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(54) **PROTECTIVE CASE ADAPTED FOR FLOATATION**

(57) The present teachings relate to a carrying case comprising: a first portion including a first inner surface and a first outer surface; a second portion including a second inner surface and a second outer surface; a pocket defined by the first inner surface and the second inner surface; a sealing device located on the first portion, the second portion, or both, and wherein the sealing device provides for access to the pocket; wherein the pocket and one or more items stored therein are kept dry when the sealing device is in a closed position; and wherein the carrying case, with the one or more items stored therein, is buoyant in water.

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Description

FIELD

[0001] The present teachings generally relate to a carrying case. The carrying case may be particularly advantageous for floating in water.

BACKGROUND

[0002] People often leave the house and travel with important items such as mobile phones, driver's licenses, banknotes, and credit cards. These items may be generally carried in pockets, purses, or even backpacks. In some circumstances, people require added protection while engaged in water activities such as lounging at the pool, boating, or kayaking. The user may want to prevent the items from contacting water as a result of inadvertent splashes or accidental submersion. The user may also want the carrying case to float in the event it is dropped in water so that the carrying case does not sink to the bottom of a body of water where retrieval would be difficult. Moreover, the user may want the carrying case to allow the user to interact with items stored therein, such as a touchscreen of a mobile phone, so the user does not have to remove the items from the carrying case, while engaged in an activity.

[0003] It would be desirable to provide a carrying case that is waterproof. It would be desirable to provide a carrying case that is buoyant in water. It would be desirable to provide a carrying case that allows a person to view and/or manipulate items stored in the carrying case without removing the items from the carrying case. It would be desirable to provide a carrying case that allows a person to view and/or manipulate a mobile device, such as a mobile phone, contained in the carrying case without removing the mobile device from the carrying case. It would be desirable to provide a carrying case that allows for a user to interact with a touchscreen while it is stored in the carrying case. It would be desirable to provide a carrying case that does not interfere with radio or cellular signals generated by or meant to be received by the mobile device.

SUMMARY

[0004] The present disclosure relates to a carrying case, which may address at least some of the needs identified above. The carrying case may comprise a first portion and a second portion. The first portion may include a first inner surface and a first outer surface. The second portion may include a second inner surface and a second outer surface. The carrying case may comprise a pocket defined by the first inner surface and the second inner surface. The carrying case may comprise a sealing device located on the first portion, the second portion, or both. The sealing device may provide for access to the pocket. The pocket and one or more items stored therein may be kept dry when the sealing device is in a closed position. The carrying case, with one or more items stored therein, may be buoyant in water.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005]

FIG. 1 is a plan view of a carrying case.
FIG. 2 is a plan view of a carrying case.
FIG. 3 is a side view of a carrying case.
FIG. 4 is a side view of a carrying case.
FIG. 5 is a perspective view of a carrying case.
FIG. 6 is a perspective view of a carrying case.

DETAILED DESCRIPTION

[0006] The present teachings meet one or more of the above needs by the improved carrying case described herein. The explanations and illustrations presented herein are intended to acquaint others skilled in the art with the teachings, its principles, and its practical application. Those skilled in the art may adapt and apply the teachings in its numerous forms, as may be best suited to the requirements of a particular use. Accordingly, the specific embodiments of the present teachings as set forth are not intended as being exhaustive or limiting of the teachings. The scope of the teachings should, therefore, be determined not with reference to the above description, but should instead be determined with reference to the appended claims, along with the full scope of equivalents to which such claims are entitled. The disclosures of all articles and references, including patent applications and publications, are incorporated by reference for all purposes. Other combinations are also possible as will be gleaned from the following claims, which are also hereby incorporated by reference into this written description.

[0007] The teachings herein provide for a carrying case. The carrying case may function to hold one or more items, keep one or more items stored therein dry, float in water, or any combination thereof.

[0008] The carrying case may be a bag or container.

[0009] The carrying case may be water resistant, waterproof, or both. The carrying case may be compliant with Ingress Protection ("IP") Code IP68 of International Electrotechnical Commission ("IEC") standard 60529. The carrying case may be waterproof at a depth of 50 meters or less, 30 meters or less, or 10 meters or less. The carrying case may be buoyant in water. As referred to herein, "buoyant" may mean apt to rise to the top of a liquid and/or stay afloat on top of a liquid.

[0010] The carrying case or at least a portion thereof may allow for electromagnetic radiation to pass therethrough. The carrying case or at least a portion thereof may not interfere with electromagnetic radiation generated by or meant to be received by mobile devices stored in the carrying case. The carrying case or at least a por-

tion thereof may block electromagnetic radiation from passing therethrough. The carrying case may prevent RFID items stored therein from communicating with electromagnetic energy needed to power and/or communicate with the RFID items. RFID items may include passports, credit cards, enhanced driver's licenses, the like, or any combination thereof.

[0011] The carrying case may include both a portion that allows electromagnetic radiation to pass through and a portion that blocks electromagnetic radiation. A portion that allows electromagnetic radiation to pass through may be located where a mobile device's antennae is positioned when the mobile device is stored in the carrying case. A portion that blocks electromagnetic radiation may be located where an RFID item is stored in a carrying case. For example, the carrying case may include one or more slots for credit cards and the one or more slots may be located on a portion of the carrying case that blocks electromagnetic radiation.

[0012] The carrying case may be held in a user's hand, worn around a user's wrist, worn around a user's neck, worn around a user's torso and/or shoulder, hung from an object, clipped to an object, or any combination thereof.

[0013] The carrying case may allow for a user to view and/or manipulate one or more items stored therein. The carrying case may allow for a user to manipulate a touchscreen of one or more mobile devices while the one or more mobile devices are stored therein.

[0014] The carrying case may include a first portion, a second portion, a perimeter, a seam, a pocket, one or more slots, one or more apertures, a sealing device, one or more attachment features, one or more attachment devices, one or more visual features, one or more windows, one or more water-tight holes, or any combination thereof.

[0015] The carrying case may store one or more items. The one or more items may be selectively stored in the carrying case. The one or more items may be selectively removed from the carrying case. The one or more items may include any item typically carried by people on a regular or semi-regular basis. The one or more items may fit within the carrying case such that the carrying case may be closed.

[0016] The one or more items may include mobile devices, charging devices for mobile devices, headphones, key fobs, keys, cards, passports, paper, banknotes, checkbooks, writing implements, medicine, makeup, the like, or any combination thereof. The mobile devices may include mobile phones, tablets, laptops, cameras, portable music devices, the like, or any combination thereof. The mobile devices may include a touchscreen. The touchscreen may include a resistive touchscreen, a surface acoustic wave touchscreen, a capacitive touchscreen, a surface capacitance touchscreen, a projected capacitance touchscreen, a mutual capacitance touchscreen, a self-capacitance touchscreen, the like, or any combination thereof. The cards may include driver's license, credit cards, membership cards, or any combination thereof. Cards, passports, paper, banknotes, the like, or any combination thereof may be referred to as planar items. The planar items may be accepted by one or more slots.

