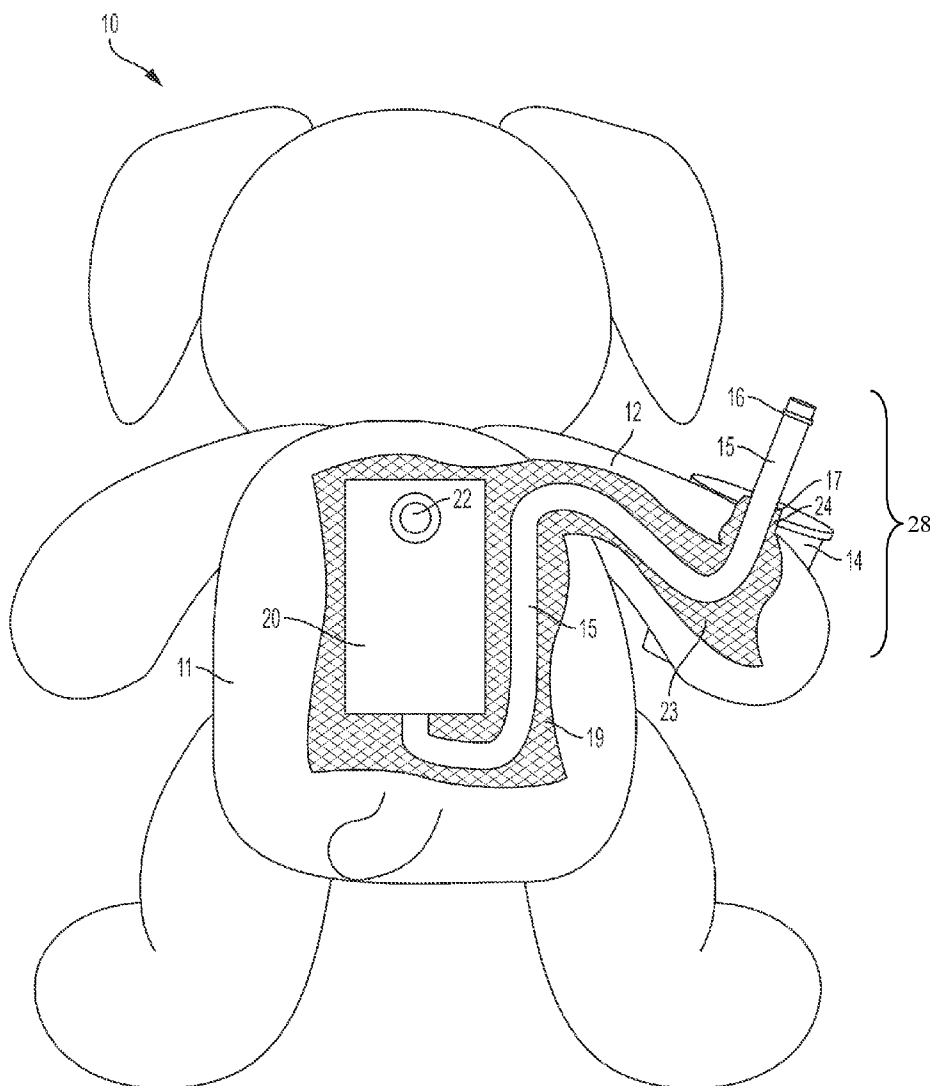




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Leuenberger et al.(10) **Pub. No.: US 2016/0199746 A1**(43) **Pub. Date: Jul. 14, 2016**(54) **TOY WITH INTERNAL WATER BLADDER
AND DRINKING MECHANISM****Publication Classification**(71) Applicants: **Briana L. Leuenberger**, Taberg, NY
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NY (US)(51) **Int. Cl.**
A63H 3/00 (2006.01)(52) **U.S. Cl.**
CPC **A63H 3/005** (2013.01)(72) Inventors: **Briana L. Leuenberger**, Taberg, NY
(US); **Scott R. Leuenberger**, Taberg,
NY (US)(57) **ABSTRACT**(21) Appl. No.: **14/992,082**(22) Filed: **Jan. 11, 2016****Related U.S. Application Data**(60) Provisional application No. 62/102,618, filed on Jan.
13, 2015.

A toy configured to enable hydration is provided. The toy includes a body that defines an internal cavity; a first arm and a second arm extending outwardly from the body, the first arm defining an arm cavity extending from the internal cavity to a distal end opening of the first arm; a bladder disposed within the internal cavity; and a straw having first and second ends, the first end of the straw in fluid communication with the bladder, the straw extending from the bladder through the arm cavity, and the second end of the straw extending through the distal end opening of the first arm.



