



(19) **United States**

(12) **Patent Application Publication**
Ringenbach et al.

(10) **Pub. No.: US 2022/0340244 A1**

(43) **Pub. Date: Oct. 27, 2022**

(54) **WRISTBAND ALERT FLAG FOR WATER SPORT SAFETY**

Related U.S. Application Data

(60) Provisional application No. 63/281,400, filed on Nov. 19, 2021, provisional application No. 63/179,229, filed on Apr. 24, 2021.

(71) Applicants: **James A. Ringenbach**, Marco Island, FL (US); **Sheila K. Ringenbach**, Marco Island, FL (US); **Calvin J. Ringenbach**, Marco, FL (US); **Thomas J. Ringenbach**, Marco Island, FL (US); **Mason K. Ringenbach**, Marco Island, FL (US)

Publication Classification

(51) **Int. Cl.**
B63C 9/20 (2006.01)
(52) **U.S. Cl.**
CPC **B63C 9/20** (2013.01)

(72) Inventors: **James A. Ringenbach**, Marco Island, FL (US); **Sheila K. Ringenbach**, Marco Island, FL (US); **Calvin J. Ringenbach**, Marco, FL (US); **Thomas J. Ringenbach**, Marco Island, FL (US); **Mason K. Ringenbach**, Marco Island, FL (US)

ABSTRACT

Visual safety device providing a caution wristband and alert flag designed to protect a water sport participant from surrounding boat traffic. The safety device includes a rolled up banner attached to a wristband to be worn by a water sport participant. A downed water sport participant, such as a water skier, wakesurfer, wake boarder, or tuber, manually deploys and waves the alert flag while in the water to notify their boat operator of their location and increasing visibility to oncoming boaters. Once the water sport participant is in a safe position or back on a boat, the alert flag is simply wrapped back into a caution wristband.