[0017] The carrying case may include a first portion and/or a second portion. The first portion may function to cooperate with the second portion to form the carrying case. The first portion and/or the second portion may be generally planar. The first portion and/or the second portion may have a shaped profile. The shaped profile may be a parallelogram. The first portion and/or the second portion may include corners. The corners may be square, acutely angled, obtusely angled, rounded, or any combination thereof. The first portion and/or the second portion may include a perimeter. The perimeter may include one or more edges. The first portion and/or the second portion may have a length of about 63 centimeters or less, about 51 centimeters or less, about 38 centimeters or less, or even about 25 centimeters or less. The first portion and/or the second portion may have a length of about 10 centimeters or more, about 15 centimeters or more, or even about 20 centimeters or more.

[0018] The first portion and/or the second portion may have a width of about 63 centimeters or less, about 51 centimeters or less, about 38 centimeters or less, or even about 25 centimeters or less. The first portion and/or the second portion may have a width of about 10 centimeters or more, about 15 centimeters or more, or even about 20 centimeters or more.

[0019] The first portion and/or the second portion may have a thickness of about 0.01 millimeters or more, about 0.05 millimeters or more, or even about 0.1 millimeter or more. The first portion and/or the second portion may have about 3 millimeters or less, about 2 millimeters or less, or even about 1 millimeter or less.

[0020] The first portion and the second portion may have generally equal length, width, thickness, or any combination thereof. The first portion and the second portion may have different lengths, widths, thicknesses, or any combination thereof.

[0021] The length and width of the carrying case, the first portion, the second portion, or any combination thereof may define a surface area. The surface area may contribute to buoyancy of the carrying case.

[0022] The first portion and/or the second portion may be fabricated from a material that is water resistant, waterproof, resistant to salinity, resistant to chlorine, resistant to ultraviolet ("UV") radiation, or any combination thereof.

[0023] The first portion and/or the second portion or at least portions thereof may be fabricated from a material that allows electromagnetic radiation to pass through. The first portion and/or the second portion or at least portions thereof may be fabricated from a material that blocks electromagnetic radiation from passing therethrough.

[0024] The first portion and/or the second portion or at

least portions thereof may be fabricated from a material that is clear, translucent, opaque, or any combination thereof.

[0025] The first portion and/or the second portion or at least portions thereof may be fabricated from a material that is flexible, rigid, elastic, or any combination thereof. The first portion and/or the second portion or at least portions thereof may be fabricated from a material that is lightweight.

[0026] The first portion and/or the second portion or at least portions thereof may be fabricated from a material that is resistant to marring, scratching, fading, nicking, puncturing, ripping, tearing, stretching, the like, or a combination thereof.

[0027] The first portion and/or the second portion or at least portions thereof may be fabricated from one or more materials that function as solar panels. The first portion and/or second portion or at least portions thereof may include one or more solar panels. The one or more solar panels may function to charge an electronic device, a battery, or both stored within the carrying case. The solar panel may be flexible. An exemplary flexible solar panel may include those sold under the trade name SunPower®, commercially available from SunPower Corporation.

[0028] The first portion and/or the second portion may be fabricated from a single material or may be fabricated from two or more materials. The first portion and/or the second portion may include one or more discrete segments. The one or more segments may be fabricated from different materials or the same material. The one or more segments may provide different functions, as described in the paragraphs above.

[0029] The first portion and/or the second portion may be fabricated from a polymer film, a synthetic fabric, a natural fabric, or any combination thereof. The synthetic fabric and/or the natural fabric may be coated. The polymer film may include thermoplastic polyurethane ("TPU"), chlorosulfonated polyethylene ("CSPE") synthetic rubber, polyvinyl chloride ("PVC"), polyethylene ("PE"), polycarbonate ("PC"), polyester, the like, or any combination thereof. Exemplary chlorosulfonated polyethylene synthetic rubber may include those sold under the tradename TOSO-CSM®, commercially available from the Tosoh Corporation. The fabric may be woven, non-woven, or both. The synthetic fabric may include nylon, vinyl, polyester, or both. The natural fabric may comprise wool, cotton, hemp, or any combination thereof. The coating may include thermoplastic polyurethane, polyvinyl chloride, or both. Exemplary coated synthetic materials may include those sold under the trade name BioThane®, commercially available from BioThane Coated Webbing Corp.

[0030] The first portion and/or the second portion may include a perimeter, one or more edges on the perimeter, an inner surface, an outer surface opposing the inner surface, one or more attachment features, one or more attachment devices, one or more visual features, one or more windows, one or more water-tight holes, one or more slots, one or more apertures, one or more sealing devices, or any combination thereof.

[0031] The perimeter of the first portion and/or an area of the first portion that is adjacent to the perimeter of the first portion may be connected to a perimeter of the second portion and/or an area of the second portion that is adjacent to the perimeter of the second portion. The first portion and the second portion may be connected at any point or points interior of the perimeter and/or area adjacent to the perimeter.

[0032] The first portion and the second portion may be connected by one or more seams. The seams may be located along a perimeter of the first portion and along a perimeter of the second portion. The seams may be water-tight. The seams may be formed by a weld, chemical fastener, or both. The weld may be obtained by radio-frequency ("RF") welding. The chemical fastener may be an acrylic adhesive, epoxy adhesive, styrene-butadiene-styrene ("SBS") adhesive, the like, or any combination thereof. The seams may be formed around the entirety or at least part of the perimeters of the first portion and the second portion. The seams may span from one edge of the first portion and the second portion to an opposing edge of the first portion and the second portion. The seams may span from one edge of the first portion and the second portion to an adjacent edge of the first portion and the second portion. The seams may extend a distance from an edge of the first portion and the second portion, the distance being less than the entire length and/or width of the first portion and/or the second portion. The seams may have a width of about 0.5 millimeters or more, about 1 millimeter or more, or about 1.5 millimeter or more. The seams may have a width of about 1 centimeter or less, about 8 millimeters or less, or about 6 millimeters or less. The first portion and/or the second portion, once connected, may lay flat against each other. The first portion and/or the second portion, once connected, may be convex. The first portion may be convex with respect to the second portion (i.e., bow away from the second portion), the second portion may be convex with respect to the first portion, or both. Convexity of the first portion and/or the second portion may provide for a volume of the one or more pockets. Convexity of the first portion and/or the second portion may provide for a volume of an air space between the one or more pockets and one or more items stored within the pockets. Convexity of the first portion and/or the second portion may provide for thicker items to be stored within the one or more pockets. Convexity of the first portion and/or the second portion may provide for more items to be stored within the one or more pockets.

