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(54) **WATERCRAFT INCLUDING A FLOATABLE SLIDE AND A BOAT**

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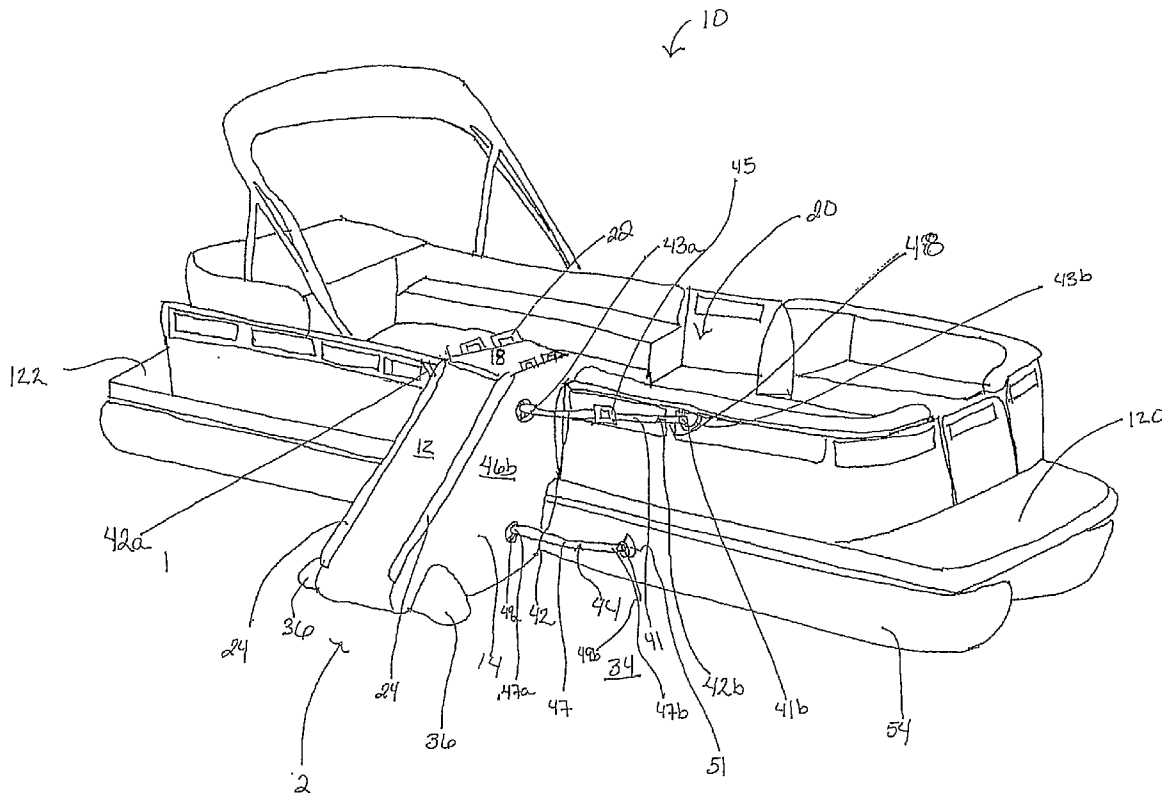
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(57) **ABSTRACT**

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The invention features a watercraft that includes a boat and a floatable slide coupled to at least one side wall of the boat.