(21) Appl. No.: 17/727,536

(22) Filed: **Apr. 22, 2022**

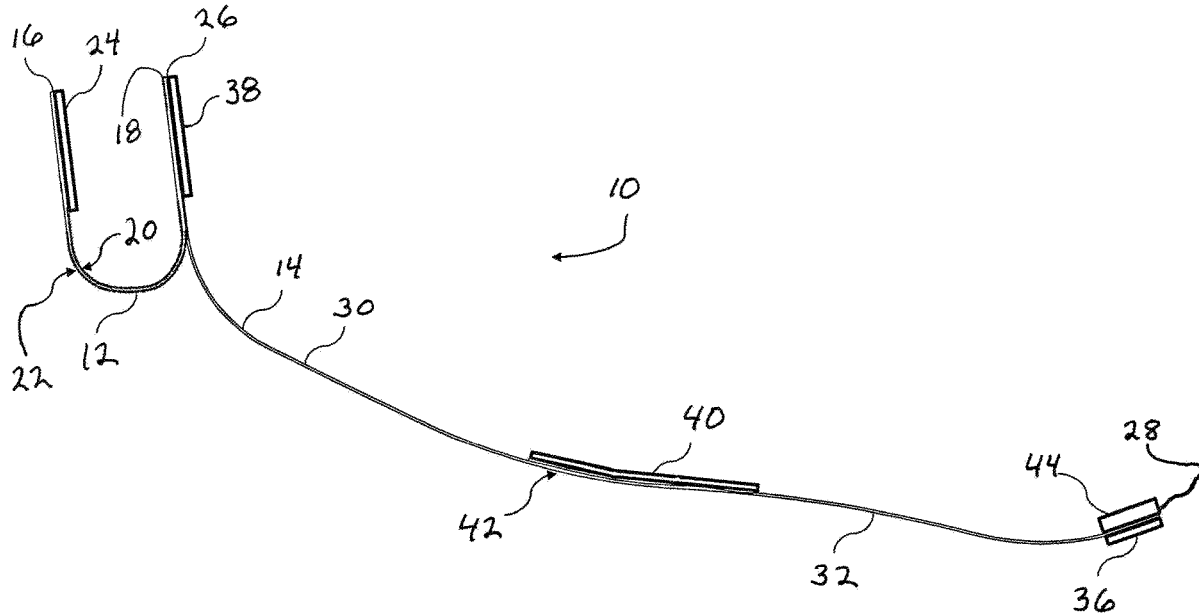