[0033] The first portion and/or the second portion may include an inner surface (first inner surface and second inner surface, respectively). The inner surface may function to define one or more pockets. The inner surface of the first portion may oppose the inner surface of the second portion. The inner surface of a portion may oppose the outer surface of the same portion. The inner surface

of the first portion and/or the second portion may be fabricated from the same material as the other parts of the carrying case or may be fabricated from a different material. The inner surface may contact one or more items stored within the carrying case. The inner surface may include one or more slots.

[0034] The first portion and/or the second portion may include an outer surface (first outer surface and second outer surface, respectively). The outer surface may function to protect the pocket from ingress of water. The outer surface of a portion may oppose the inner surface of the same portion. The outer surface of the first portion and/or the second portion may be fabricated from the same material as the other parts of the carrying case or may be fabricated from a different material. The outer surface of the first portion and/or the second portion may include one or more colors, patterns, figures, grains, textures, logos, designs, patches, the like, or a combination thereof. The outer surface may include one or more attachment features, one or more attachment devices, one or more visual features, or any combination thereof.

[0035] The carrying case may include a one or more pockets. The pocket may function to receive, retain, or protect items, or any combination thereof. The pocket may be located between the inner surface of the first portion and the inner surface of the second portion. The pocket may be defined by the inner surface of the first portion, the inner surface of the second portion, one or more seams, or any combination thereof. The pocket may selectively receive one or more items. Items may be selectively removed from the pocket.

[0036] The carrying case may include one or more air spaces. The air space may function to provide buoyancy to the carrying case. The air space may be defined by the space within one or more pockets and surrounding one or more items stored therein. The air space may be located between one or more items, the first inner surface, the second inner surface, or any combination thereof. The air space may be formed, at least in part, by convexity of the first portion and/or the second portion. The air space may be formed, at least in part, by one or more items stored within the pocket and spacing apart the inner surface of the first portion and the inner surface of the second portion. That is, items stored within a pocket may push apart a first inner surface from a second inner surface to provide for an air space. The air space may be defined by a volume. The volume of the air space may be a function of one or more dimensions (e.g., length and/or width) of the carrying case, one or more dimensions of the first portion, one or more dimensions of the second portion, one or more dimensions of one or more items located within a pocket, or any combination thereof. A ratio of the air space volume to the weight of items located within a pocket may determine whether the carrying case floats in water. A ratio of the air space volume to the combined weight of the carrying case and items stored within a pocket may determine whether the carrying case floats in water. The air space volume may be increased to reduce the density of the carrying case to the effect that the carrying case may be buoyant and float on water.

[0037] The first portion and/or the second portion may include one or more apertures. The apertures may function to provide access to the one or more pockets. The apertures may be integrally formed in the first portion and/or second portion. The apertures may be cut out of the first portion and/or second portion. Integrally forming apertures may mean molding into the first portion and/or the second portion. The molding process may include casting, injection molding, co-injection molding, compression molding, the like, or any combination thereof.

[0038] The apertures may extend along any surface of the first portion, second portion, or both. The apertures may extend adjacent to one or more edges, two or more edges, three or more edges, or even four or more edges of the carrying case. The apertures may extend parallel to one or more edges of the carrying case. The apertures may extend at a bias (i.e., at an angle) with respect to one or more edges of the carrying case. The apertures may extend between opposing corners of the first portion and/or the second portion. The apertures may extend between opposing edges of the first portion and/or the second portion. The apertures may extend at least partially along one or more edges. The apertures may be covered by one or more sealing devices.

[0039] The first portion and/or the second portion may include one or more sealing devices. The sealing device may function to provide and/or restrict access into the carrying case. The sealing device may be manipulated into an open position and a closed position. In an open position, items may be placed in or removed from the carrying case. In a closed position, the pocket and items stored therein may be secured and/or kept dry.

[0040] The sealing device may extend adjacent to one or more edges, two or more edges, three or more edges, or even four or more edges of the carrying case. The sealing device may extend parallel to one or more edges of the carrying case. The sealing device may extend at a bias with respect to one or more edges of the carrying case. The sealing device may extend between opposing corners of the first portion and/or the second portion. The sealing device may extend between opposing edges of the first portion and/or the second portion. The sealing devices may extend at least partially along one or more edges.

[0041] The sealing device may be defined by a length. The length may be about 10 centimeters or more, about 15 centimeters, or more, about 20 centimeters or more, or even about 25 centimeters or more. The length may be about 60 centimeters or less, about 50 centimeters or less, about 40 centimeters or less, or even about 30 centimeters or less. The length may be selected to prevent items from being added to the carrying case that would cause the carrying case to lose its buoyancy. For example, the length of the sealing device may be dimensioned to allow a mobile phone to pass through but not a tablet.

The length may be selected to prevent items from being added to the carrying case that would produce a ratio of air pocket volume to item weight that would cause the carrying case to lose its buoyant properties. The length may be selected to prevent items from being added to the carrying case that would produce a ratio of air pocket volume to combined carrying case and item weight that would cause the carrying case to lose its buoyant properties. To this end, the sealing device may be dimensioned to only allow items of a particular length and/or width to pass therethrough to preserve a gap between the edges of the items and the edges and/or seams of the carrying case.

[0042] The sealing device may be a zipper. An exemplary zipper may be a T-zip sealing device such as the TIZIP® waterproof sealing device, commercially available from Titex GmbH, Germany. The zipper may include a plurality of teeth, tape, a slider, one or more stoppers, one or more pulls, or any combination thereof.

[0043] The teeth may interlock to seal the zipper. Interlocked teeth may pull apart to open the zipper. The tape may spatially fix the teeth. The teeth may be coupled to the tape.

[0044] The zipper may comprise at least two strips of tape. Each strip of tape may comprise a row of spaced apart teeth along an edge of the tape. The teeth may extend a length from the edge of the tape. The tape may couple to one or more surfaces. The tape may function to affix the zipper to one or more surfaces. For instance, the tape may be adhered or otherwise coupled to a first inner surface and/or second inner surface of the carrying case.

[0045] The slider may manipulate the teeth to interlock the teeth and/or pull the teeth apart. The slider may move longitudinally along one or more strips of tape spatially fixing teeth. Actuation of the slider longitudinally along the teeth may manipulate the sealing device between an open position and a closed position.

[0046] The stoppers may be located at one or both opposing ends of the zipper. The stopper may prevent the pull from fully disengaging from the zipper.

[0047] The sealing device may include or any color, design, pattern, texture, or any combination thereof. For example, the sealing device teeth may be bright green in color providing a signature look for the carrying case. As yet another example, the sealing device teeth may be fluorescent to aid persons in locating the carrying case in the event it is separated from its owner.