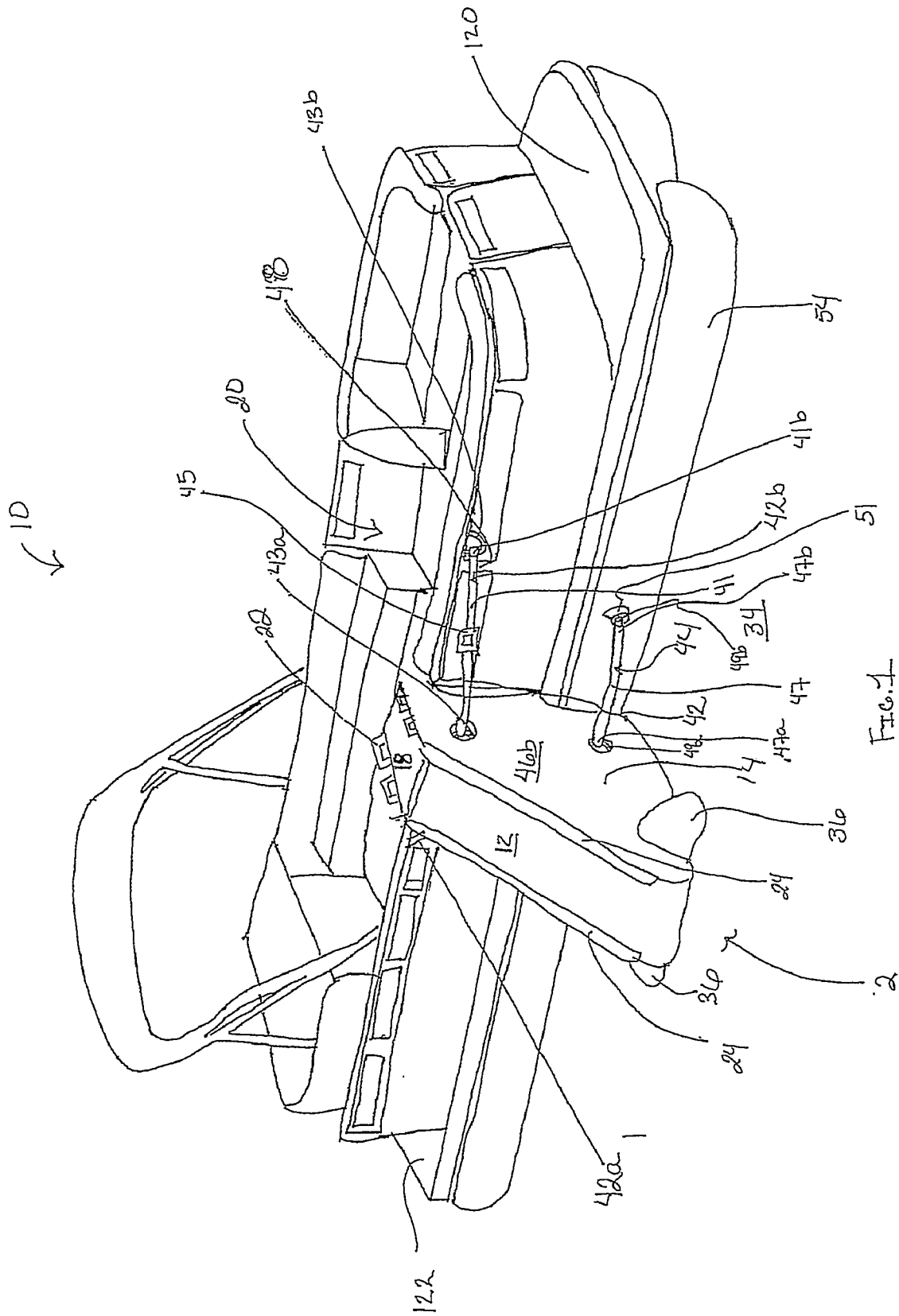


FIG. 1

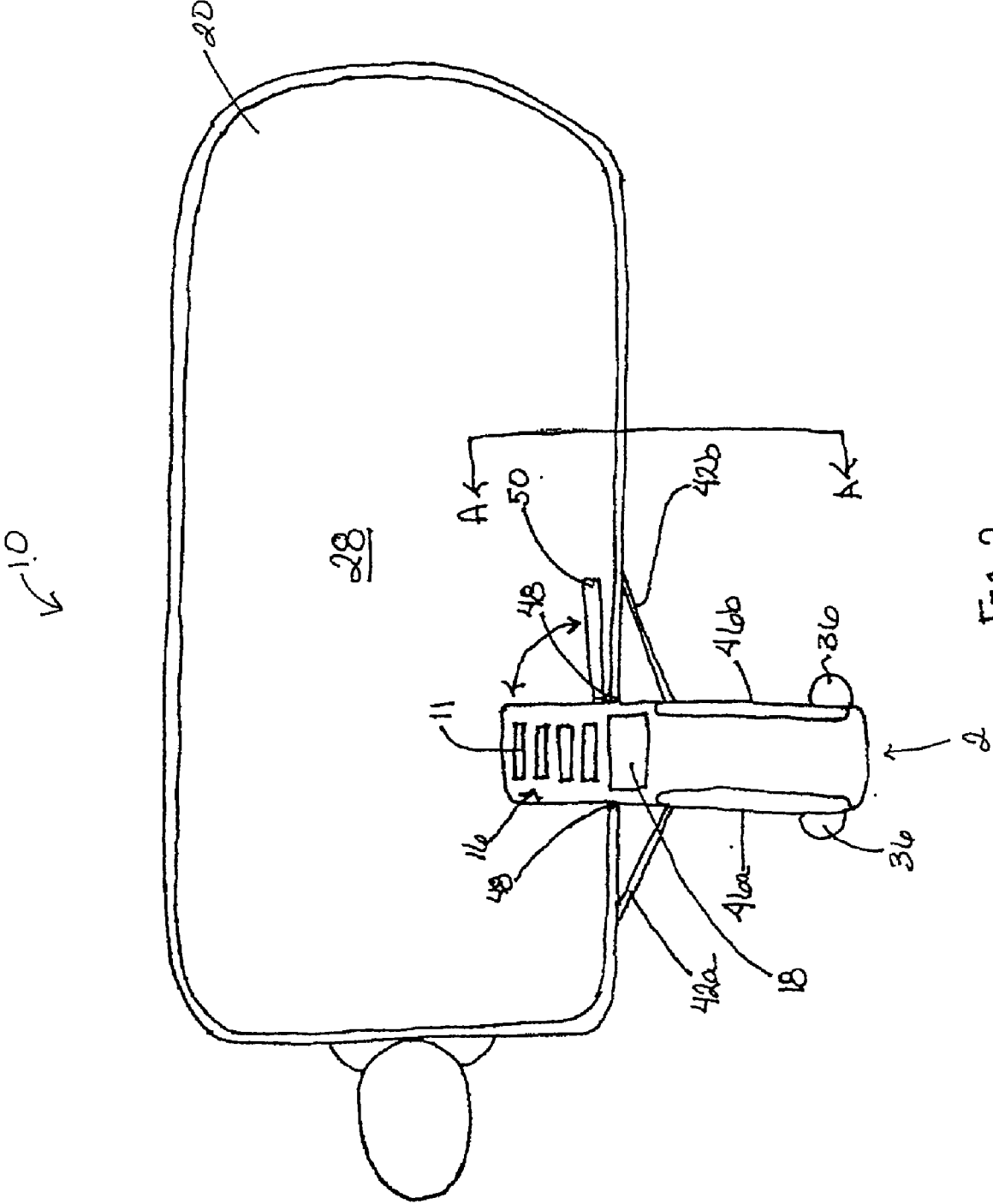