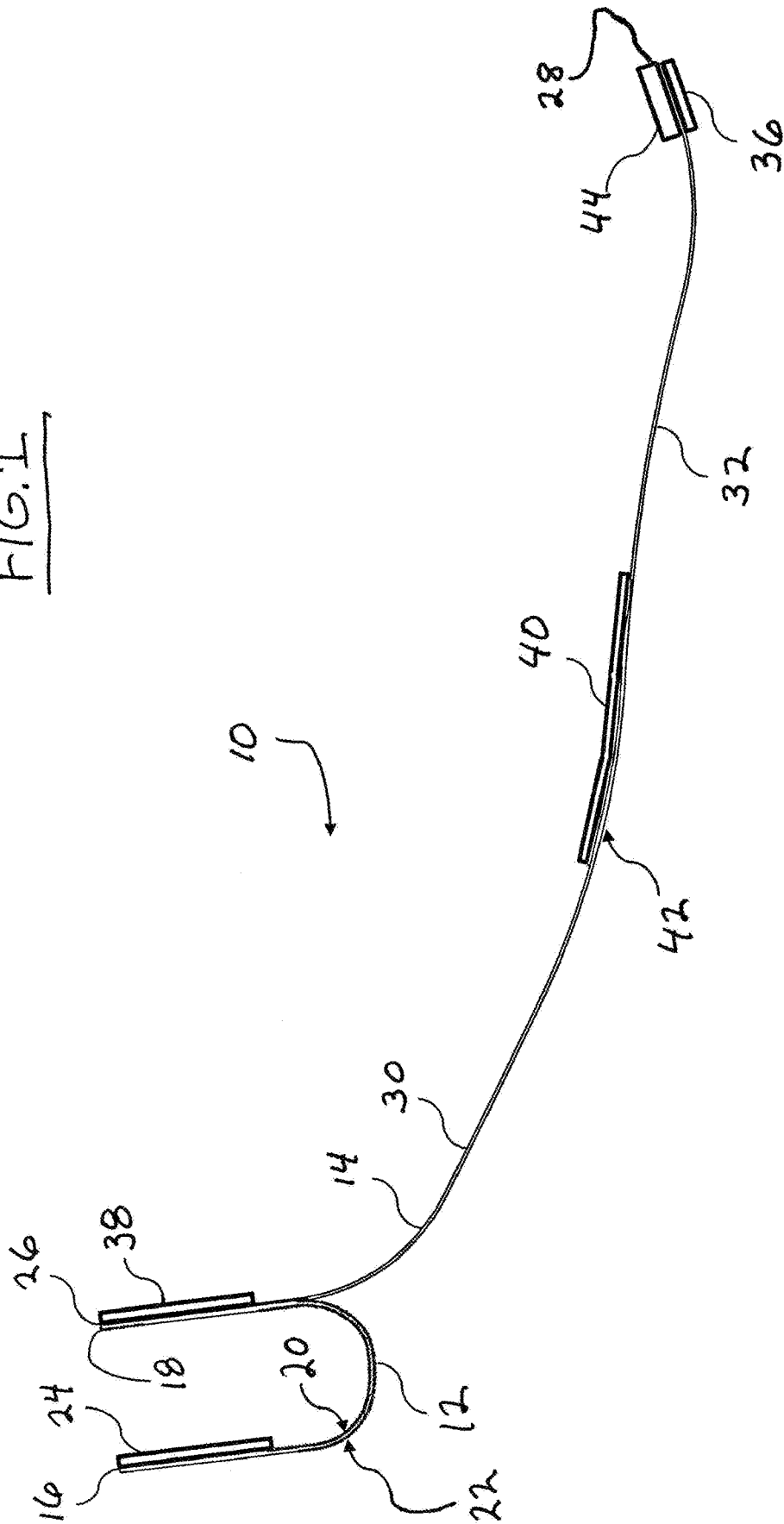
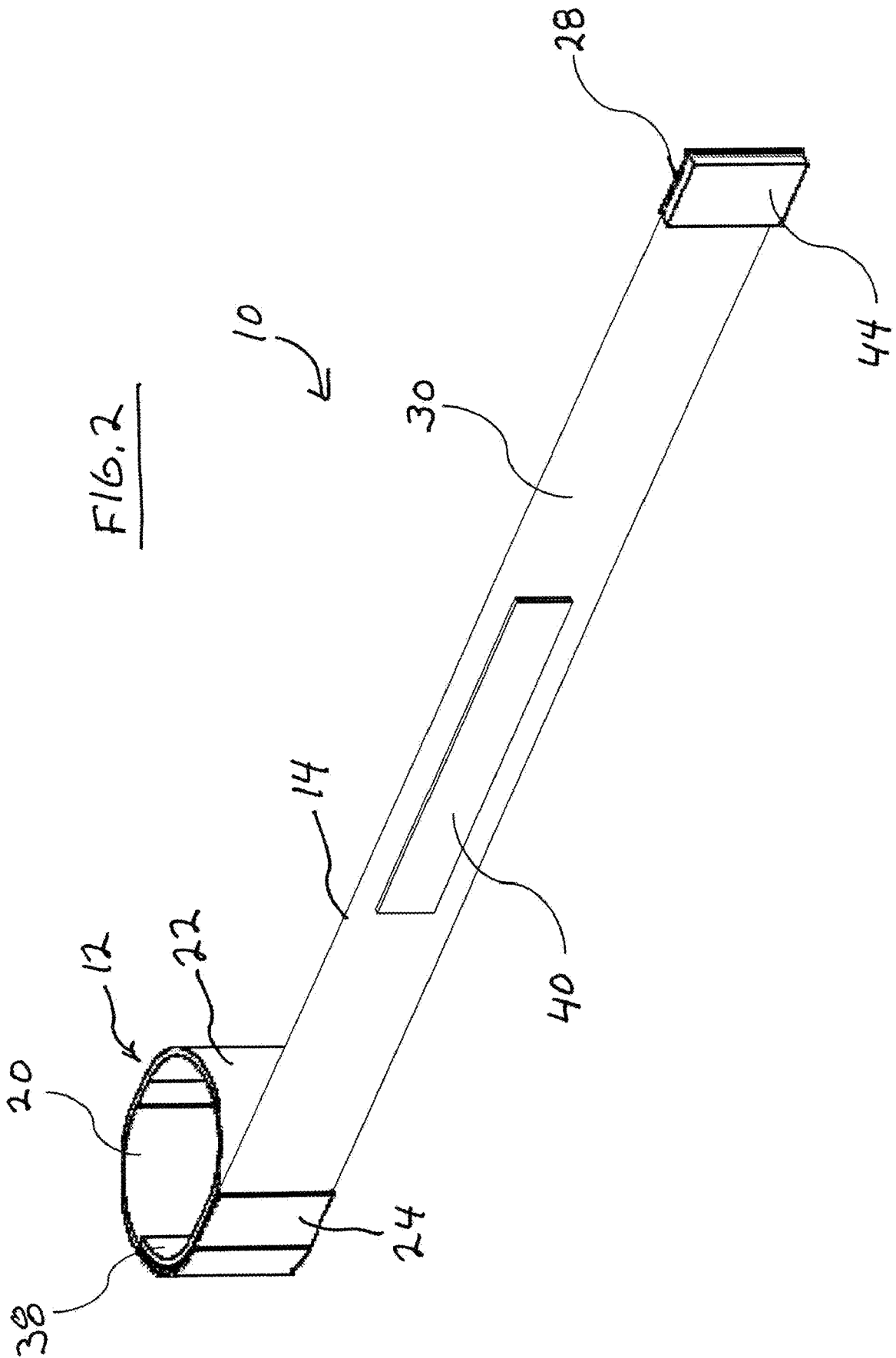
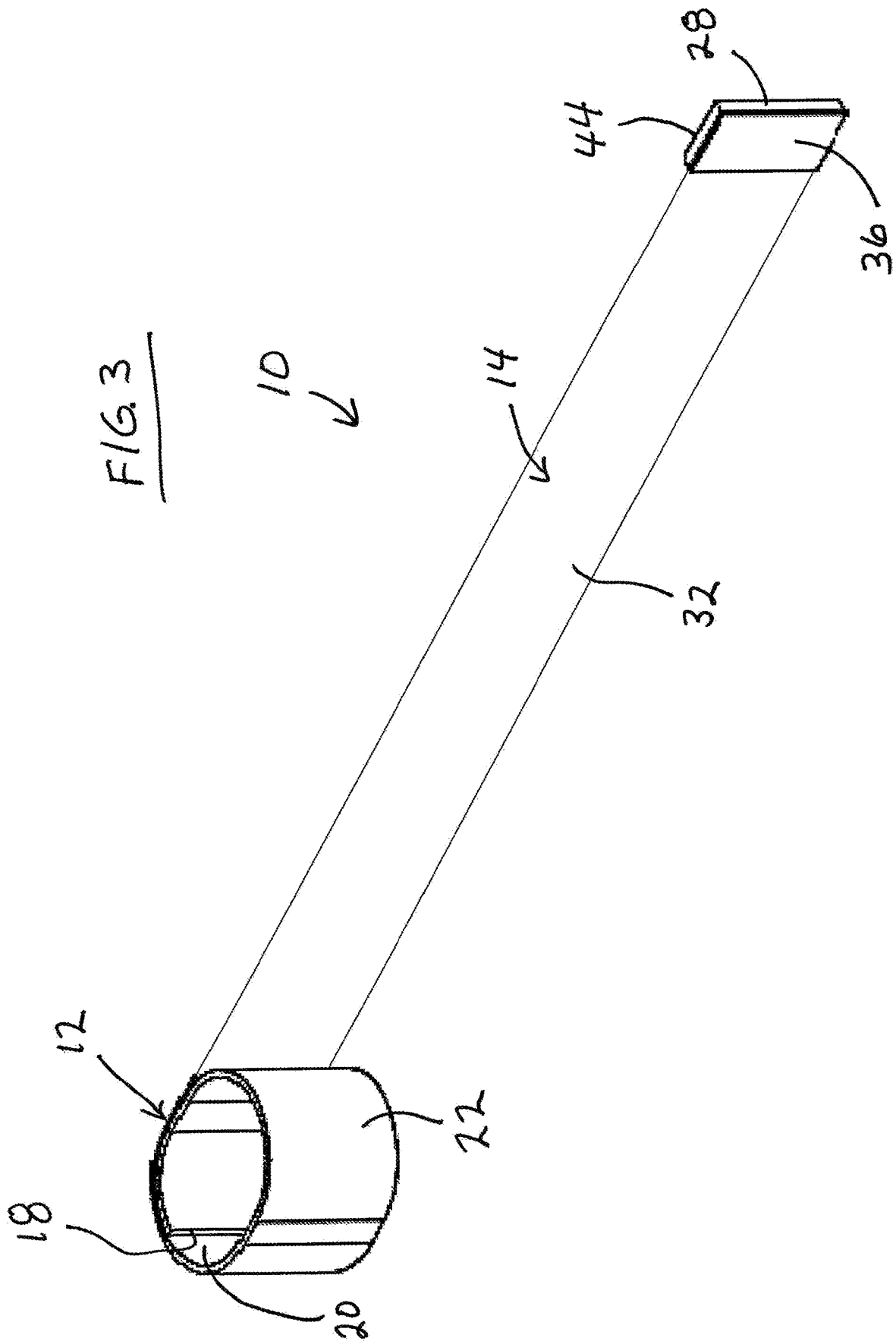