[0048] The sealing device may be connected to the first portion, the second portion, or both. The sealing device may be connected to an inner surface of the first portion, an outer surface of the first portion, an inner surface of the second portion, an outer surface of the second portion, or any combination thereof. The sealing device may connect to a perimeter of the one or more apertures. The tape of the sealing device may extend over the apertures. The sealing device may cover the apertures. The tape of the sealing device may extend past the perimeter of the apertures. The tape of the sealing device may extend about 1 millimeter or more, about 2 millimeters or more, or even about 3 millimeters or more past the perimeter of the apertures. The tape of the sealing device may extend about 2 centimeters or less, about 1 centimeter or less, or even about 8 millimeters or less past the perimeter of the one or more apertures.

[0049] The tape of the sealing device may connect to the first portion and/or second portion. The tape of the sealing device may connect to an inner surface of the first portion, an outer surface of the first portion, an inner surface of the second portion, an outer surface of the second portion, or any combination thereof. The tape may be connected by one or more seams. The seams may be water-tight. The seams may extend around the entire perimeter of the aperture or at least a portion thereof. The seams may be formed by a weld, a mechanical fastener, a chemical fastener, or any combination thereof. The weld may be obtained by radio-frequency ("RF") welding. The mechanical fastening may include welding, sewing, stitching, riveting, the like, or any combination thereof. The chemical fastener may include an acrylic adhesive, epoxy adhesive, styrene-butadiene-styrene ("SBS") adhesive, the like, or any combination thereof. The sealing device may form a water resistant or a waterproof seal. The sealing device may prevent the ingress of water into the pockets of the carrying case. The sealing device may include a locking device, a sealing device handle, or both.

[0050] The one or more sealing devices may include a sealing device handle. The sealing device handle may function to provide a grip for users to selectively open and/or close (i.e., actuate) the sealing device. The sealing device handle may be attached to the slider of the sealing device. The sealing device handle may be buoyant in water. The sealing device handle may cooperate with other features of the carrying case to cause the carrying to float.

[0051] The one or more sealing devices may include a locking device. The locking device may function to prevent unwanted access to the contents of the carrying case. The locking device may prevent actuation of the slider. The locking device may anchor the slider to a fixed point on the carrying device. The locking device may be selectively locked and/or unlocked by a key, a code, or both.

[0052] The inner surface of the first portion and/or the inner surface of the second portion may include one or more slots. The slots may function to accept, receive, retain, hold, or protect one or more planar items, or any combination thereof. The planar items may include cards, passports, paper, banknotes, the like, or any combination thereof. The cards may include driver's licenses, credit cards, membership cards, insurance cards, transit cards, business cards, gift cards, the like, or any combination thereof.

[0053] The slots may comprise one or more cutouts or slits in the inner surface of the first portion and/or the

inner surface of the second portion. The cutout or slit may expose a space between two layers of material. For instance, a first portion and/or second portion may comprise two layers of material coupled together and a cutout or slit may be provided to define a space where planar items may be located. One or more seams may be provided on the layers of material to define a space where planar items may be located.

[0054] The slots may comprise a patch of material connected to the inner surface of the first portion and/or the inner surface of the second portion. The patch may be connected by one or more seams. The seams may be formed on and/or adjacent to one or more edges around the perimeter of the patch. The seams may be formed around at least a portion of the perimeter of the patch. The patch may include one or more edges. At least one edge of the patch may be free of a seam. The free edge may allow the slots to accept one or more planar items. The slots may be defined by the inner surface of the first portion, the inner surface of the second portion, the patch, one or more seams, or any combination thereof.

[0055] The seams may be formed by a weld, a chemical fastener, or both. The weld may be obtained by radio-frequency ("RF") welding. The chemical fastener may include an acrylic adhesive, an epoxy adhesive, a styrene-butadiene-styrene ("SBS") adhesive, the like, or any combination thereof.

[0056] The patch may be fabricated from a polymer film, a synthetic fabric, a natural fabric, or any combination thereof. The synthetic fabric and/or the natural fabric may be coated. The polymer film may include thermoplastic polyurethane ("TPU"), chlorosulfonated polyethylene ("CSPE") synthetic rubber, polyvinyl chloride ("PVC"), polyethylene ("PE"), polycarbonate ("PC"), polyester, the like, or any combination thereof. Exemplary chlorosulfonated polyethylene synthetic rubber may include those sold under the tradename TOSO-CSM®, commercially available from the Tosoh Corporation. The fabric may be woven, non-woven, or both. The synthetic fabric may include nylon, vinyl, polyester, or both. The natural fabric may comprise wool, cotton, hemp, or any combination thereof. The coating may include thermoplastic polyurethane, polyvinyl chloride, or both. Exemplary coated synthetic fabrics may include those sold under the trade name BioThane®,commercially available from BioThane Coated Webbing Corp.

[0057] The outer surface of the first portion and/or the outer surface of the second portion may include one or more attachment features. The attachment features may function to accept one or more attachment devices, attach accessories to the carrying case, secure the carrying case to an object, or any combination thereof. The attachment features may include hooks, snaps, buttons, loops, anchors, the like, or any combination thereof. The attachment features may accept one or more attachment devices.

[0058] The attachment features may be connected to the outer surface of the first portion and/or the outer surface of the second portion by a weld, a chemical fastener, or both. The weld may be obtained by radio-frequency ("RF") welding. The chemical fastener may include an acrylic adhesive, an epoxy adhesive, a styrene-butadiene-styrene ("SBS") adhesive, the like, or any combination thereof. The one or more attachment features may be fabricated from a polymer film, a synthetic fabric, a natural fabric, or any combination thereof. The synthetic fabric and/or the natural fabric may be coated. The polymer film may include thermoplastic polyurethane ("TPU"), chlorosulfonated polyethylene ("CSPE") synthetic rubber, polyvinyl chloride ("PVC"), polyethylene ("PE"), polycarbonate ("PC"), polyester, the like, or any combination thereof. Exemplary chlorosulfonated polyethylene synthetic rubber may include those sold under the tradename TOSO-CSM®, commercially available from the Tosoh Corporation. The attachment features may be woven, non-woven, or both. The synthetic fabric may include nylon, vinyl, polyester, or both. The natural fabric may comprise wool, cotton, hemp, or any combination thereof. The coating may include thermoplastic polyurethane, polyvinyl chloride, or both. Exemplary coated synthetic fabrics may include those sold under the trade name BioThane®,commercially available from BioThane Coated Webbing Corp.

[0059] The outer surface of the first portion and/or the outer surface of the second portion may include one or more attachment devices. The attachment devices may function to allow the user to hang the carrying case, manipulate the carrying case, wear the carrying case, hold the carrying case, or any combination thereof. The attachment devices may include rings, carabiners, straps, handles, ropes, the like, or any combination thereof. The rings may be circular or elongated. The attachment devices may connect the carrying case to an object. By way of example, a carabiner coupled to the carrying case may be connected to a strap on a backpack.

[0060] The outer surface of the first portion and/or the outer surface of the second portion may include one or more visual features. The visual features may function to aid a user locate the carrying case, provide a signature look for the carrying case, or both. The visual features may include lights, reflectors, mirrors, logos, the like, or any combination thereof.