FIG. 2

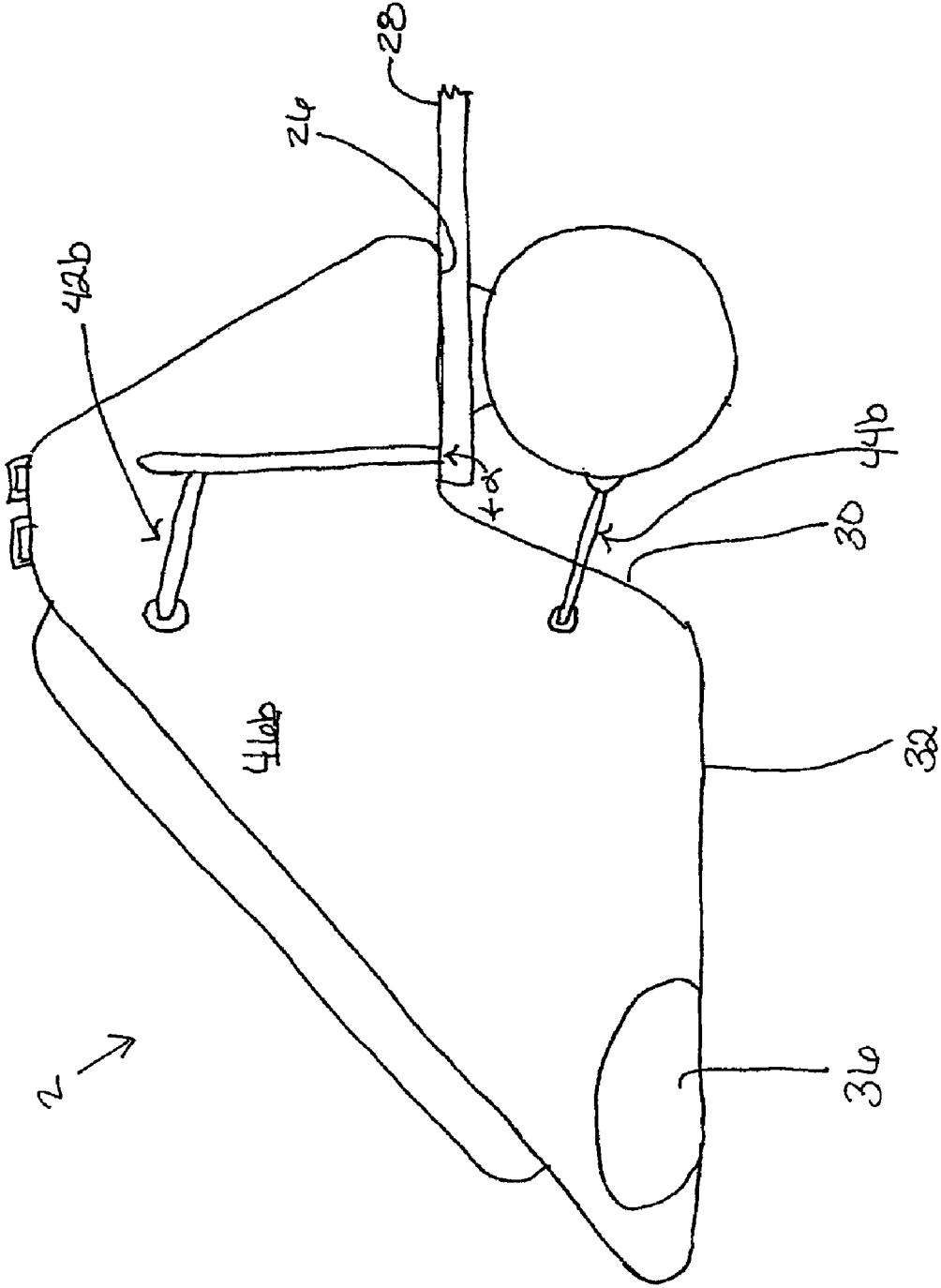