FIG. 1







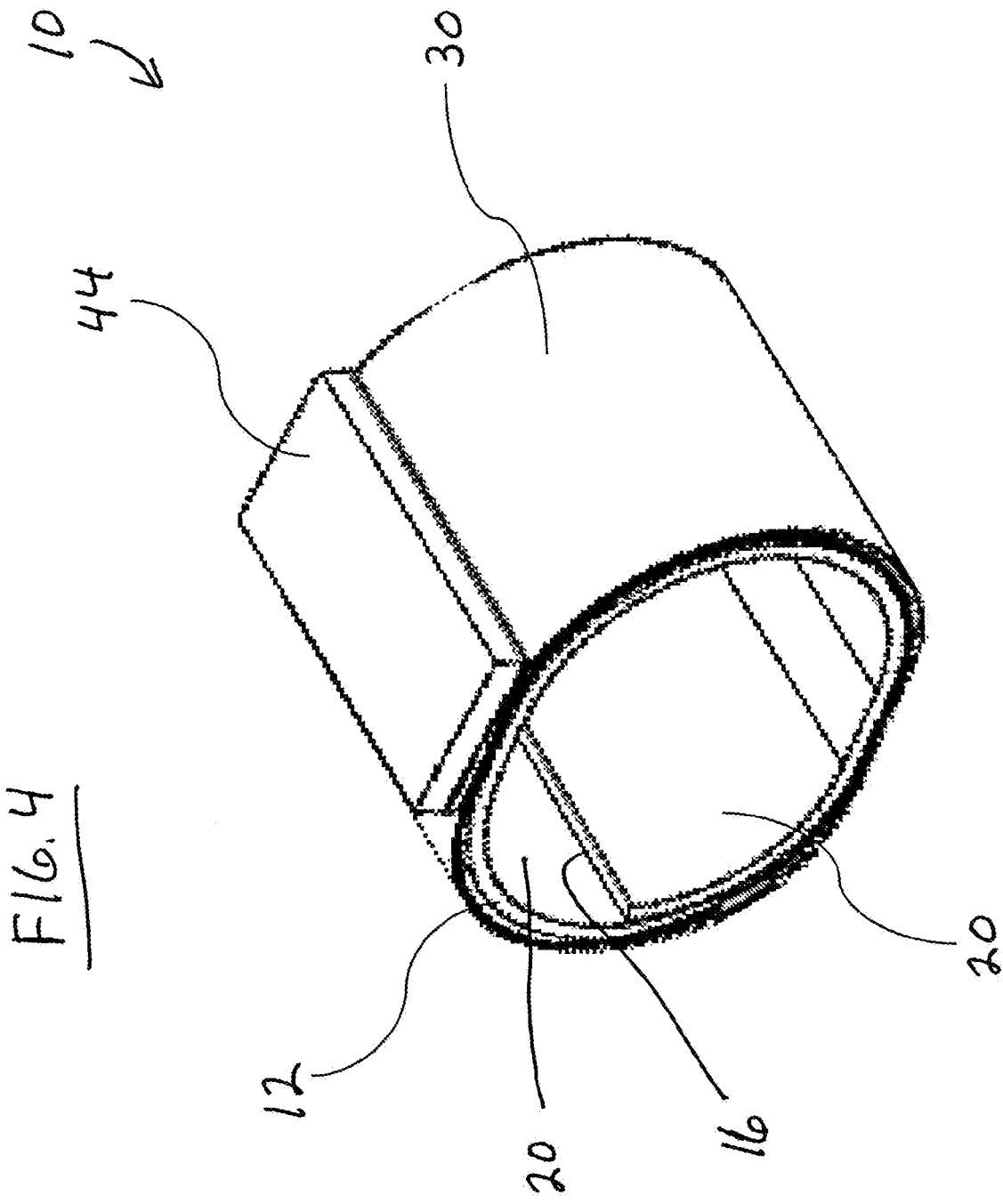
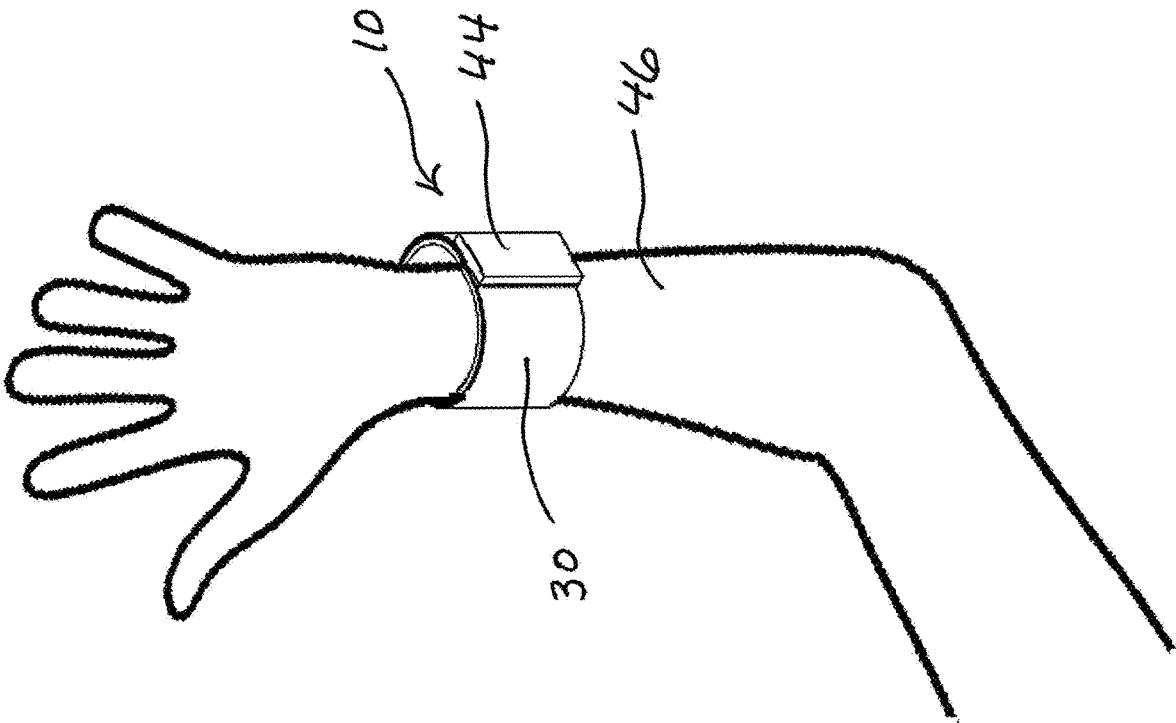