[0061] The first portion and/or the second portion may include one or more windows. The windows may function to provide visual access into the carrying case, allow a user to manipulate a mobile device located within the carrying case while avoiding removing the mobile device from the carrying case, or both. The windows may provide a user the ability to view and/or manipulate an item under conditions that are less than ideal for removing the item from the carrying case. For example, a user may wish to text on their mobile phone while in a pool. The windows may be employed when the first portion and/or the second portion or portions thereof are fabricated from opaque or translucent material. The windows may cover an entire portion of the outer surface of the first portion

and/or second portion, or segments thereof. The windows may be fabricated from a clear, transparent, or at least partially transparent material. The windows may be fabricated from thermoplastic polyurethane ("TPU").

[0062] The windows may be a segment of material discrete from the first portion and/or the second portion. The windows may be attached to an inner surface of the first portion, an inner surface of a second portion, an outer surface of the first portion, an outer surface of the second portion, or any combination thereof. The windows may be attached by a weld, a chemical fastener, or both. The weld may be obtained by radio-frequency ("RF") welding. The chemical fastener may include an acrylic adhesive, an epoxy adhesive, a styrene-butadiene-styrene ("SBS") adhesive, the like, or any combination thereof. The windows may form a water-tight seal with the carrying case. The windows may form a water-tight seal with the inner and/or outer surface of the first and/or second portion. The water-tight seal may prevent moisture and/or water from entering the pocket and/or the inside of the carrying case.

[0063] The first portion and/or the second portion may include one or more water-tight holes. The water-tight holes may function to allow a charging cable, wired headphones, the like, or any combination thereof to extend out of the carrying case, while still maintaining a water resistant or waterproof carrying case design. In this regard, one or more bushings, seals, or the like may cooperate with the water-tight holes.

[0064] **FIG. 1** is a plan view of a carrying case 20. The carrying case 20 includes a first portion 22. The first portion 22 includes an outer surface 32 and an inner surface 50, the inner surface 50 being illustrated in **FIG. 3** and **FIG. 4**. The outer surface 32 includes two attachment features 45 affixed thereto. As depicted, the attachment features 45 are loops. The two attachment features 45 each accept attachment devices 46, respectively. As depicted, the attachment devices 46 are elongated rings. The first portion 22 is fabricated from a first material 90 and a second material 92. The first material 90 is transparent. The second material 92 is opaque. The first material 90 and the second material 92 are connected by a seam 26. The second material 92 overlaps the first material 90 at the seam 26.

[0065] The carrying case 20 comprises a second portion 24, the second portion 24 being illustrated in **FIG. 2**. The first portion 22 and the second portion 24 are connected by a seam 26. The seam 26 extends along the entirety of a perimeter 28 of the first portion 22 and a perimeter 28 of the second portion 24. The first portion 22, the second portion 24, and the seam 26 define a pocket 60. An item 70 (e.g., a mobile phone) is stored in the pocket 60.

[0066] **FIG. 2** is a plan view of a carrying case 20. The carrying case 20 includes a second portion 24. The second portion 24 includes an outer surface 34, an inner surface 52 illustrated in **FIG. 3** and **FIG. 4**, an aperture 29, and a sealing device 40. The sealing device 40 is in a closed position 44. The second portion 24 is fabricated from a first material 90. The first material 90 is transparent. The sealing device 40 is connected to the inner surface 52 by a seam 26. The sealing device 40 is exposed through the aperture 29.

[0067] The sealing device 40 includes a sealing device handle 42, teeth 80, tape 82, and a slider 84. The tape 82 is connected to the inner surface 52 by a seam 26. The teeth 80 are coupled to the tape 82. The slider 84 engages the teeth 80. The slider 84 can move longitudinally along the teeth 80. Actuation of the slider 84 longitudinally along the teeth 80 manipulates the sealing device 40 between an open position 43, illustrated in FIG. 5, and a closed position 44. A sealing device handle 42 is attached to the slider 84. The sealing device handle 42 assists a user grip and actuate the slider 84.

[0068] A slot 54 is disposed on the inner surface 52, illustrated in **FIG. 3** and **FIG. 4**. The slot 54 is configured to store a planar item 56. The slot 54 is defined by a patch 55, the inner surface 52, and a seam 26. The patch 55 and the inner surface 52 are connected by a seam 26. The seam 26 extends around three of the four edges of the patch 55.

[0069] The first portion 22, illustrated in **FIG. 1**, and the second portion 24 are connected by a seam 26. The seam 26 extends along an entirety of a perimeter 28 of the first portion 22 and a perimeter 28 of the second portion 24. The first portion 22, the second portion 24, and the seam 26 define a pocket 60. An item 70 (e.g., a mobile phone) is stored in the pocket 60. When the sealing device 40 is in an open position 43, illustrated in **FIG. 5**, the item 70 and/or planar item 56 may be placed in or removed from the pocket 60 and/or the slot 54, respectively. When the sealing device 40 is in the closed position 44, the pocket 60 and any item 70 stored therein are kept dry.

[0070] **FIG. 3** and **FIG. 4** are side views of a carrying case 20. The carrying case 20 includes a first portion 22 and a second portion 24. An inner surface 50 of the first portion 22 is oriented toward an inner surface 52 of the second portion 24. The first portion 22 and the second portion 24 are connected at a seam 26. The first portion 22 and the second portion 24 define a pocket 60. An item 70 (e.g., mobile phone) may be stored in the pocket 60.

[0071] The first portion 22 includes attachment features 45. The attachment features 45 are affixed to an outer surface 32 of the first portion 22. The attachment features 45 accept attachment devices 46.

[0072] The second portion 24 includes an inner surface 52. The inner surface 52 includes a sealing device 40 affixed thereto, illustrated in **FIG. 2**. The sealing device 40 includes a sealing device handle 42.

[0073] **FIG. 5** and **FIG. 6** are perspective views of a carrying case 20. The carrying case 20 includes a first portion 22 and a second portion 24. The first portion 22 includes an inner surface 50. The second portion 24 includes an inner surface 52. The inner surface 50 of the first portion 22 and the inner surface 52 of the second portion 24 define a pocket 60. The pocket 60 is accessible

through a sealing device 40 when the sealing device 40 is in an open position 43, illustrated in **FIG. 5**. The pocket 60 is sealed by a sealing device 40 when the sealing device 40 is in a closed position 44, illustrated in **FIG. 6**. The pocket 60 includes items 70 stored therein. The items 70 separate the inner surface 50 of the first portion 22 and the inner surface 52 of the second portion 24. An air space 62 is created between the items 70 and the inner surface 50 of the first portion 22 and the inner surface 52 of the second portion 24. The air space 62 provides, at least in part, for the buoyancy of the carrying case 20.