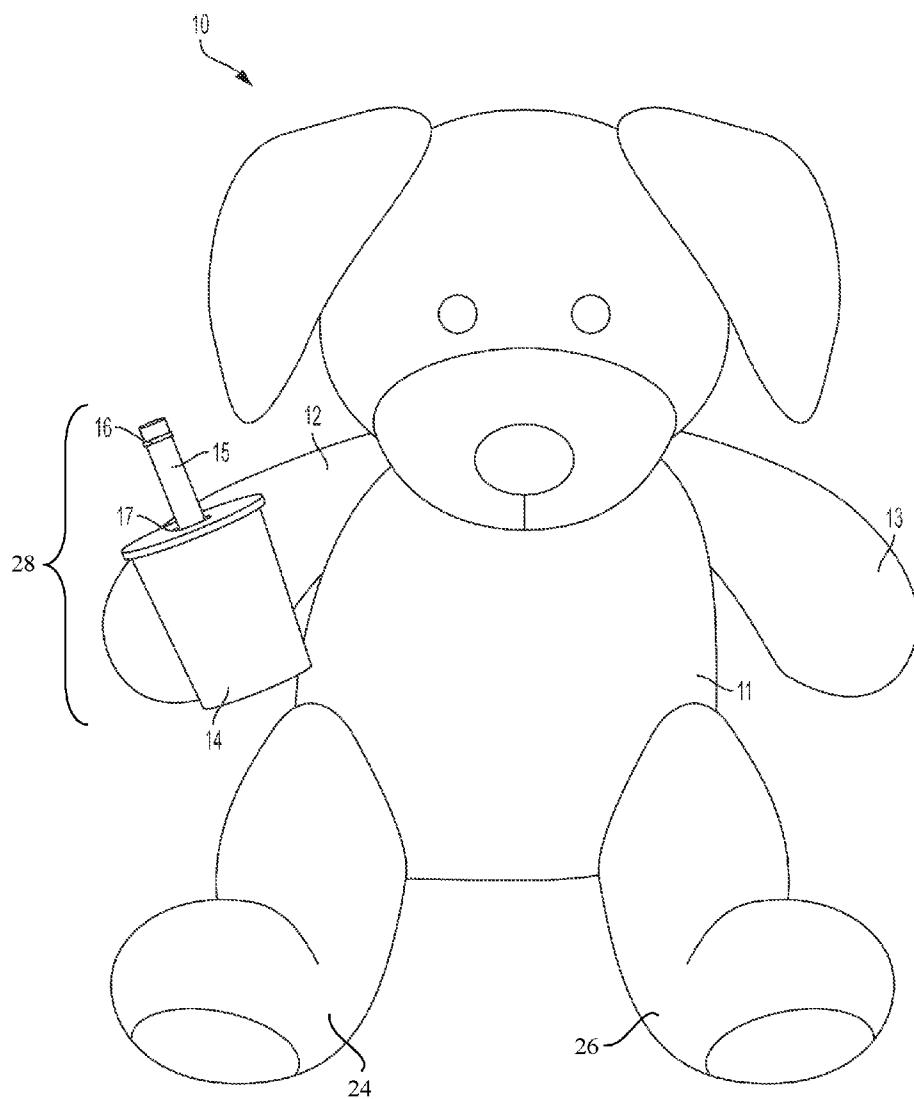


FIG. 1A

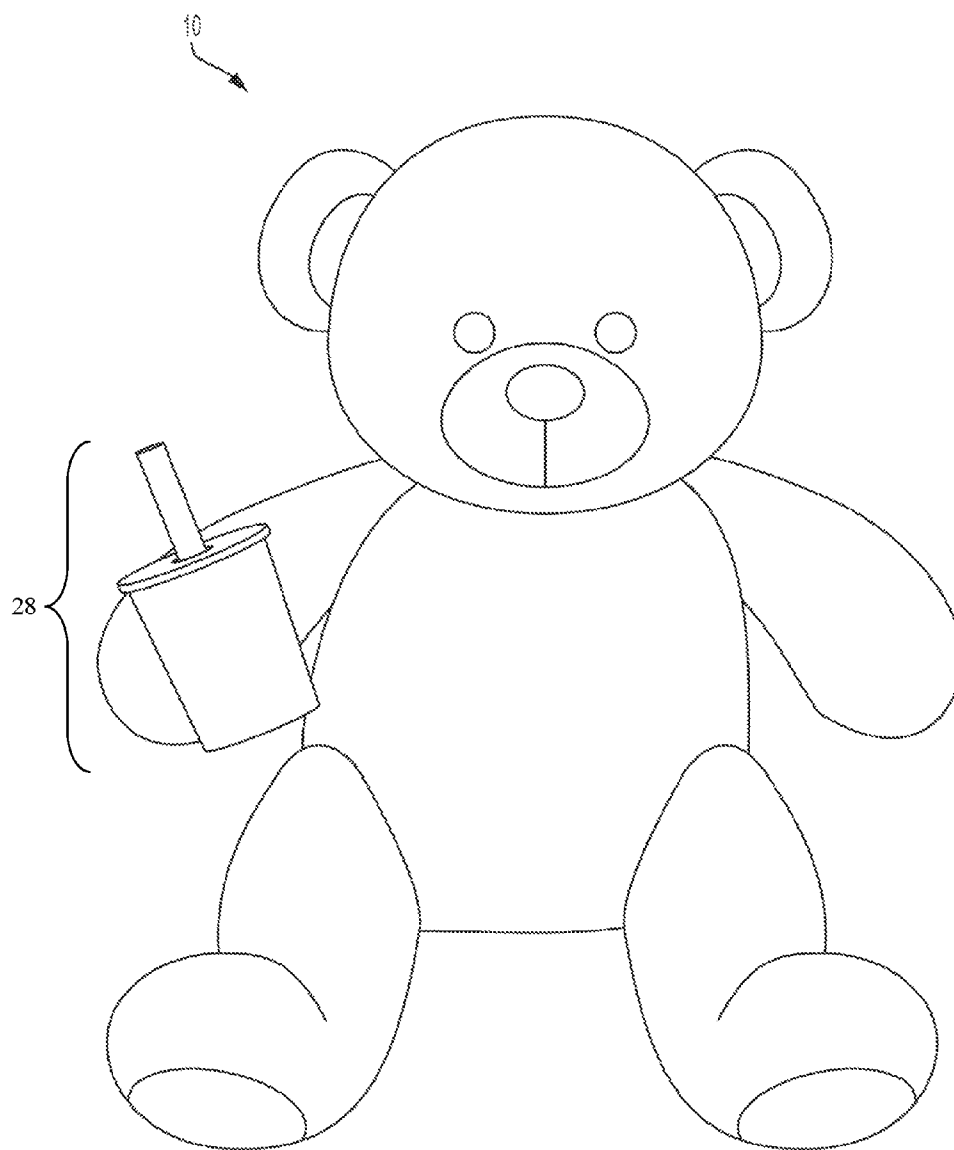


FIG. 1B

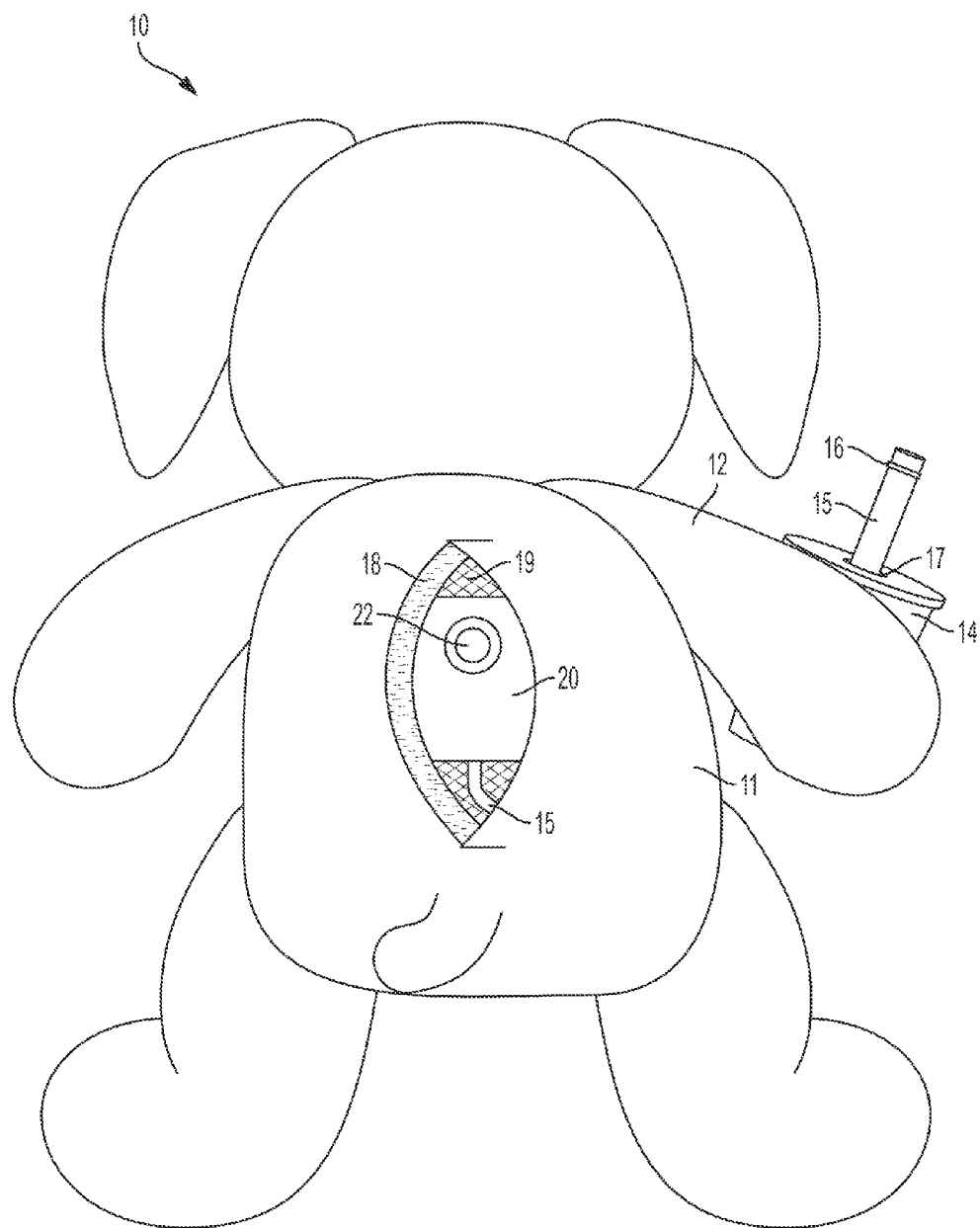


FIG. 2

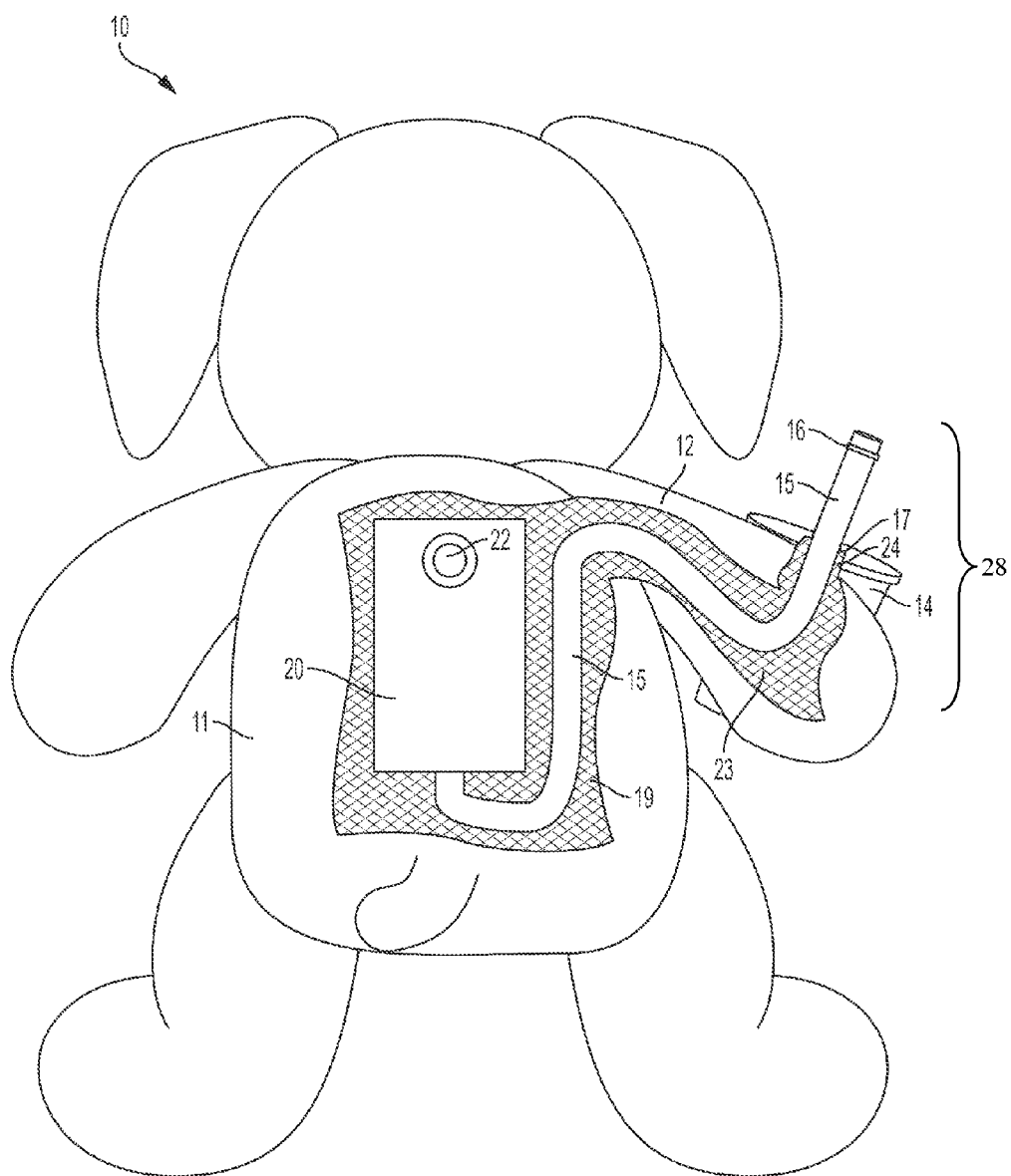


FIG. 3

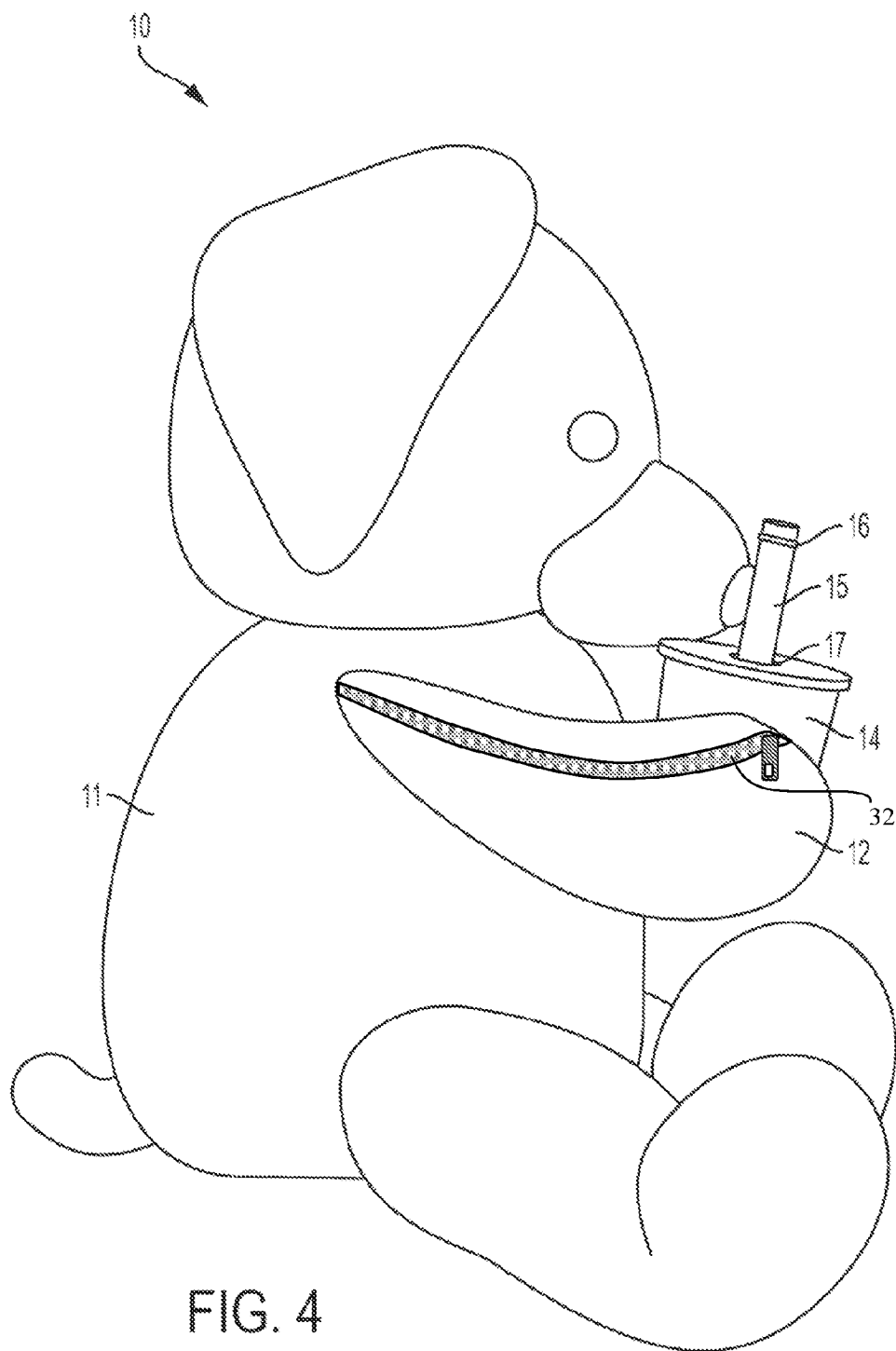


FIG. 4

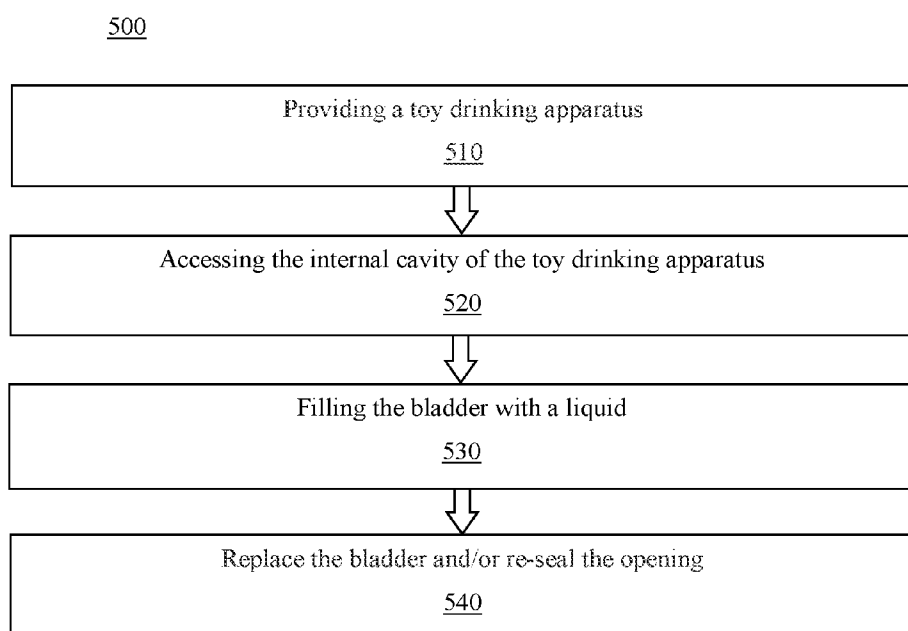


FIG. 5

TOY WITH INTERNAL WATER BLADDER AND DRINKING MECHANISM

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to U.S. Provisional Patent Application Ser. No. 62/102,618, filed on Jan. 13, 2015, and entitled “Toy With Internal Water Bladder and Drinking Mechanism,” the entire disclosure of which is incorporated herein by reference.

FIELD OF THE INVENTION

[0002] The present disclosure is directed generally to a device for promoting increased fluid consumption, and, more specifically, to a toy with an internal water bladder and drinking mechanism.

BACKGROUND

[0003] Dehydration is a serious medical condition caused by excessive loss of water, usually due to illness or physical activity. Excessive loss of water means, effectively, that for a given time period the amount of water lost from the individual exceeds the amount of water ingested by the individual. Dehydration can result in mild symptoms like decreased frequency of urination, lack of tears, lethargy, and irritability. Serious dehydration can result in heat exhaustion and heat stroke, among other symptoms.

[0004] Children are especially susceptible to dehydration because they tend to be very active, including outdoors in sunlight and higher temperatures. However, children will typically only drink when they are thirsty without concern about dehydration. As a result, a child can already be in the early stages of dehydration before they even realize they are thirsty.