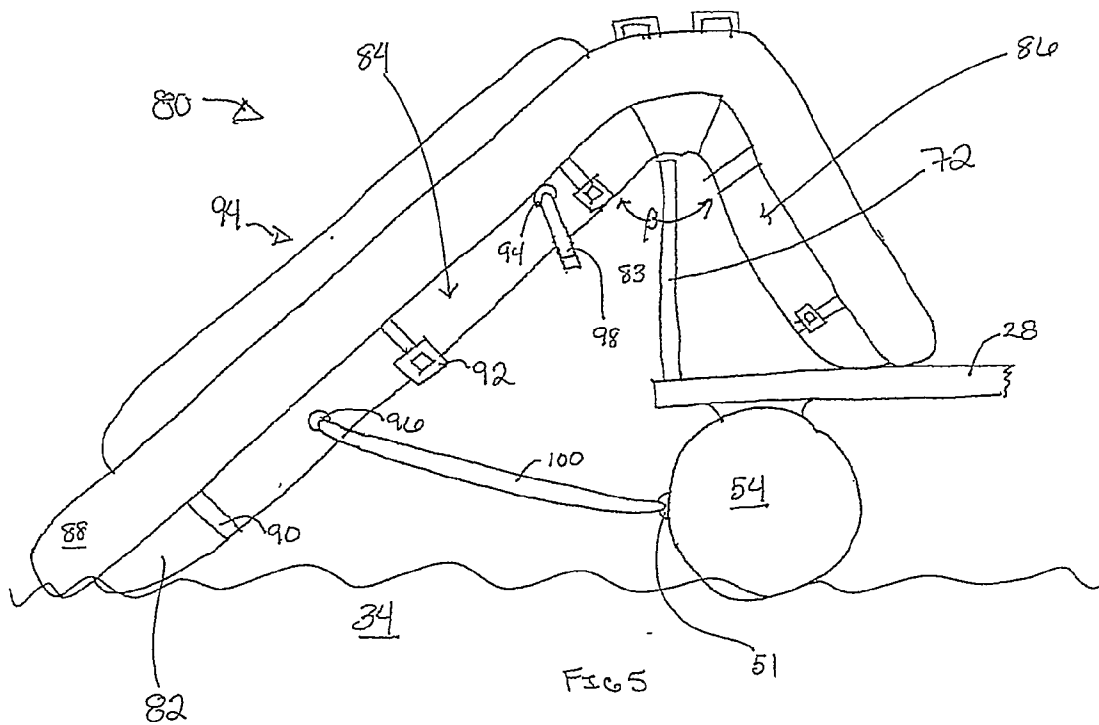
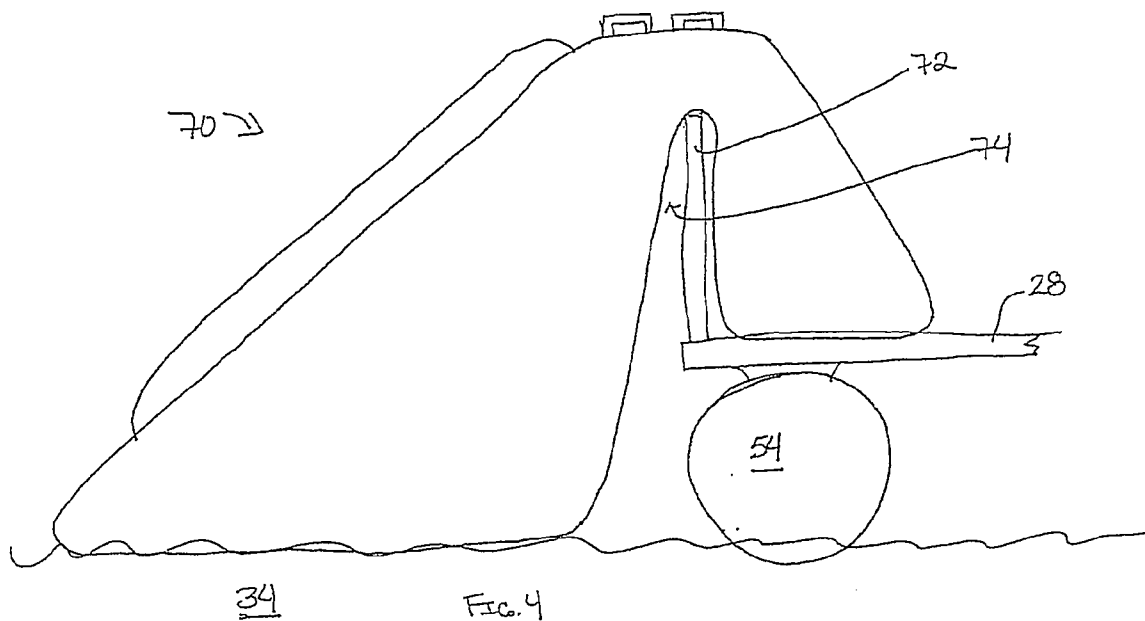