FIG. 4

FIG. 5



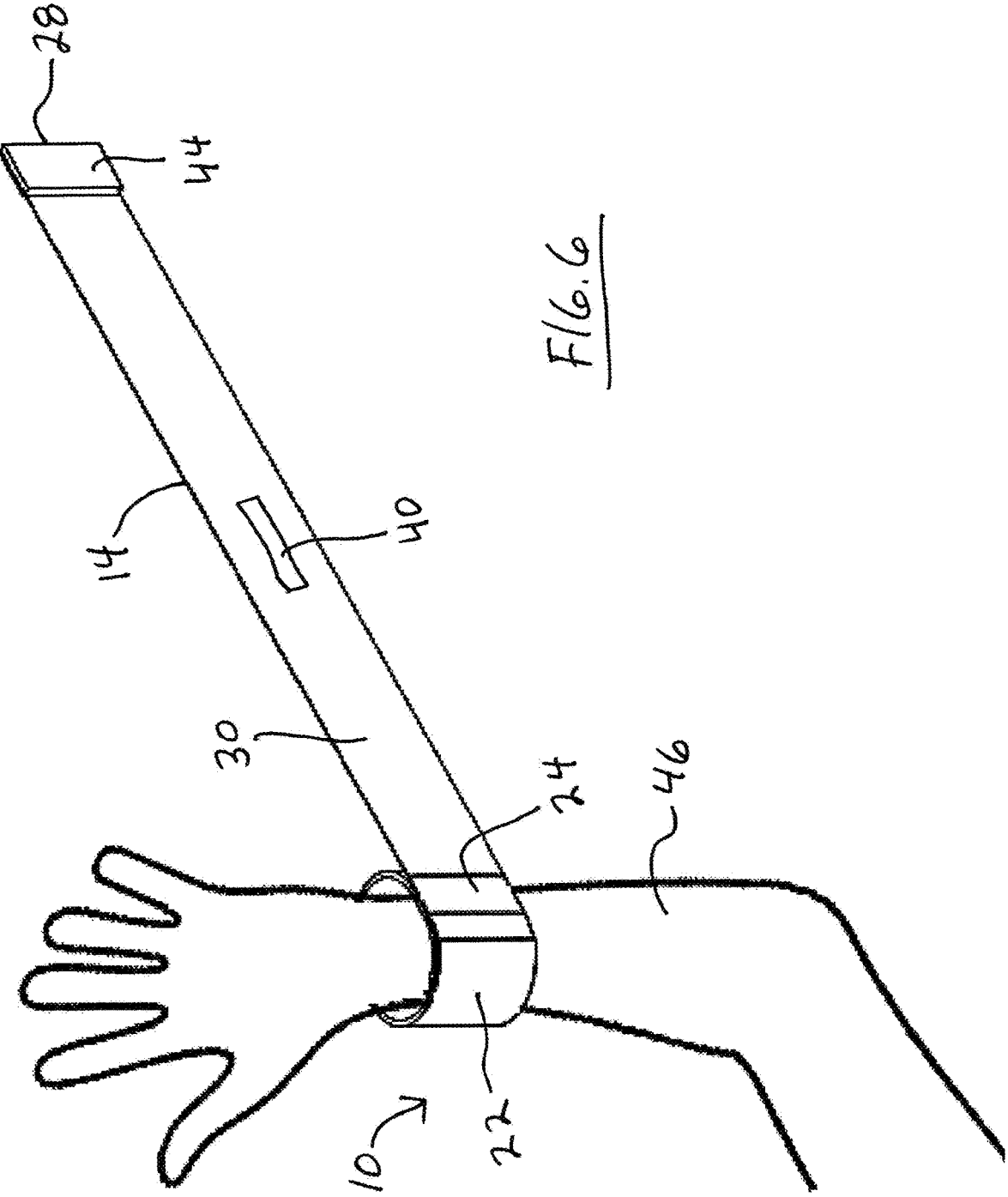
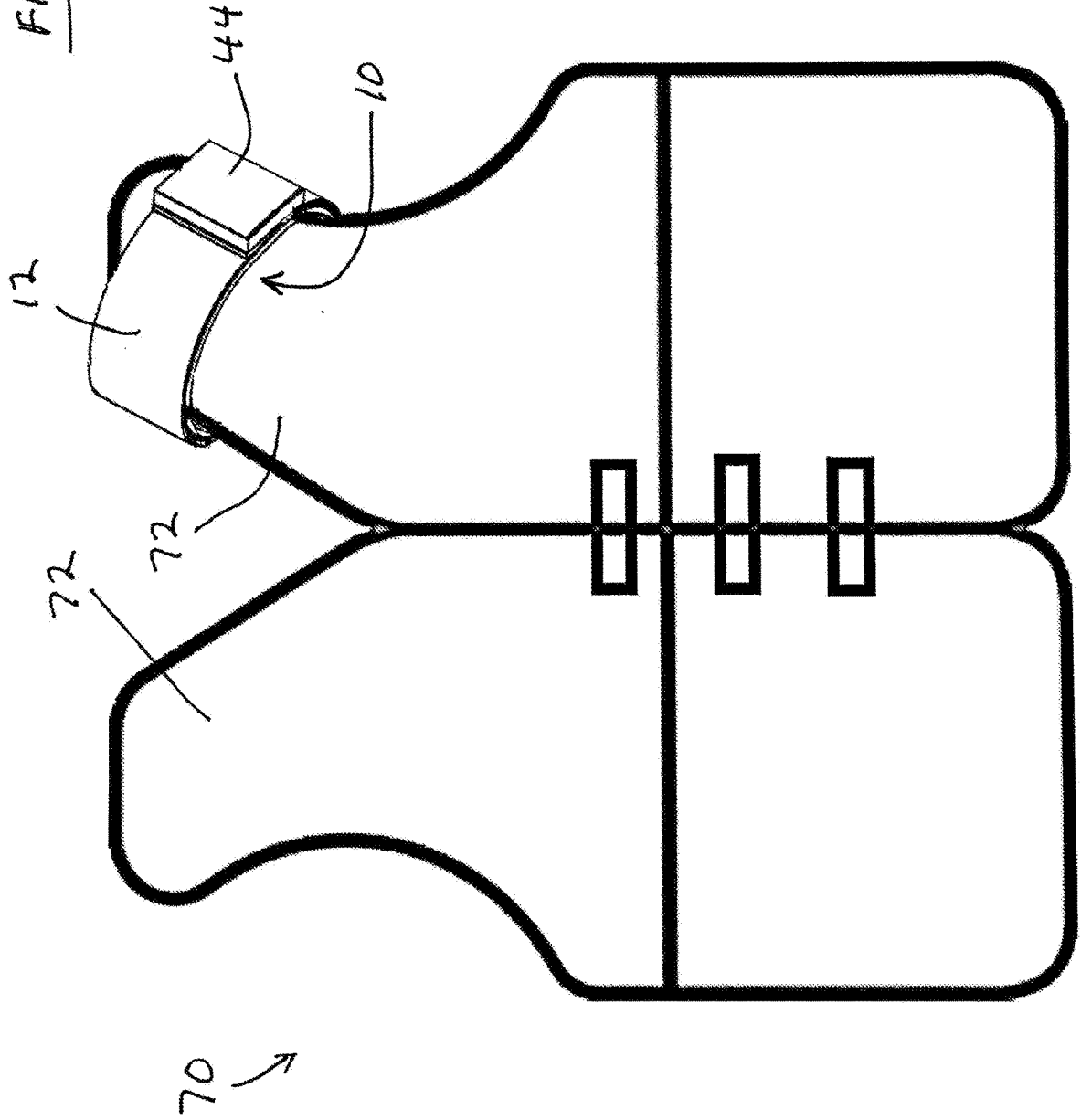
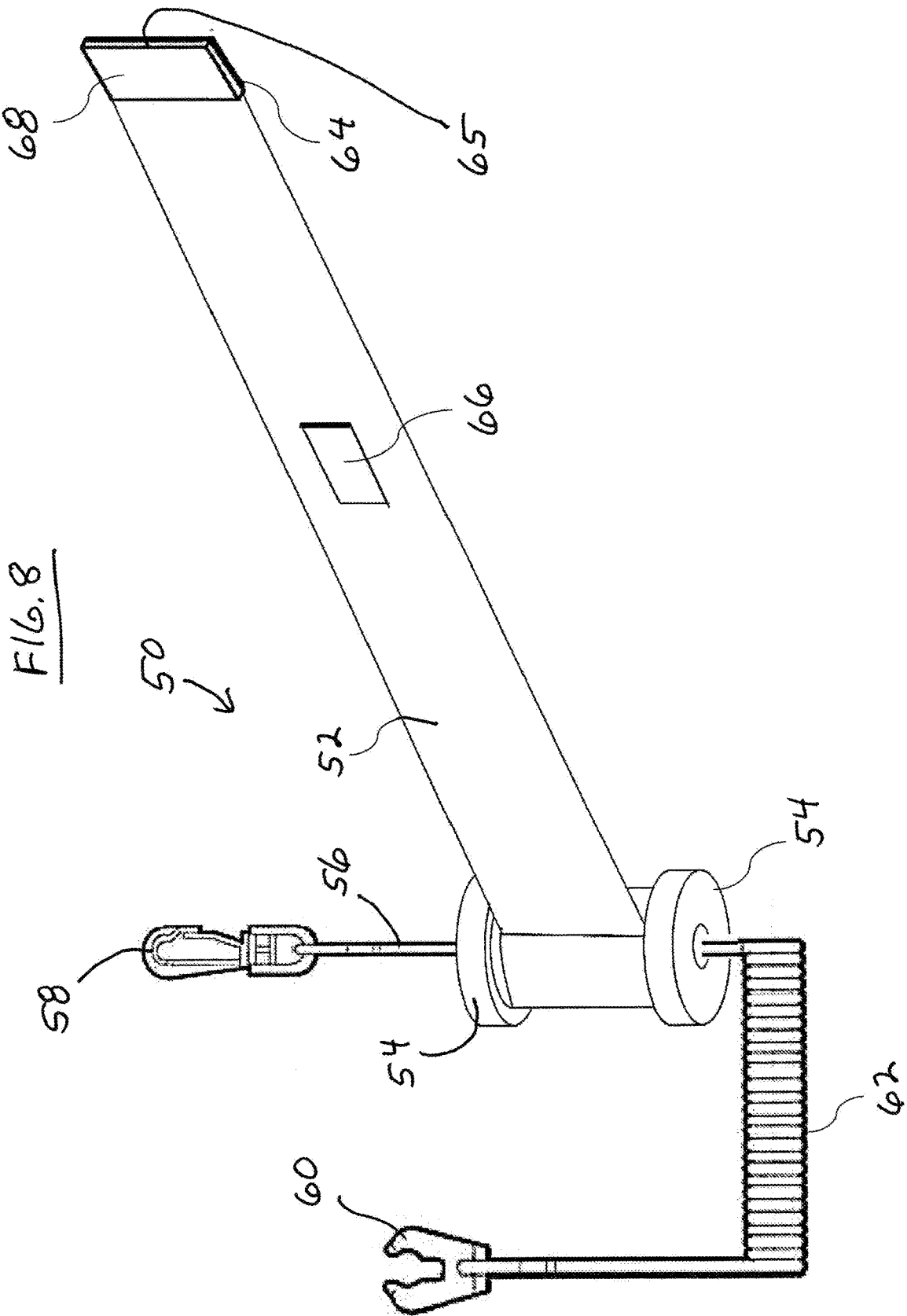