[0005] The best way to prevent dehydration is to encourage consumption of low-calorie liquids prior to or during periods of illness and physical activity. This can be particularly difficult for children who will be disinterested in drinking when they are sick, and too distracted to drink when they’re playing or otherwise physically active.

[0006] Accordingly, there is a need in the art for methods and devices that encourage and facilitate the consumption of liquids by children, especially when they are ill or physically active, thereby preventing dehydration and the symptoms that can accompany the condition.

SUMMARY OF THE INVENTION

[0007] The present disclosure is directed to an inventive apparatus and system for encouraging and facilitating the consumption of liquids by children. Further, the inventive drinking apparatus and system prevents dehydration in children, and the symptoms that can accompany dehydration. Accordingly, embodiments of the invention are directed to a toy with an internal water bladder and drinking apparatus that allows and encourages a child to drink the water stored in the internal bladder, thereby encouraging hydration by providing easily accessible water to the child even when a water source is not readily available.

[0008] It is therefore a principal object and advantage of embodiments of the present invention to provide a hand-held plush toy.

[0009] It is another object and advantage of embodiments of the present invention to provide a plush toy that is carried or held by someone for the purpose of transporting water and to use as a drinking device.

[0010] Other objects and advantages of the present invention will in part be obvious, and in part appear hereinafter.

[0011] In accordance with the foregoing objects and advantages, the present invention provides a toy configured to enable hydration. The toy includes: (i) a body defining an internal cavity; (ii) a first arm and a second arm extending outwardly from the body, the first arm defining an arm cavity extending from the internal cavity to a distal end opening of the first arm; (iii) a bladder disposed within the internal cavity; and (iv) a straw having first and second ends, the first end of the straw in fluid communication with the bladder, the straw extending from the bladder through the arm cavity, and the second end of the straw extending through the distal end opening of the first arm.

[0012] According to an embodiment, the toy further includes first and second legs.

[0013] According to an embodiment, the toy further includes a drinking apparatus located at the distal end opening of the first arm, the drinking apparatus including a drinking cup. According to an embodiment, none, a portion, or all of the drinking cup is located within the arm cavity.

[0014] According to an embodiment, the drinking straw includes a spill-proof tip on the second end.

[0015] According to an embodiment, the straw includes a flange located at the second end of the straw, the flange configured to prevent the second end of the straw from being pulled into the arm cavity.

[0016] According to an embodiment, the toy further includes an opening to the internal cavity.

[0017] According to an embodiment, the internal cavity and arm cavity are lined with a fabric. According to another embodiment, the internal cavity and arm cavity are lined with a waterproof material.

[0018] According to an embodiment, the bladder includes an opening configured to allow the bladder to be filled with liquid.

[0019] According to an embodiment, the bladder is flexible. According to another embodiment, the bladder is reversibly removable from the internal cavity.

[0020] Generally, in one aspect, is a toy configured to enable hydration. The toy includes: (i) a body defining an internal cavity and an opening to the internal cavity; (ii) a first arm and a second arm extending outwardly from the body, wherein the first arm defines an arm cavity extending from the internal cavity to a distal end opening of the first arm; (iii) a drinking apparatus located at the distal end opening of the first arm, the drinking apparatus comprising a drinking cup; (iv) a removable flexible bladder disposed within the internal cavity, the bladder comprising an opening configured to allow the bladder to be filled with liquid; and (v) a straw having first and second ends, the first end of the straw in fluid communication with the flexible bladder and the second end of the straw in fluid communication with the drinking cup, the straw extending from the flexible bladder through the arm cavity, and the second end of the straw extending through the distal end opening of the first arm to the drinking apparatus.