FIG. 3



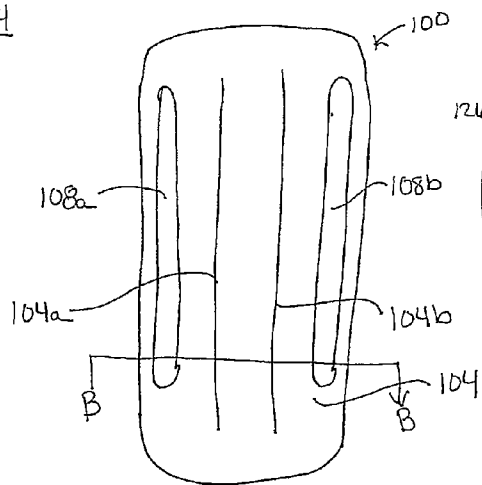
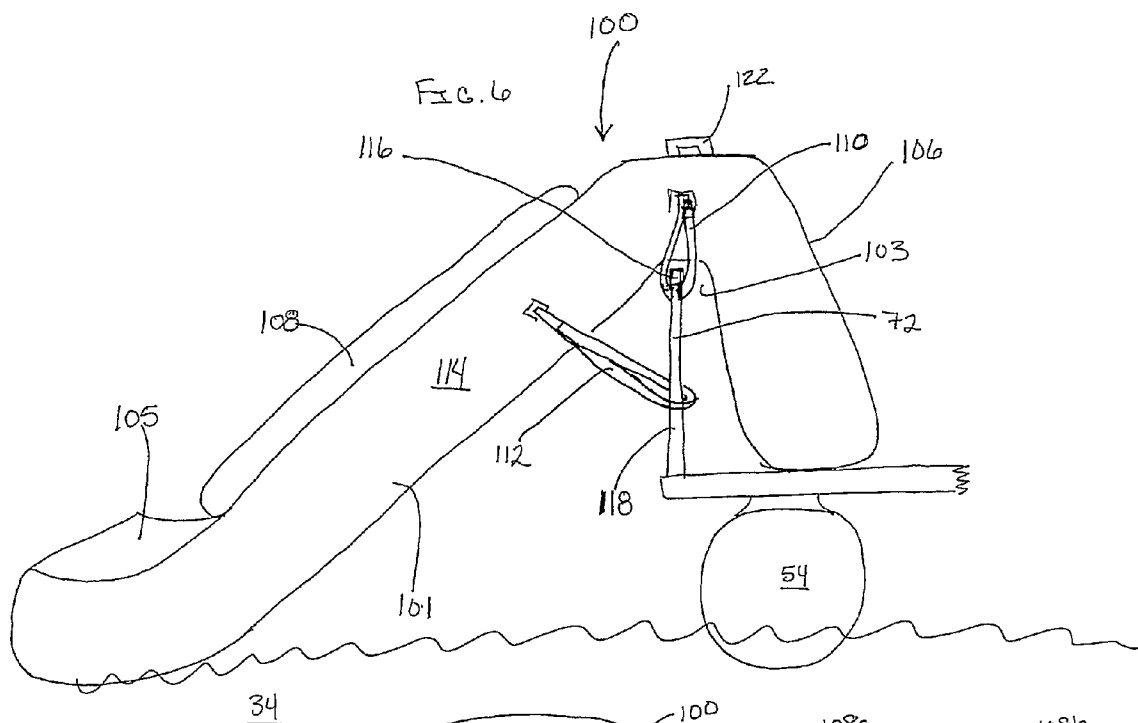
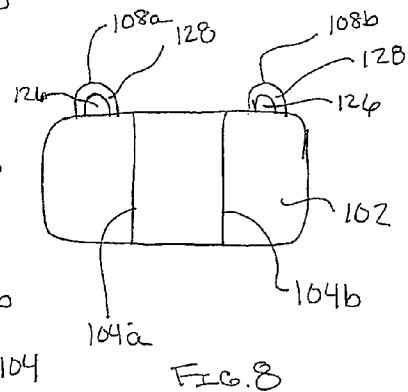