[0074] Unless otherwise stated, all ranges include both endpoints and all numbers between the endpoints. The use of "about" or "approximately" in connection with a range applies to both ends of the range. Thus, "about 20 to 30" is intended to cover "about 20 to about 30", inclusive of at least the specified endpoints.

[0075] The terms "generally" or "substantially" to describe angular measurements may mean about +/- 10° or less, about +/- 5° or less, or even about +/- 1° or less. The terms "generally" or "substantially" to describe angular measurements may mean about +/- 0.01° or greater, about +/- 0.1° or greater, or even about +/- 0.5° or greater. The terms "generally" or "substantially" to describe linear measurements, percentages, or ratios may mean about +/-10% or less, about +/- 5% or less, or even about +/- 1% or less. The terms "generally" or "substantially" to describe linear measurements, percentages, or ratios may mean about +/-0.01% or greater, about +/- 0.1% or greater, or even about +/- 0.5% or greater.

[0076] Unless otherwise stated, any numerical values recited herein include all values from the lower value to the upper value in increments of one unit provided that there is a separation of at least 2 units between any lower value and any higher value. As an example, if it is stated that the amount of a component, a property, or a value of a process variable such as, for example, temperature, pressure, time and the like is, for example, from 1 to 90, from 20 to 80, or from 30 to 70, it is intended that intermediate range values such as (for example, 15 to 85, 22 to 68, 43 to 51, 30 to 32 etc.) are within the teachings of this specification. Likewise, individual intermediate values are also within the present teachings. For values which are less than one, one unit is considered to be 0.0001, 0.001, 0.01, or 0.1 as appropriate. These are only examples of what is specifically intended and all possible combinations of numerical values between the lowest value and the highest value enumerated are to be considered to be expressly stated in this application in a similar manner. Unless otherwise stated, all ranges include both endpoints and all numbers between the endpoints.

[0077] The term "consisting essentially of" to describe a combination shall include the elements, ingredients, components, or steps identified, and such other elements ingredients, components or steps that do not materially affect the basic and novel characteristics of the combination. The use of the terms "comprising" or "including" to describe combinations of elements, ingredients, components, or steps herein also contemplates embodiments that consist essentially of the elements, ingredients, components, or steps.

[0078] Plural elements, ingredients, components, or steps can be provided by a single integrated element, ingredient, component, or step. Alternatively, a single integrated element, ingredient, component, or step might be divided into separate plural elements, ingredients, components, or steps. The disclosure of "a" or "one" to describe an element, ingredient, component, or step is not intended to foreclose additional elements, ingredients, components, or steps.

[0079] It is understood that the above description is intended to be illustrative and not restrictive. Many embodiments as well as many applications besides the examples provided will be apparent to those of skill in the art upon reading the above description. The scope of the invention should, therefore, be determined not with reference to the above description, but should instead be determined with reference to the appended claims, along with the full scope of equivalents to which such claims are entitled. The disclosures of all articles and references, including patent applications and publications, are incorporated by reference for all purposes. The omission in the following claims of any aspect of subject matter that is disclosed herein is not a disclaimer of such subject matter, nor should it be regarded that the inventors did not consider such subject matter to be part of the disclosed inventive subject matter.

REFERENCE NUMERALS

[0080]

20	Carrying case
22	First portion
24	Second portion
26	Seam
28	Perimeter
29	Aperture
32	Outer surface of first portion
34	Outer surface of second portion
40	Sealing device
42	Sealing device handle
43	Open position
44	Closed position
45	Attachment feature
46	Attachment device
50	Inner surface of first portion
52	Inner surface of second portion
54	Slot
55	Patch
56	Planar item
60	Pocket
62	Air space
70	Item
80	Teeth

82 Tape
84 Slider
90 First material
92 Second material

Claims

1. A carrying case comprising:

   a first portion including a first inner surface and a first outer surface;
   a second portion including a second inner surface and a second outer surface;
   a pocket defined by the first inner surface and the second inner surface;
   a sealing device located on the first portion, the second portion, or both, and wherein
   the sealing device provides for access to the pocket;
   wherein the pocket and one or more items stored therein are kept dry when the sealing device is in a closed position; and
   wherein the carrying case, with the one or more items stored therein, floats in water.

2. The carrying case of Claim 1, wherein the one or more items stored in the pocket can be viewed and/or manipulated from the first outer surface, the second outer surface, or both.

3. The carrying case of Claim 1 or Claim 2, wherein the one or more items include one or more mobile devices.

4. The carrying case of Claim 3, wherein the first portion, the second portion, or both are configured so that a user can manipulate a touchscreen of the one or more mobile devices while the one or more mobile devices are stored in the pocket.

5. The carrying case of any of Claim 1 through Claim 4, wherein the first portion, the second portion, or both comprise thermoplastic polyurethane, chlorosulfonated polyethylene synthetic rubber, polyvinyl chloride, polyethylene, polycarbonate, or any combination thereof.

6. The carrying case of any of Claim 1 through Claim 5, wherein the first portion and the second portion are connected by a seam; and
   wherein the seam is located along a perimeter of the first portion and along a perimeter of the second portion.

7. The carrying case of any of Claim 6, wherein the seam is formed by a weld, a chemical fastener, or both;

   wherein the weld is obtained by radio-frequency welding; and
   wherein the chemical fastener includes an acrylic adhesive, an epoxy adhesive, a styrene-butadiene-styrene adhesive, or any combination thereof.

8. The carrying case of any of Claim 1 through Claim 7, wherein the carrying case further includes an air space between the one or more items, the first inner surface, and the second inner surface; and
   wherein the air space provides for buoyancy of the carrying case.

9. The carrying case of any of Claim 1 through Claim 8, wherein the carrying case further comprises a sealing device handle, which provides a grip for users to actuate the sealing device.

10. The carrying case of Claim 9, wherein the sealing device handle is buoyant in water.

11. The carrying case of any of Claim 1 through Claim 10, wherein the first inner surface, the second inner surface, or both include one or more slots; and
    wherein the one or more slots are configured to accept a planar item.

12. The carrying case of any of Claim 1 through Claim 11, wherein the first outer surface, the second outer surface, or both include one or more attachment features attached thereto;

    wherein the one or more attachment features are configured to accept one or more attachment devices; and
    wherein the one or more attachment devices are configured to secure the carrying case to an object.

13. The carrying case of Claim 12, wherein the one or more attachment features are attached to the first portion, the second portion, or both by a weld, a chemical fastener, or both;

    wherein the weld is obtained by radio-frequency welding; and
    wherein the chemical fastener includes an acrylic adhesive, an epoxy adhesive, a styrene-butadiene-styrene adhesive, or any combination thereof.

14. The carrying case of any of Claim 1 through Claim 13, wherein a surface area of the first portion, the second portion, or both contributes to buoyancy of the carrying case.

15. The carrying case of any of Claim 1 through Claim 14, wherein the sealing device is attached to the first

portion, the second portion, or both by a weld, a chemical fastener, or both.