FIG. 6

FIG. 7





WRISTBAND ALERT FLAG FOR WATER SPORT SAFETY

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This patent application claims priority to (1) provisional patent application entitled “Wrist Band Alert Flag” filed on Apr. 24, 2021, having Ser. No. 63/179,229, which is hereby incorporated by reference, and (2) provisional patent application entitled “Hey Wave Rally Flag” filed on Nov. 19, 2021, having Ser. No. 63/281,400, which is hereby incorporated by reference

BACKGROUND OF THE INVENTION

Field of the Invention

[0002] The present invention relates generally to water sport alert devices, and more particularly, to a releasable alert flag for easily locating a person in the water.

Description of Related Art

[0003] Water sports are very popular for people of all ages, and water safety is very important in water sports to prevent injuries, including possibly very serious injuries. Common water sports include water skiing, wakesurfing, wake boarding, and tubing. In all of these water sports, a person participating in such water sports is very likely going to fall into the water at some point, and that person will be alone in the water until the operator of the boat pulling that water skier, wakesurfer, wake boarder, or tuber, can recover and get that person back into the boat. During the time that person is alone floating in the water, the person is vulnerable to being hit by another motor boat, especially in a crowded lake with a lot of boat traffic. While some lakes require water sport participants to wear colored bathing caps and other highly visible clothing, others do not. Furthermore, sometimes even brightly colored clothing is not easily visible, especially in rough waves.

[0004] Laws are in place on many lakes to create safety and awareness among recreational boaters and water sport participants. Skier flags, typically 12"×12" bright orange flags, are often mandatory on boats in certain states pulling skiers, wakesurfers, wake boarders, or tubers. However, these flags remain with the boat and not with people floating in the water. Hand signals are a part of boater safety classes, although these signals are not always visible or easy for younger riders to convey. Because of the aforementioned factors, many water sport participants are too anxious to ride in crowded boating conditions.

[0005] Accordingly, there is a need for an improved signaling device to alert other boaters that a person is floating on the surface of the water.

ASPECTS AND SUMMARY OF THE PRESENT INVENTION

[0006] One aspect of the present invention is to provide a highly visible signaling device to alert boaters that a person is floating on the surface of the water.

[0007] Another aspect of the present invention is to provide a highly visible signaling device that is lightweight and compact for easy use and storage.

[0008] A further aspect of the present invention is to provide a highly visible signaling device that is low cost and requires minimal maintenance.

[0009] An additional aspect of the present invention is to provide a highly visible signaling device that can be easily deployed and used multiple times.

[0010] Another aspect of the present invention is to provide a highly visible signaling device that can fit and be easily used by different people of all sizes and ages.

[0011] An additional aspect of the present invention is to provide a device that will float on the surface of the water to be located easily if separated from the user.

[0012] In order to achieve these aspects and others, the present invention provides a visual safety device for use in open water sports having a wrist strap with a first strap end and a second strap end, and an inner side and an outer side. A banner is included with a first banner end and a second banner end, and a first banner side and a second banner side. A first strap connector is located on the inner side proximate the first strap end of the wrist strap, and a first banner connector is located on the second banner side proximate the second banner end. The outer side of the wrist strap proximate the second strap end is connected to the second banner side proximate to the first banner end. A second banner connector is located proximate the first banner end on the first banner side, wherein the second banner connector is configured to be attached to the first strap connector when the wrist strap is wrapped around a wrist of a user. A third banner connector is located on the first banner side of the banner proximate a middle location of the banner between the first banner end and the second banner end, wherein the third banner connector is configured to be attached to the first banner connector when the banner is wrapped around the wrist of a user. The connectors are preferably made of Velcro® and the wrist strap is preferably made of a flexible material.

[0013] The water visual safety device, which has been named by the inventors as the Hey Wave™ Water Sport Visibility Wristflag, is a caution wristband and alert flag designed to protect a water sport participant floating on the water from surrounding boat traffic. A downed water skier, wakesurfer, wake boarder, or tuber, for example, manually deploys and waves the alert flag while in the water notifying the passengers or driver of their boat of their location in the water and increasing visibility to oncoming boaters. Once the rider is in a safe position, the alert flag is simply wrapped back around the wrist into a caution wristband. Hey Wave™ Water Sport Visibility Wristflags are made entirely of quality all weather, high visibility materials designed for style and comfort to the water sport participant. The Hey Wave™ Water Sport Visibility Wristflag is for every boater pulling skiers, wakesurfers, wake boarders, or tubers. It was initially designed to increase rider safety for friends and family who were otherwise at the mercy of unaware boat traffic in crowded waters. The Hey Wave™ Water Sport Visibility Wristflag also provides a sense of security to younger riders who feel empowered using a new signaling device to communicate to other boaters and their captain while reducing the anxiety of the downed rider experience.

[0014] The Hey Wave™ Water Sport Visibility Wristflag also provides added safety measures and liability protection for water sport use or rentals of paddle boards, boogie boards, kayaks, rafts, sail boards, and waverunners. The safety benefits continue even in more controlled waters,

such as water parks and wave pools so life guards are able to quickly see any alert flags deployed by struggling swimmers. Additionally, a day at the beach shouldn't be filled with anxiety, as parents are able to easily spot their kids on crowded beaches and while splashing in the water when their children are using the Hey Wave™ Water Sport Visibility Wristflag configured in accordance with the present invention. Moreover, the alert band or flag of the present invention does not impede a rider's enjoyment or performance in any way. The alert flag can even be attached to a life vest, paddle, kayak, canoe, paddleboard with quick release methods. The alert flag can include provisions for accessories such as lights, whistles, proximity locators, water sensing alert sensors, and boat or waverunner engine cut off switches.