[0021] Generally, in one aspect, is a method for enabling hydration. The method includes the steps of: providing a toy, the toy comprising: (i) a body defining an internal cavity; (ii) a first arm and a second arm extending outwardly from the

body, wherein the first arm defines an arm cavity extending from the internal cavity to a distal end opening of the first arm; (iii) a flexible bladder disposed within the internal cavity; and (iv) a straw having first and second ends, the first end of the straw in fluid communication with the bladder, the straw extending from the bladder through the arm cavity, and the second end of the straw extending through the distal end opening of the first arm; removing the bladder from the internal cavity; filling the bladder with a liquid; and replacing the bladder in the internal cavity.

[0022] Another aspect of the present invention provides an internal liner within the body of the plush toy which is continuous with the internal liner of the first front leg. The water bladder, which is connected to the drinking apparatus, is situated inside the internal liner in the body of the plush toy. The internal liner within the body of the plush toy is accessible through an opening in the back of the body and this opening will be sealed.

[0023] Yet another aspect of the present invention provides a plush toy with an internal water bladder and drinking apparatus. The water bladder is designed to be flexible and intended to hold approximately eight (8) ounces of drinking water. The drinking apparatus connected to the water bladder is flexible with a spill proof drinking end.

[0024] These and other aspects of the invention will be apparent from the detailed description and embodiment(s) described herein.

BRIEF DESCRIPTION OF THE DRAWINGS

[0025] The present invention will be more fully understood and appreciated by reading the following Detailed Description in conjunction with the accompanying drawings, in which:

[0026] FIG. 1A is a front view of the toy with internal bladder and drinking apparatus, in accordance with an embodiment.

[0027] FIG. 1B is a front view of the toy with internal bladder and drinking apparatus, in accordance with an embodiment.

[0028] FIG. 2 is a rear view of the toy with internal bladder and drinking apparatus, in accordance with an embodiment.

[0029] FIG. 3 is a cross section of the rear view of the toy with internal bladder and drinking apparatus, in accordance with an embodiment.

[0030] FIG. 4 is a side view of the toy with internal bladder and drinking apparatus, in accordance with an embodiment.

[0031] FIG. 5 is a flowchart of a method for preventing dehydration in a child, in accordance with an embodiment.

DETAILED DESCRIPTION OF EMBODIMENTS

[0032] The present disclosure describes various embodiments of a toy comprising an internal liquid bladder and drinking tube. More generally, Applicant has recognized and appreciated that it would be beneficial to provide a system for encouraging and facilitating the consumption of a liquid by a child. Accordingly, the methods described or otherwise envisioned herein provide a toy with an internal water bladder and drinking apparatus that allows and encourages a child to drink the water stored in the internal bladder, thereby encouraging hydration by providing easily accessible water to the child even when a water source is not readily available.

[0033] According to an embodiment, the present disclosure further describes a method of Hydrating—or, similarly, pre-

venting dehydration of—a child. A toy comprising an internal liquid bladder and drinking tube as described or otherwise envisioned herein is provided, and the internal bladder is filled with a liquid to be consumed by the child. The child is then free to consume the stored liquid from the internal bladder via the drinking tube, thereby encouraging hydration and preventing dehydration. This is especially beneficial in situations where the child is consuming or requires large amounts of liquids, and/or in situations where the child does not have easy or readily available access to liquid.

[0034] Referring to FIG. 1, in one embodiment, is a front view of a drinking apparatus according to one embodiment, referred to generally by reference numeral 10. In a preferred embodiment, drinking apparatus 10 includes a central body 11, a first leg 12 and a second leg 13. First leg 12 and second leg 13 can be separate or can be connected or otherwise kept in permanent or reversible communication by a magnet, hook and loop, snap, button, or other known mechanism. Drinking apparatus 10 can be made of any material or materials safe enough and light enough to be carried by a child, including but not limited fabric, plastic, rubber, and/or any other material known in the art of children's toys.

[0035] The body 11 of drinking apparatus 10 can take a wide variety of shapes and sizes sufficient to enclose an internal liquid bladder, as described below. For example, the body 11 can also be manufactured to physically represent anything that appeals to a child. For example, the body 11 can be an animal, either real or fictional, a person, a real or fictional character, or a wide variety of other configurations. For example, as shown in FIG. 1A, body 11 of drinking apparatus 10 is a toy in the shape of a dog. As shown in FIG. 1B, body 11 of drinking apparatus 10 is a toy in the shape of a bear. To further encourage hydration and use of the drinking mechanism, the toy can be a plush and/or stuffed toy, and can be sized for a child to easily hold and squeeze the plush and/or stuffed toy. The body can be a variety of different colors as well, including colors that encourage holding and use of the toy. The body can also comprise additional legs and/or arms, depending on the animal, creature, person, or thing represented. For example, as shown in FIG. 1, the toy dog includes a first back leg 24 and a second back leg 26. Other accessories can include, but are not limited to horns, tails, wings, hair, clothing, glasses, props, and a wide variety of other accessories. These accessories may alternatively be a component of the drinking mechanism 28, described below. Examples of suitable shapes for drinking apparatus 10 include, but are not limited to, a rabbit, bird, bear, dog, cat, lion, tiger, turtle, monkey, elephant, giraffe, or other reptile, mammal, or dinosaur. In addition, drinking apparatus 10 can be a representation of any character from a movie, play, book, cartoon, or other fictional or non-fictional source.

[0036] According to an embodiment, one of either first leg 12 or second leg 13 comprises a drinking mechanism 28. Drinking mechanism 28 can comprise a wide variety of different configurations to facilitate the consumption of liquids by a child. For example, as shown in FIG. 1, drinking mechanism 28 comprises a drinking cup 14, from which an end of a drinking straw 15 protrudes. The drinking straw comprises a spill proof tip or mechanism 16 that prevents the child from accidentally or inadvertently spilling the liquid from the toy. Further, drinking mechanism 28 can comprise a flange or other component 17 to prevent the drinking straw 15 from sliding completely into drinking cup 14 and/or the leg. According to an alternative embodiment, drinking mecha-

nism 28 comprises drinking straw 15 protruding directly from a surface of first leg 12 and/or first leg 13, without a drinking cup 14. Alternatively, drinking cup 14 can be embedded within the hand of the leg, or can be embedded within the leg itself, such as in body configurations where the toy doesn't have defined hands or paws.