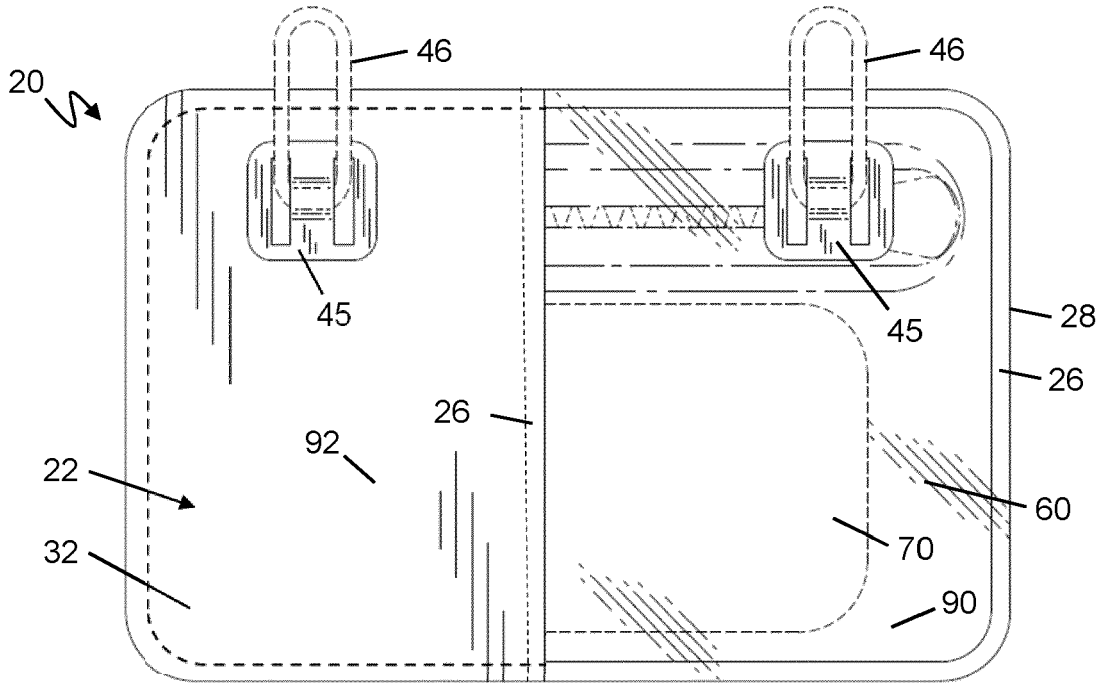
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FIG. 1

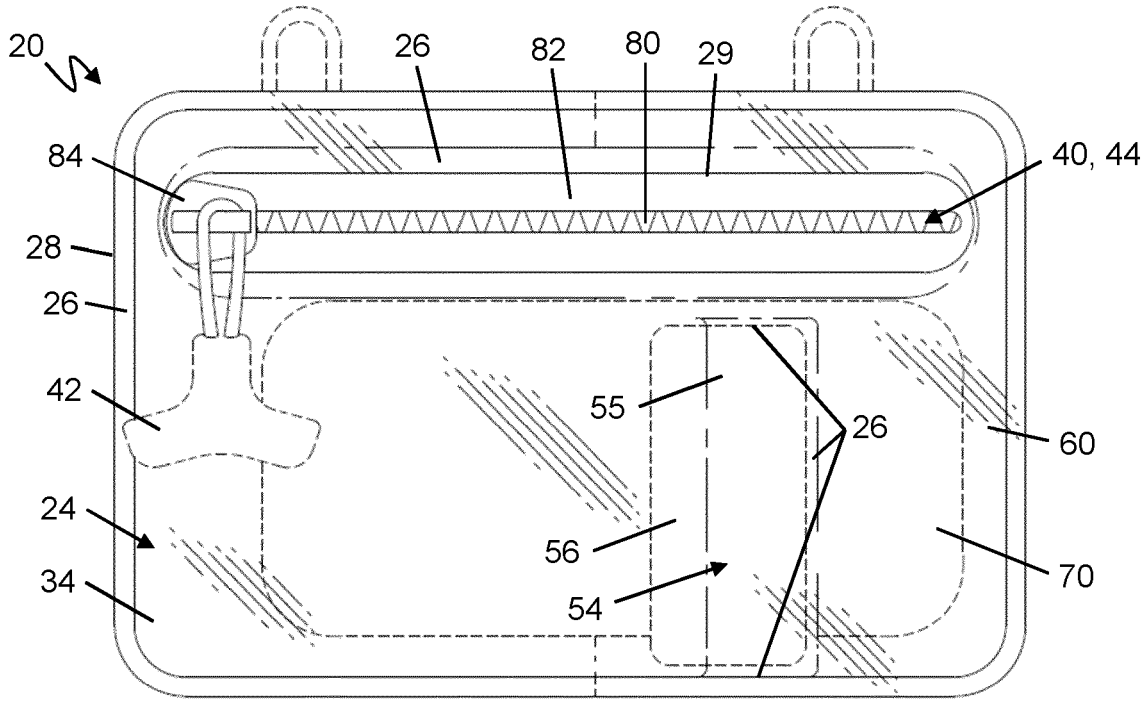
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FIG. 2

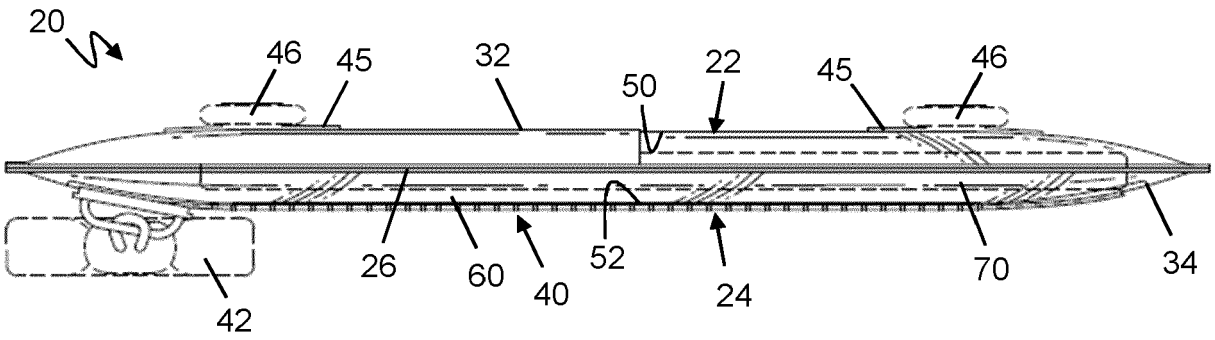
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FIG. 3