[0015] The alert band of the present invention preferably has two highly visible colors at different locations on the alert band. A first color, such as orange, is visible when the alert band is rolled up around the wrist to signal a "caution" state or mode. When the alert band is unrolled or deployed, a second color, such as neon yellow, is visible to signal an "alert" state or mode. So, for example, if multiple kids in a wave pool are wearing the alert band with the orange bands wrapped up, a lifeguard can easily spot the neon yellow wristband when the banner on the wrist strap is unrolled to become an alert flag and signal an "alert" state or mode. Other colors are possible too, such as use behind a boat, wherein a neon green banner can be deployed in an "alert" state or mode.

[0016] The foregoing has outlined, rather broadly, the preferred features of the present invention so that those skilled in the art may better understand the detailed description of the invention that follows. Additional features of the invention will be described hereinafter that form the subject of the claims of the invention. Those skilled in the art should appreciate that they can readily use the disclosed invention and specific embodiments as a basis for designing or modifying other structures for carrying out the same purposes of the present invention, and that such other structures do not depart from the spirit and scope of the invention in its broadest form.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] FIG. 1 is a side view of the alert band configured in accordance with the present invention;

[0018] FIG. 2 is a perspective view of the first banner side of the alert band shown in FIG. 1 with the banner in the extended or unrolled or "alert" state;

[0019] FIG. 3 is a perspective view of the second banner side of the alert band shown in FIGS. 1-2 with the banner in the extended or "alert" state;

[0020] FIG. 4 is a perspective view of the alert band shown in FIGS. 1-3 with the banner in the rolled up or "non-alert" state;

[0021] FIG. 5 is a perspective view of the alert band shown in FIGS. 1-4 on the wrist of a user with the banner in the wrapped or "non-alert" state around the wrist strap;

[0022] FIG. 6 is a perspective view of the alert band shown in FIGS. 1-5 on the wrist of a user with the banner in the extended or "alert" state;

[0023] FIG. 7 is a front view of a life vest utilizing the alert band shown in FIGS. 1-6; and

[0024] FIG. 8 is a perspective view of another embodiment of the alert band configured for use on an engine cutoff strap to be used by the driver of a motor boat.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0025] Referring now to the drawings, FIG. 1 is a side view of the band alert, alert band, band alert flag, or alert band flag 10 configured in accordance with the present invention. The alert band 10 includes a wrist strap 12 attached to a banner 14. The wrist strap 12 includes a first strap end 16 and a second strap end 18 at opposing ends of the longitudinal length of the wrist strap 12. The wrist strap 12 has an inner side 20 and an outer side 22. A first strap connector 24 is located on the inner side 20 of the wrist strap 12 proximate the first strap end 16. The wrist strap 12 preferably is constructed of a flexible material, such as knit elastic polyester or neoprene.

[0026] The banner 14 has a first banner end 26 and a second end 28 as opposing ends of the longitudinal length of the banner 14. The banner 14 includes a first banner side 30 and a second banner side 32. The banner 14 also includes a first banner connector 36 on the second banner side 32 proximate the second banner end 28. A second banner connector 38 is located on the first banner side 30 proximate the first banner end 26. A third banner connector 40 is located on the first banner side 30 proximate the longitudinal middle 42 of the banner 14 between the first banner end 26 and the second banner end 28. A banner release handle 44 is attached to the first banner side 30 proximate the second banner end 28. The banner release handle 44 preferably is constructed of a padded soft cushion material and sewn onto the banner 14.

[0027] In accordance with the present invention, the outer side 22 of the wrist strap 12 proximate the second strap end 18 is connected to the second banner side 32 of the banner 14 proximate the first banner end 26, preferably by sewing the second strap end 18 to the first banner end 26. A user secures the alert band 10 to his or her wrist by wrapping the wrist band 12 around his or her wrist and attaching the first strap connector 24 to the second banner connector 38. The banner 14 is then wrapped around the wrist strap 12 and the wrist of the user by wrapping the banner 14 around the wrist strap 12 and connecting the first banner connect 36 to the third banner connector 40. The banner 14 remains secured to the wrist strap 12 until the user desires to uncoil or unwind the banner 14 from the wrist strap 12. The first strap connector 24 and the first, second, and third banner strap connectors 36, 38, 40, respectively, are preferably hook and loop connectors, such as Velcro®.

[0028] When a user desires to unwind the banner 14 from the wrist strap 12 to signal that he or she is down in the water or otherwise needs assistance, the user simply pulls on the handle 44 on the second banner end 28 of the banner 14 to release the first banner connector 36 from the third banner connector 40. The banner 14 can then be easily unwound from the wrist strap 12 and waived by the user to signal an alert status. When the user is removed from the water or is no longer in an alert status, the user can simply wind the banner 14 back around the wrist strap 12 and reconnect the first banner connector 36 to the third banner connector 40.

[0029] To remove the alert band 10 from his or her wrist, a user can disconnect the first banner connector 36 from the third banner connector 40, and then disconnect the first strap

connector **24** from the second banner connector **38**. If the connectors **36**, **40**, **24**, **38** are made of Velcro®, the hook and loop connectors can be interchanged, as long as a hook connector as attaching to a corresponding loop connector.

[0030] The banner **14** preferably is constructed of oxford cloth made of solution dyed polyester to create a highly visibility color and is further coated with polyurethane for waterproof protection on both sides. The wrist strap **12** preferably is constructed of knit elastic polyester or neoprene and is of a high visibility color. The wrist strap **12** also includes a safety breakaway feature, as the Velcro® connectors will release off of a user's wrist when a certain level of force is applied to the wrist strap **12**. This safety feature is to prevent the user from having an arm pulled if the alert band **10** becomes wrapped around a pull rope, propeller, or other immovable object underwater. For example, white water rafters can get caught up on rocks once thrown off. Additionally, the alert band **10** preferably is constructed of buoyant material so the alert band **10** will float if the alert band **10** is pulled off a user or somehow falls into the water.

[0031] FIG. 2 illustrates a perspective view of the alert band **10** with the banner **14** extended in the "alert" status position. The first banner side **30** of the banner **14** is shown, wherein the third banner connector **40** and the padded handle **44** are clearly illustrated. The padded handle **44** is shown proximate the second banner end **28**. The wrist strap **12** is illustrated in the coiled position. The inner side **20** and the outer side **22** of the wrist strap **12** are both shown in this perspective view. The first strap connector **24** and the second banner connector **38** also are illustrated.