[0037] According to an embodiment, drinking cup 14, drinking straw 15, spill proof tip or mechanism 16, and exterior flange 17 can each be comprised of any flexible liquid-holding material known in the art, including but not limited to, rubber, flexible plastic, and/or other materials, including but not limited to materials free of Bisphenol A (BPA).

[0038] Referring to FIG. 2, in accordance with an embodiment, is a reverse view of a drinking apparatus 10 with central body 11, and showing one arm 12 and one leg 24. According to this embodiment, central body 11 of drinking apparatus 10 defines an internal cavity 19 which is accessed via a resealable opening 18. Opening 18 can be opened and closed repeatedly to allow access to internal cavity 19, utilizing a variety of different mechanisms. For example, opening 18 can comprise one or more hook and loop strips, such as VELCRO®, which can be connected to the opening by sewing, heat-sealing, gluing, or otherwise connecting using any known mechanism of connection known in the art. Other mechanisms include zippers, buttons, and/or latches, among many others.

[0039] The interior surface(s) of internal cavity 19 can optionally be lined with any fabric material known in the art, including but not limited to cotton, polyester, nylon, and other non-waterproof materials. Alternatively, the interior surface of internal cavity 19 can be lined with a waterproof material that prevents damage to the toy if the bladder leaks or ruptures. The interior surface of internal cavity 19 can also optionally comprise an anti-bacterial and/or anti-fungal agent to prevent growth of microorganisms within the space. According to a preferred embodiment, an interior surface of internal cavity 19 is lined with a material which is sewn to the toy, heat-sealed, glued, or otherwise connected using any known mechanism of connection known in the art.

[0040] As shown in FIG. 2, internal cavity 19 defines a space in which a bladder 20 can be stored. According to an embodiment, bladder 20 can comprise any liquid-holding material known in the art, including but not limited to, rubber, flexible plastic, and/or other materials, including but not limited to materials free of Bisphenol A (BPA). The bladder 20 can be flexible or inflexible depending on a variety of different aspects, including but not limited to the design of the toy, manufacturing specifications, and consumer demand. For example, the bladder 20 can be flexible such that it conforms to the shape of internal cavity 19 when it is inserted into the cavity, or when it is filled with liquid while situated within the cavity. Alternatively, the bladder can be a rigid or substantially inflexible material or shape such that it must already be situated within the cavity—for example, the toy can be manufactured around the bladder—or the bladder must be sized to be withdrawn from and inserted into the cavity despite its rigid or inflexible nature. Accordingly, bladder 20 can be configured to be reversibly removable from internal cavity 19, and thus is optionally not connected to internal cavity 19 and/or body 11.

[0041] According to an embodiment, bladder 20 includes an orifice 22, such as a capped mouth, for filling the bladder with water or another liquid of the user's choosing. A variety

of other opening and closing mechanisms are possible, including but not limited to screw caps, snap caps, and others.

[0042] According to an embodiment depicted in FIG. 2, bladder 20 is connected to a second end of drinking straw 15, or another component of drinking mechanism 28, such that a pathway for liquid is formed between the bladder and the operating end of drinking straw 15. For example, drinking straw 15 can be approximately 10 to 12 inches in length and can be connected to the bottom or side of bladder 20. If a portion of the internal cavity extends into the arm, the drinking straw can extend from the bladder through the internal cavity to an opening in the first or second arm. Alternatively, the drinking straw can extend through an opening or hole in the internal cavity, which can be sealed around, or firmly surrounding, the straw. The drinking straw will then extend through a tunnel or cavity in the arm to an opening in the first or second arm.

[0043] Referring to FIG. 3, in one embodiment, is a cross-section of the drinking apparatus 10 with central body 11, and showing one arm 12 with drinking mechanism 28, comprising drinking cup 14, from which an end of drinking straw 15 protrudes. The drinking mechanism 28 also includes spill proof tip or mechanism 16, and flange or other component 17 to prevent the drinking straw 15 from sliding completely into drinking cup 14 and/or the leg. Internal cavity 19 is connected to and optionally continuous with internal cavity 23 of front arm 12 and the region of drinking mechanism 28. Indeed, drinking straw 15 extends from internal cavity 19 through internal cavity 23 of front arm 12 and out through an opening in the front paw of arm 12. According to an embodiment, all or a portion of internal cavity 19 and internal cavity 23 can be lined with a liner material, including but not limited to, cotton, polyester, nylon or other non-waterproof materials.

[0044] According to an embodiment, internal cavity 23 is a tubular sewn structure that is connected to and continuous with internal cavity 19, which runs inside front arm 12 and the hand or paw of the front arm. The internal cavity 23 can be surrounded on all sides by stuffing of the toy and can be connected to the toy only at connection point 24 at the top of drinking cup 14, where internal cavity 23 may be sewn to the toy, heat-sealed, glued, or otherwise connected using any known mechanism of connection known in the art.

[0045] Referring to FIG. 4, in one embodiment, internal cavity 23 is opened and/or accessed by a zipper 32 which extends, for example, along arm 12 and optionally along the back of the toy to internal cavity 19. Although not shown in FIG. 4, zipper 32 can optionally be contiguous with opening 18, and can be the same contiguous zipper extending from the bottom of opening 18 to the end of arm 12.

[0046] Referring to FIG. 5, in one embodiment, is a flow-chart of a method 500 for hydration of a child, or for preventing dehydration of a child. At step 510 of the method, a drinking apparatus 10 is provided. The drinking apparatus may be any of the drinking devices described or otherwise envisioned herein. For example, drinking apparatus 10 may include a central body 11, first leg 12, second leg 13, drinking mechanism 28, internal cavity 19, and bladder 20, among other elements or components.

[0047] At step 520 of the method, bladder 20 inside internal cavity 19 is accessed. According to an embodiment this comprises pulling out the bladder 20 out of internal cavity 19 and optionally disconnecting it from drinking straw 15. Alternatively, this step comprises accessing the internal cavity 19 via opening 18. For example, if opening 18 comprises hook and

loop strips or buttons, this allows re-sealable access to the internal cavity by pulling apart the hook and loop strips, or unbuttoning the buttons.