FIG. 7



WATERCRAFT INCLUDING A FLOATABLE SLIDE AND A BOAT

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application No. 61/046,648 filed Apr. 21, 2008, and incorporated herein.

BACKGROUND

[0002] The invention is directed to coupling a floatable slide to a boat.

[0003] Speed boats, deck boats and pontoon boats have been used with great enjoyment on a variety of bodies of water such as lakes, rivers and oceans. People have used boats to travel across water, sometimes at high speeds, to pull water skiers, and to pull riders on inflatable towable crafts such as inner tubes.

[0004] A variety of other devices have been developed to further enhance and expand upon the way in which people enjoy various bodies of water. Such devices include jet skis, parasailing, and large swim platforms. More recently people have begun using inflatable trampolines, which provide a jump surface on the water that is anchored in place so that it does not float away. The enjoyment of these trampolines is often enhanced by attaching various floatable articles such as additional bounce platforms, running platforms, inner tubes and slides to the trampoline.

SUMMARY

[0005] In one aspect, the invention features a floatable slide coupled to the side wall of a boat. In one embodiment, the slide is hooked over the gunwale (i.e., side wall) of the boat. In some embodiments, the boat is a pontoon boat that includes a deck, and at least one pontoon, the side wall is a side railing, and the floatable slide is coupled to the side railing. In one embodiment, the slide is detachable from the boat. In another embodiment, the slide is inflatable.

[0006] In other embodiments, the slide is constructed to sit within an opening defined by a side rail gate of a pontoon boat, to slide over the side rail gate of a pontoon boat, to slide over a front rail gate of a pontoon boat, or a combination thereof.

[0007] The invention features a slide that is floatable on water and that is easily attached to and removed from the side wall of a boat.

[0008] Other features and advantages will be apparent from the following description of the drawings, the preferred embodiments, and from the claims. In the figures, like numbers are used to represent like elements.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. 1 is a perspective view of a watercraft that includes a floatable slide attached to a pontoon boat.

[0010] FIG. 2 is a top view of the watercraft of FIG. 1.

[0011] FIG. 3 is an enlarged view taken in cross section along line A-A of FIG. 2.

[0012] FIG. 4 is a side view of a floatable slide coupled to a side rail of a pontoon boat according to another embodiment.

[0013] FIG. 5 is a side view of a floatable slide coupled to a side rail of a pontoon boat according to another embodiment.

[0014] FIG. 6 is a side view of a floatable slide coupled to a side rail of a pontoon boat according to another embodiment.

[0015] FIG. 7 is a top view of the floatable slide of FIG. 6.

[0016] FIG. 8 is a view taken in cross section along line B-B of FIG. 7.

DETAILED DESCRIPTION

[0017] FIGS. 1-3 illustrate a watercraft 10 that includes an inflatable slide 2 attached to a pontoon boat 20. The slide 2 includes an inclined sliding surface 12 disposed on a base 14, a ladder 16 of multiple steps 11 leads to a sitting platform 18, and handles 22 positioned along the perimeter of the sitting platform 18 to enable a user to grip the slide 2 and to assist the user in climbing the ladder 16 and sitting down on the sitting platform 18. A user climbs the steps 11 of the ladder 16 sits on the sitting platform 18 and slides down the sliding surface 12. Additional handles optionally can be positioned along the perimeter of the ladder 16 to assist in climbing the ladder 16. The inclined sliding surface 12 is flanked by two guide rails 24. The base 14 is generally wedge-shaped and includes a first substantially horizontal portion 26 that is available for contact with the deck 28 of the pontoon boat 20. The base 14 also includes an inclined portion 30 that extends away from the first substantially horizontal portion 26, preferably at an angle a greater than 90 degrees to the first substantially horizontal portion 26 of the base 14. The inclined portion 30 terminates at a second substantially horizontal portion 32 of the base 14. The second substantially horizontal portion 32 of the base 14 is available for contact with the surface of a body of water 34 when the slide 2 is positioned on the pontoon boat 20 and the pontoon boat 20 is floating on the body of water 34. Optional side stabilizers 36 extend from the base 14 of the slide 2 to impart additional stability to the slide 2.