[0032] FIG. 3 illustrates a perspective view of the alert band **10** with the banner **14** extended in the "alert" position as shown in FIG. 2, but this view illustrates the second banner side **32**. Also illustrated are the first banner connector **36** and the padded handle **44** proximate the second banner end **28**. The inner side **20** and the outer side **22** of the wrist strap **12** in the coiled position also are illustrated. The second strap end **18** also can be seen.

[0033] FIG. 4 is a perspective view of the alert band **10** in the coiled or "non-alert" status position. The padded handle **44** and the first banner side **30** are shown in this view. Also illustrated are the inner side **20** and first strap end **16** of the wrist strap **12**.

[0034] FIG. 5 is a perspective view of an arm of a user wearing the alert band **10** on the wrist **46** in the coiled "non-alert" status position. Illustrated are the first banner side **30** and the padded handle **44** proximate the second banner end **28**.

[0035] FIG. 6 is a perspective view of an arm of a user wearing the alert band **10** on the wrist **46** in the extended "alert" status position. Illustrated are the first banner side **30** of the banner **14** in the extended position. The padded handle **44** on the second banner end **28** are shown, and the third banner connector **40** on the first banner side **30** also is illustrated. The outer side **22** and first strap connector **24** of the wrist strap **12** are further illustrated.

[0036] FIG. 7 is a front view of a ski vest or life vest **70** utilizing the alert band **10** configured in accordance with the present invention as illustrated in FIGS. 1-6. This embodiment shows the Hey Wave™ Water Sport Visibility Wrist-flag wrapped around a shoulder strap **72** of a typical ski or wake vest. In this embodiment, the wrist strap **12** of the alert band **10** is secured around a shoulder strap **72** of the life vest **70**. A person using the life vest **70** can wrap the wrist strap

12 around the shoulder strap **72** of the life vest **70** instead of his or her wrist **46**. The wearer of the life vest **70** can quickly release the banner **14** of the alert band **10** by pulling on the padded handle **44**, similar to when a user is wearing the alert band **10** on his or her wrist **46**. The wrist strap **12** will keep the alert band **10** secured to the should strap **72** when the banner **14** is released. Most performance ski vests are typically dark, solid colors, in order to emphasize style and fit, more than visibility to oncoming boat traffic. Accordingly, the alert band **10** overcomes these dark colors of typical ski vests by providing color variations on the alert band **10** that include high visibility colors both on the wrist strap **12** and the banner **14**. Additionally, the alert band **10** can be wrapped around one or both shoulder straps **72** of a ski vest **70**.

[0037] FIG. 8 illustrates another embodiment of the present invention, wherein an alert band **50** is included in an engine cutoff switch connector. The alert band **50** includes a banner **52** that wraps around a spool **54** in the coiled "non-alert" status position. The spool **54** rotates around a cord **56**. The cord **56** includes a clip **58** to be connected to the driver of a boat or personal water craft (PWC) and the clasp **60** is to be connected to the engine cutoff switch of the boat or PWC, wherein the cord **56** turns off the motor if the driver falls off the boat or PWC unintentionally. The cord **56** includes a coiled expandable section **62** for flexibility of the driver while wearing the alert band **50**. The banner **52** wraps around the spool **54** and remains coiled around the spool **54** by connecting a peripheral connector **64** on the distal end **65** of the banner **52** to the middle banner connector **66**.

[0038] If a driver operator unintentionally falls off the boat or PWC while wearing the alert band **50**, the alert band **50** shuts off the motor, and the boat or PWC operator can unwind the banner **52** from the spool **54** to signal an "alert" status by extending the banner **52**, which can be easily seen by other boaters.

[0039] While specific embodiments have been shown and described to point out fundamental and novel features of the invention as applied to the preferred embodiments, it will be understood that various omissions and substitutions and changes of the form and details of the invention illustrated and in the operation may be done by those skilled in the art, without departing from the spirit of the invention.

1. A visual safety device for use in open water sports, comprising:

- a wrist strap having a first strap end and a second strap end, and an inner side and an outer side;
- a banner having a first banner end and a second banner end, and a first banner side and a second banner side;
- a first strap connector on the inner side proximate the first strap end of the wrist strap;
- a first banner connector on the second banner side proximate the second banner end;
- the outer side of the wrist strap proximate the second strap end being connected to the second banner side proximate to the first banner end;
- a second banner connector proximate the first banner end on the first banner side, wherein the second banner connector is configured to be attached to the first strap connector when the wrist strap is wrapped around a wrist of a user; and
- a third banner connector on the first banner side of the banner proximate a middle location of the banner between the first banner end and the second banner end,

- wherein the third banner connector is configured to be attached to the first banner connector when the banner is wrapped around the wrist of a user.
2. The visual safety device of claim 1, wherein the first strap connector and the second banner connector both include hook and loop fasteners.
 3. The visual safety device of claim 1, wherein the first strap connector and the second banner connector both include Velcro® fasteners.
 4. The visual safety device of claim 1, wherein the first strap connector and the second banner connector both include hook and loop fasteners.
 5. The visual safety device of claim 1, wherein the first strap connector and the second banner connector both include Velcro® fasteners.
 6. The visual safety device of claim 1, wherein the outer side of the wrist strap proximate the second strap end is sewn to the second banner side proximate to the first banner end.
 7. The visual safety device of claim 1, wherein the wrist strap is shorter in length than the banner.
 8. The visual safety device of claim 1, wherein the wrist strap is constructed of expandable material.
 9. The visual safety device of claim 1, further comprising:
 - a handle on the first banner side proximate the second banner end.
 10. The visual safety device of claim 9, wherein the handle includes padded material.
 11. The visual safety device of claim 9, wherein the padded material is constructed of neoprene designed to float the entire device of claim 1.
 12. The visual safety device of claim 1, further comprising:
 - a life vest including a shoulder strap, wherein the wrist strap is secured around the shoulder strap.
 13. The visual safety device of claim 1, wherein the first banner side includes a high visibility color.
 14. The visual safety device of claim 1, wherein the wrist strap includes a high visibility color.
 15. The visual safety device of claim 1, wherein the second banner side includes a high visibility color.
 16. The visual safety device of claim 1, wherein the banner is coated with polyurethane for waterproof protection on both sides.
 17. The visual safety device of claim 8, wherein the wrist strap is constructed of knit elastic polyester.
 18. The visual safety device of claim 8, wherein the wrist strap is constructed of neoprene.

* * * * *