[0048] At step 530 of the method, the bladder is filled with a liquid. The bladder, whether it remains in internal cavity 19 or is removed from the toy, can be filled under a faucet, tap, spigot, container, or other source of liquid.

[0049] At step 540 of the method, the bladder is prepared for use. If the bladder is removed from the toy for filling, the bladder is placed back into the internal cavity and re-attached to the drinking straw 15. If the bladder is not removed from the toy for filling, then the opening is closed with the bladder located inside. In either case, the opening on the bladder itself for the liquid must be closed. The toy is now ready for use by the child.

[0050] Accordingly, the drinking apparatus 10 is designed to permit a child to store, carry and consume drinking water or other fluids from the internal bladder through the drinking apparatus within the toy while it is being carried, held or otherwise utilized by the user. The user fills the internal bladder with drinking water or other fluid of the user's choice through the mouth in the internal bladder and secures the cap on the mouth. The user then closes the opening in the back of the body of the toy. Once the internal bladder is filled and the opening in the back of the body is closed, the user is able to drink the liquid stored in the internal bladder by utilizing the drinking apparatus that is protruding from the drinking cup affixed to the front are of the toy.

[0051] While various embodiments have been described and illustrated herein, those of ordinary skill in the art will readily envision a variety of other means and/or structures for performing the function and/or obtaining the results and/or one or more of the advantages described herein, and each of such variations and/or modifications is deemed to be within the scope of the embodiments described herein. More generally, those skilled in the art will readily appreciate that all parameters, dimensions, materials, and configurations described herein are meant to be exemplary and that the actual parameters, dimensions, materials, and/or configurations will depend upon the specific application or applications for which the teachings is/are used. Those skilled in the art will recognize, or be able to ascertain using no more than routine experimentation, many equivalents to the specific embodiments described herein. It is, therefore, to be understood that the foregoing embodiments are presented by way of example only and that, within the scope of the appended claims and equivalents thereto, embodiments may be practiced otherwise than as specifically described and claimed. Embodiments of the present disclosure are directed to each individual feature, system, article, material, kit, and/or method described herein. In addition, any combination of two or more such features, systems, articles, materials, kits, and/or methods, if such features, systems, articles, materials, kits, and/or methods are not mutually inconsistent, is included within the scope of the present disclosure.

What is claimed is:

1. A toy configured to enable hydration, the toy comprising:

- a body, the body defining an internal cavity;
- a first arm and a second arm extending outwardly from the body, wherein the first arm defines an arm cavity extending from the internal cavity to a distal end opening of said first arm;

- a bladder disposed within the internal cavity; and
- a straw having first and second ends, the first end of said straw in fluid communication with the bladder, the straw extending from the bladder through the arm cavity, and the second end of said straw extending through said distal end opening of said first arm.

2. The toy of claim 1, further comprising first and second legs.

3. The toy of claim 1, further comprising a drinking apparatus located at the distal end opening of the first arm, the drinking apparatus comprising a drinking cup.

4. The toy of claim 3, wherein all or a portion of the drinking cup is located within the arm cavity.

5. The toy of claim 1, wherein the drinking straw comprises a spill-proof tip on the second end.

6. The toy of claim 1, wherein the straw comprises a flange located at the second end of the straw, wherein the flange is configured to prevent the second end of the straw from being pulled into the arm cavity.

7. The toy of claim 1, further comprising an opening to the internal cavity.

8. The toy of claim 1, wherein the internal cavity and arm cavity are lined with a fabric.

9. The toy of claim 1, wherein the internal cavity and arm cavity are lined with a waterproof material.

10. The toy of claim 1, wherein the bladder comprises an opening configured to allow the bladder to be filled with liquid.

11. The toy of claim 1, wherein the bladder is flexible.

12. The toy of claim 1, wherein the bladder is reversibly removable from the internal cavity.

13. A toy configured to enable hydration, the toy comprising:

- a body, the body defining an internal cavity and an opening to the internal cavity;
- a first arm and a second arm extending outwardly from the body, wherein the first arm defines an arm cavity extending from the internal cavity to a distal end opening of said first arm;
- a drinking apparatus located at the distal end opening of the first arm, the drinking apparatus comprising a drinking cup;
- a removable flexible bladder disposed within the internal cavity, the bladder comprising an opening configured to allow the bladder to be filled with liquid; and
- a straw having first and second ends, the first end of said straw in fluid communication with the flexible bladder and the second end of the straw in fluid communication with the drinking cup, the straw extending from the flexible bladder through the arm cavity, and the second end of said straw extending through said distal end opening of said first arm to said drinking apparatus.

14. The toy of claim 1, wherein the straw comprises a flange located at the second end of the drinking straw, the flange configured to prevent the second end of the drinking straw from being pulled into the arm cavity.

15. A method for preventing dehydration, the method comprising the steps of:

- providing a toy, the toy comprising: (i) a body defining an internal cavity; (ii) a first arm and a second arm extending outwardly from the body, wherein the first arm defines an arm cavity extending from the internal cavity to a distal end opening of said first arm; (iii) a flexible bladder disposed within the internal cavity; and (iv) a

straw having first and second ends, the first end of said straw in fluid communication with the bladder, the straw extending from the bladder through the arm cavity, and the second end of said straw extending through said distal end opening of said first arm;

removing the bladder from the internal cavity;

filling the bladder with a liquid; and

replacing the bladder in the internal cavity.

16. The method of claim **15**, wherein the toy further comprises a drinking apparatus located at the distal end opening of the first arm, the drinking apparatus comprising a drinking cup.

17. The method of claim **15**, wherein all or a portion of the drinking cup is located within the arm cavity.

18. The method of claim **15**, wherein the straw comprises a flange located at the second end of the straw, wherein the flange is configured to prevent the second end of the straw from being pulled into the arm cavity.

19. The method of claim **15**, wherein the internal cavity and arm cavity are lined with a fabric.

20. The method of claim **15**, wherein the internal cavity and arm cavity are lined with a waterproof material.

* * * * *