[0018] The slide 2 is positioned in the opening formed when a side rail gate 50 of the pontoon boat 20 is in the open position and is secured to the boat 20 through attachment mechanisms 42, 44 on either side 46a, 46b of the slide 2. The vertical sides 46a, 46b of the slide 2 preferably contact and press against the side rails 48 that define the opening in which the side rail gate 50 sits when the gate 50 is in the closed position. The side rails 48 on either side of the slide 2 can impart a stabilizing function to the slide 2.

[0019] The slide attachment mechanisms 42, 44 are positioned on the exterior side walls 46 of the slide 2. A first attachment mechanism 42 is positioned on a portion of the side wall relatively closer to the sitting platform 18 and sliding surface 12 of the slide 2 and a second attachment mechanism 44 is located on a portion of the side wall 46 relatively closer to the water contacting surface 32 of the base 14 of the slide 2. Duplicate first and second attachment mechanisms 42, 44 are located on each side 46a, 46b of the slide 2 to enable the slide 2 to be secured to the boat 20 in a stable manner. The first attachment mechanisms 42a, 42b are coupled to the side rails 48 of the boat on opposite sides of the slide 2. The second attachment mechanisms 44a, 44b are coupled to a pontoon 54 of the boat 20. The first and second attachment mechanisms 42, 44 can be of any suitable construction including, e.g., a bungee cord, rope, and woven web straps) attached to a connector on the slide and connector on boat or pontoon. Suitable connectors include rings (e.g., O-, D-, triangle, and polygonal (e.g., square and rectangle), rings), clamps, clips, male female connectors, U joints and combinations thereof. One useful mechanism for attaching the connector to the pontoon is by a suction cup. In FIG. 1 the attachment mechanism 42 includes a first end 41a of a strap 41 attached to an O-ring 43a on the slide 2 through a first hook positioned at the

first end **41a** of the strap **41** and a second end **41b** of the strap **41** is attached to an O-ring **43b** on the boat **20** through a second hook. The strap **41** includes a buckle **45** that enables the strap **41** to be tightened and loosened to alter the tension on the strap **41**. An identical configuration (not shown) is present on the opposite side of the slide. A second attachment mechanism **44** located near the base of the slide **2** includes a second strap **47** attached at a first end **47a** to an O-ring **49a** on the side of the slide **2** and at a second end **47b** to an O-ring **49b** attached to the pontoon **54** through a suction cup **51**. An identical configuration (not shown) is present on the opposite side of the slide. The second strap can optionally include a buckle that enables the second strap to be tightened and loosened to alter the tension on the strap.

[0020] A first substantially flat horizontal portion **26** of the base **14** of the slide **2** sits on the deck **28** of the pontoon boat **20** such that a user can climb the ladder **16** of the slide **2** by stepping from the surface of the deck **28** onto the ladder **16**.

[0021] Other embodiments are within the claims. The steps of the ladder can be in a variety of forms including, e.g., pockets extending into the base of the slide, rungs attached to the slide (e.g., rope, woven webbing, polymeric and combinations thereof), and combinations thereof. Although the slide is illustrated as being generally wedge-shaped, it could have a variety of configurations. FIG. 4 illustrates an embodiment of a slide **70** that is positionable over the side rail **72** of a pontoon boat **20**. The slide **70** includes a slot **74** dimensioned to receive the side rail **72**. The opening that defines the slot **74** is relatively narrow to provide a close fit between the surface of the slot **74** and the side rail **72**, which functions to assist in stabilizing the slide **70** in position on the pontoon boat. The slide **70** can optionally include additional attachment mechanisms (e.g., attachment mechanisms **42**, **44** described above), for attaching, stabilizing and securing the slide **70** to the boat **20**.

[0022] FIG. 5 illustrates another embodiment of the slide **80**. The slide **80** sits over the side rail **72** of the boat **20** and contacts the deck **28** of the boat. The slide **80** includes two cylindrical tubes **82** (only one of which is shown) positioned adjacent one another along their longitudinal extents. The tubes **82** include a first cylindrical portion **84** having a relatively longer longitudinal extent and a second cylindrical portion **86** having a relatively shorter longitudinal extent extending at an angle **D** to the second portion **86**. The second portion **86** extends toward and contacts the deck **28** of the boat **20** while the first portion **84** extends toward and contacts the water **34**. The opening **83** defined by the first and second cylindrical portions **84**, **86** accommodates the side rail **72**.

