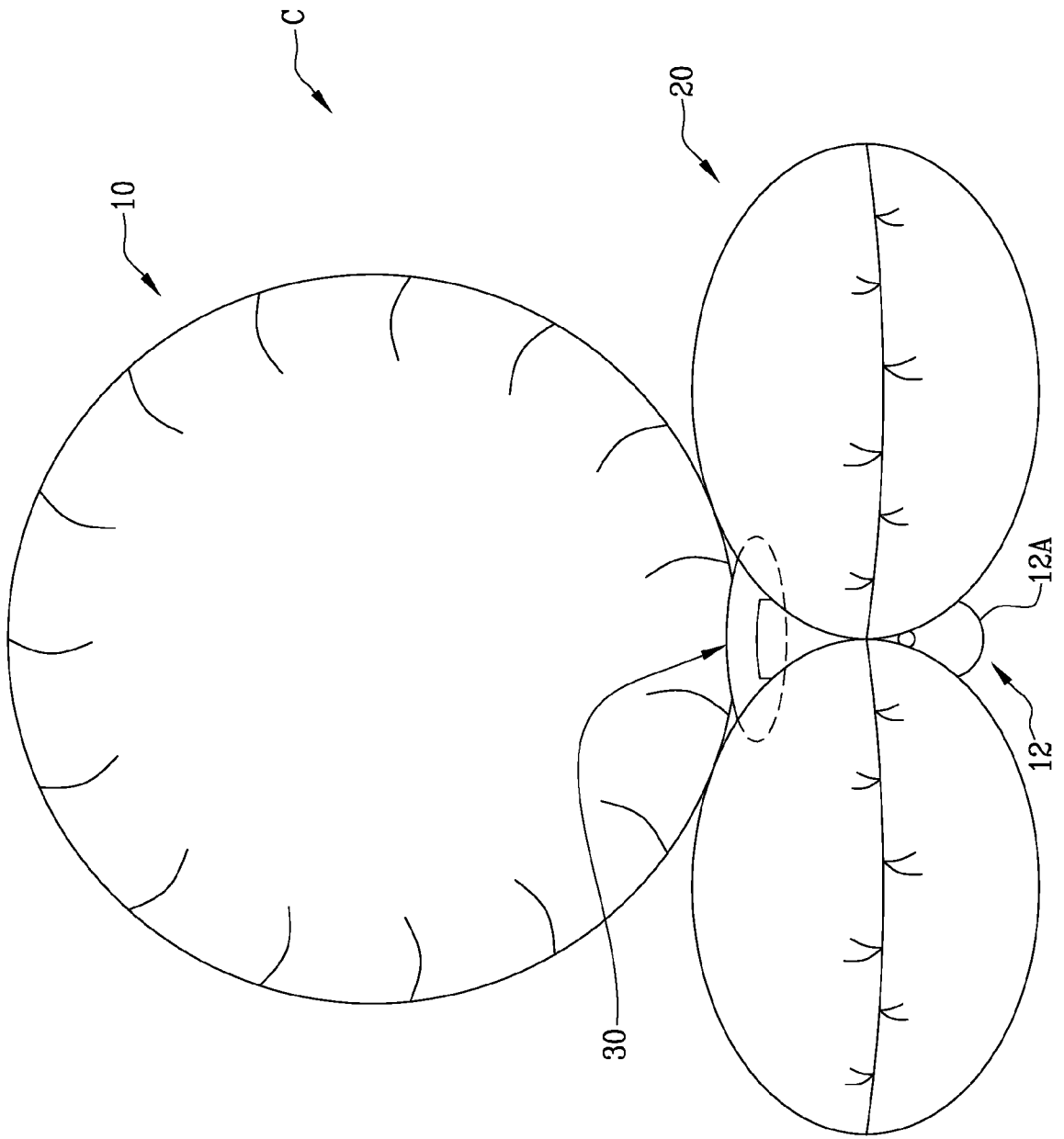


Fig. 2

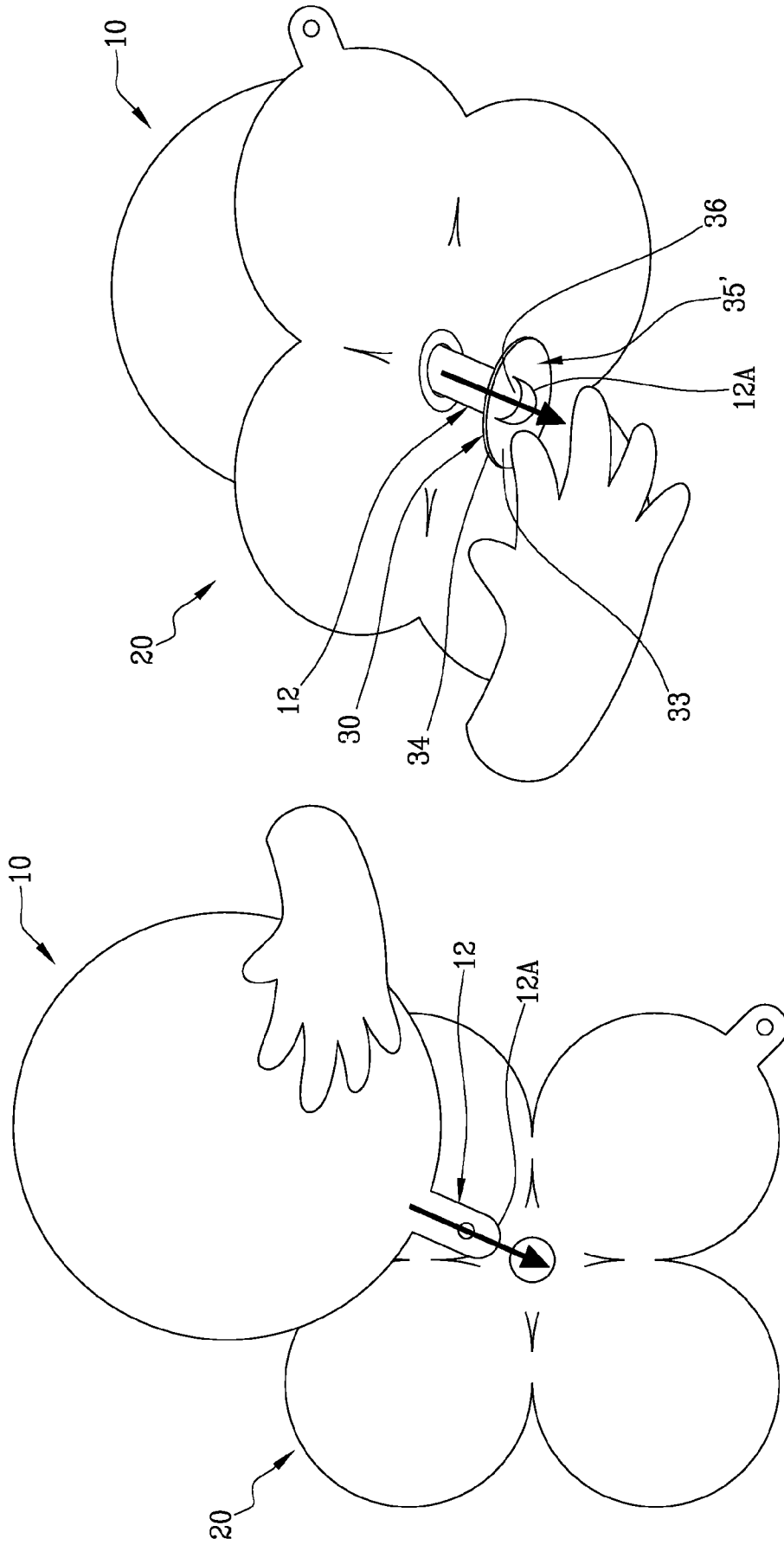


Fig. 3A

Fig. 3B

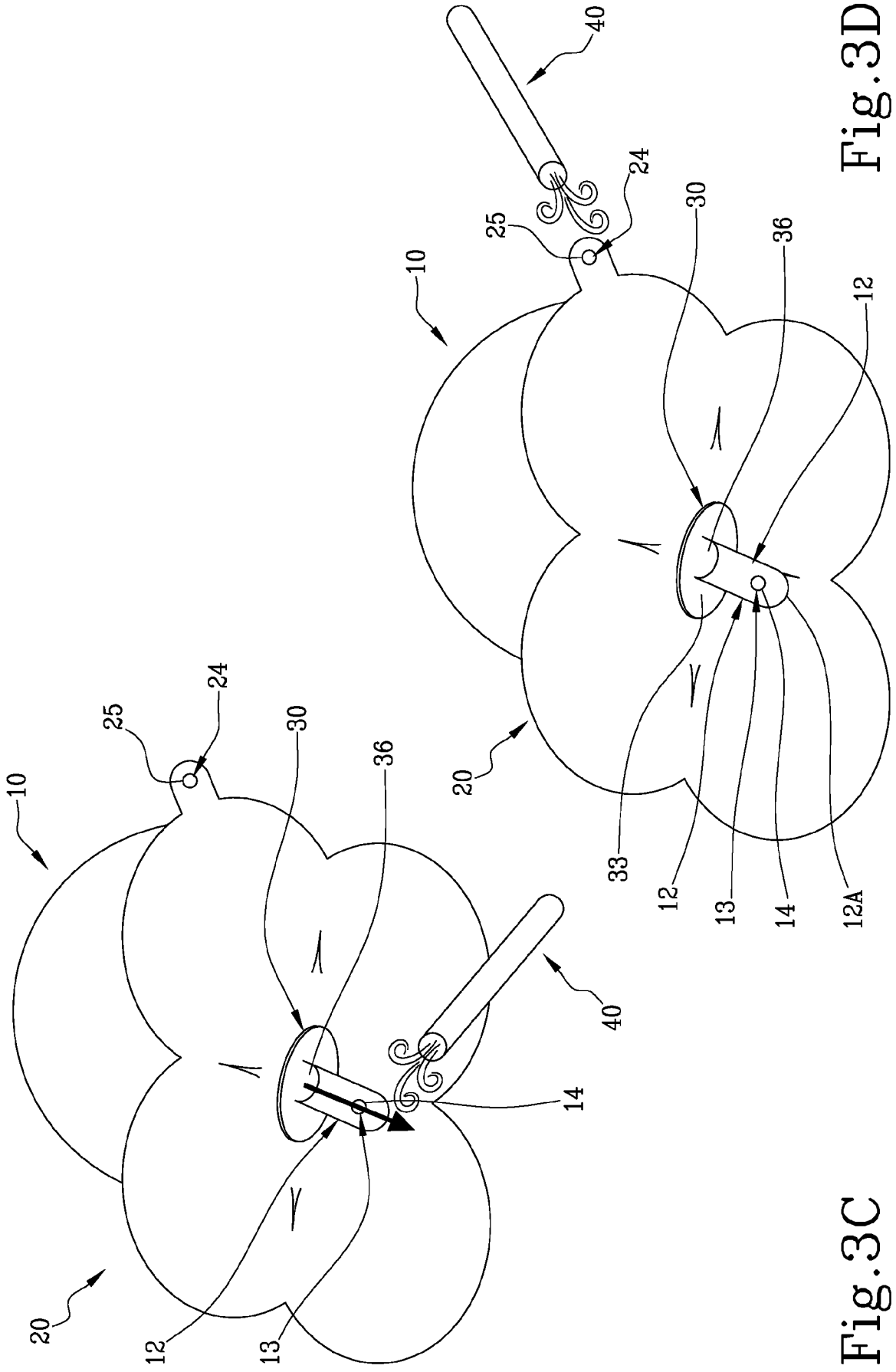


Fig. 3C

Fig. 3D

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2023/050724

A. CLASSIFICATION OF SUBJECT MATTER
INV. A63H27/10
ADD.

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A63H

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

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

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2021/299585 A1 (SIFFERLIN MARK S [US] ET AL) 30 September 2021 (2021-09-30) paragraph [0035] - paragraph [0046]; figures 1-19 -----	1-17
A	US 6 007 403 A (URSPRINGER STEVEN E [US] ET AL) 28 December 1999 (1999-12-28) column 3, line 11 - column 4, line 16; figures 1-6 -----	1-17
A	US 2012/202402 A1 (SLIVINSKI WILLIAM PAUL [US]) 9 August 2012 (2012-08-09) paragraph [0024] - paragraph [0051]; figures 1-3 -----	1-17
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Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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Date of the actual completion of the international search

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16 August 2023

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INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2023/050724

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005/210639 A1 (CUISINIER JARRET P [US]) 29 September 2005 (2005-09-29) paragraph [0022] - paragraph [0033]; figures 1-7 -----	1-17
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2023/050724

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