[0023] Each tube **82** of the slide **80** includes a valve for inflating and deflating the tubes. The two tubes **82** are enveloped by a sheet **88** (e.g., a polyvinyl chloride sheet). The sheet **88** surrounds the two cylindrical tubes **82** and is secured in place around the two tubes **82** with straps **90** woven through buckles **92**. Alternatively, the slide can be constructed from a single tube or a single air chamber of multiple configurations.

[0024] The slide **80** optionally includes two attachment rings **94**, **96** attached to the sides of the slide **80**. Straps **98**, **100** pass through the attachment rings **94**, **96**. The first strap **98** attaches to a portion of the side rail **72** of the boat **20**. The second strap **100** attaches to the pontoon **54**. The straps **98**, **100** are pulled taught to further secure the slide **80** in position against the boat **20**. The straps **98**, **100** can be attached to any feature of the boat that aids in imparting stability to the slide.

[0025] FIGS. 6-8 illustrate another embodiment of the slide **100**. The slide **100** sits over the side rail **72** of the boat **20** and contacts the deck **28** of the boat. The slide **100** includes a continuous chamber **102** that includes two supporting baffles **104a**, **104b** extending along the longitudinal extent thereof. In other embodiments, the chamber can include any number of supporting baffles. The continuous chamber **102** include a first portion **101** having a relatively longer longitudinal extent and a second portion **106** having a relatively shorter longitudinal extent. The second portion **106** extends toward and contacts the deck **28** of the boat **20** while the first portion **101** extends toward and contacts the water **34**. In other embodiments, the length of the second portion **106** is adjusted to have it contact another part of the watercraft (e.g., the second portion can be shortened so as to rest on the seat of the watercraft). The first portion **101** terminates in a platform **105**, which is optionally forms a relatively horizontal area relative to the surface of the water **34**. The opening **103** defined by the first and second portions **101**, **106** accommodates the side rail **72**. The slide **100** includes two side rails **108a**, **108b**, each of which includes an inflatable tube **126** optionally encased in a covering **128**, e.g., a woven fabric. The covering **126** optionally includes a zipper and the tube **126** is optionally removable.

[0026] The slide **100** attaches to the side rail **72** of the boat **20** through straps **110**, **112** on each side **114** of the slide **100**. The first strap **110** loops around the top **116** (e.g., horizontal extent) of the side rail **72** and the second strap **112** loops around a vertical extent **118** of the side rail **72** on the boat **20**.

[0027] The second portion **106** of the slide includes pockets that are offset from one another and that extend into the body of the slide **100** to enable a user to climb to the top **120** of the slide **100**, optionally with the aid of handles **122**.

[0028] The slide can optionally be attached to an anchor in the water.

[0029] Although the boat is depicted as a pontoon boat, the floatable slide can be coupled to a variety of boat constructions including, e.g., a speed boat, a deck boat, a fishing boat, and an inflatable boat. In one embodiment, the floatable slide is constructed to include a first end that extends over the top edge of the side wall of the boat and is positioned within the boat, and a second end that extends toward and preferably contacts the body of water on which the boat sits. The slide includes an opening (e.g., a slot) for receiving the side wall of the boat. Preferably the opening in the slide for receiving the side wall is dimensioned to form a snug fit between the slide and the side wall of the boat. The opening can be configured to conform substantially exactly to the side wall of the boat, which configuration can differ depending on the nature of the boat to which the slide is to be coupled. Alternatively, the slide is constructed to fit relatively loosely over the side wall of the boat, an example of such a slide construction is illustrated in FIG. 5.

[0030] In another embodiment, a first end of a floatable slide extends from a swim platform of a boat and a second end of the slide extends toward, or even contacts, a body of water on which the boat sits. Swim platforms are often located in the rear (i.e., stern) of the boat behind the transom, in the front (i.e., bow) of a boat, such as on a pontoon boat, or in both areas and include a relatively planar surface from which swimmers launch themselves into the water. The pontoon boat **20** of

FIG. 1, for example, includes two swim platforms **120**, **122**. In such an embodiment, a portion of the floatable slide sits on the surface of the swim platform and is coupled to the boat through connectors.

[0031] The watercraft can also include a ladder, e.g., a rope ladder, attached to at least one of the boat and the slide to enable a user to return to the boat after using the slide.

What is claimed is:

1. A watercraft comprising:
a pontoon boat; and
a floatable slide coupled to at least one side of the pontoon boat.

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