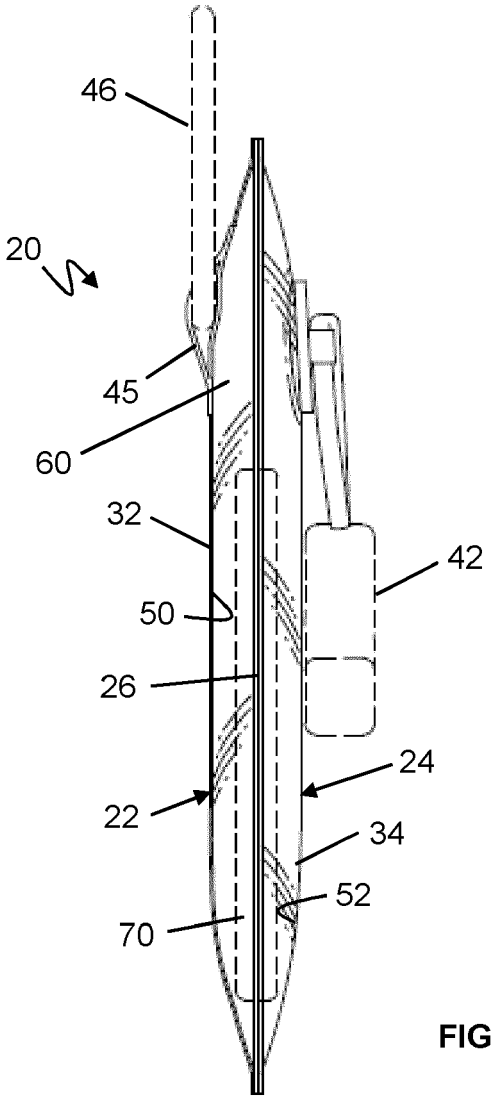
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FIG. 4

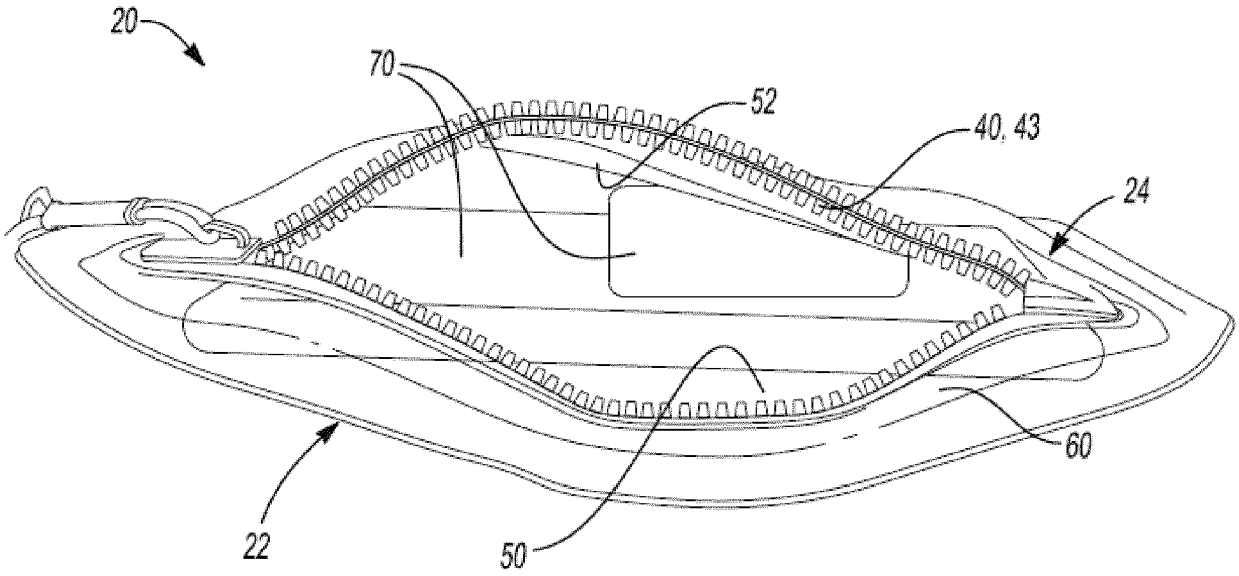

FIG. 5

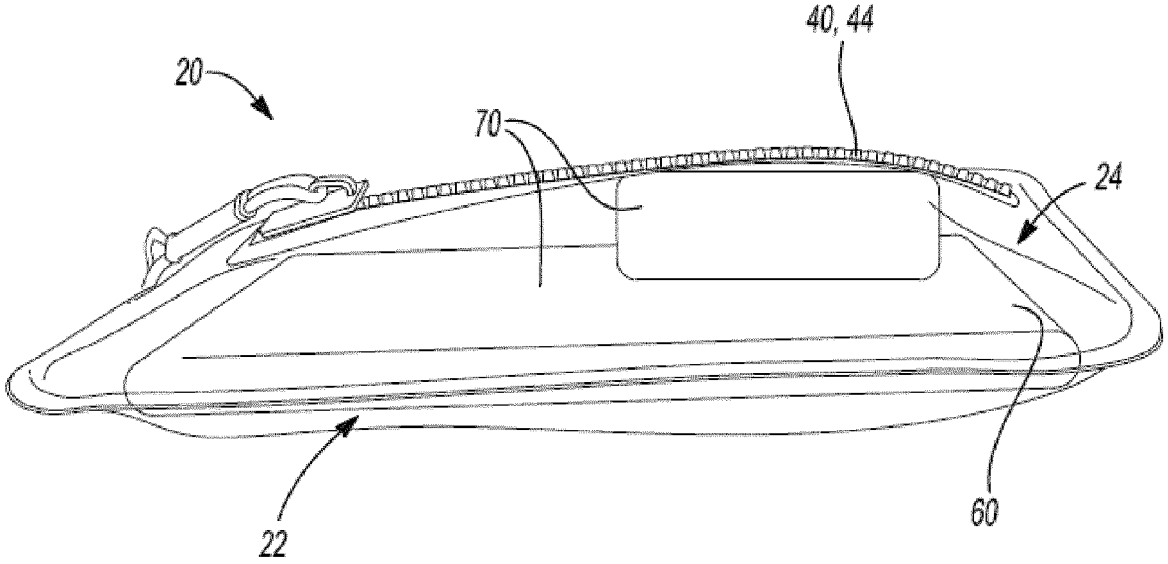

FIG. 6

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EUROPEAN SEARCH REPORT

Application Number
EP 21 19 5835

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 3 256 020 A1 (UGOWEAR LLC [US]) 20 December 2017 (2017-12-20) * paragraph [0026] - paragraph [0029]; claim 1; figures 1-4c *	1-5,8-15	INV. A45C11/22 A45C13/00
X	US 2012/008880 A1 (TOTH LANDY [US]) 12 January 2012 (2012-01-12) * paragraph [0095] - paragraph [0100]; claim 1; figures 3a, 3b *	1-7,14, 15	
X	US 2018/141741 A1 (CONWAY KEVIN [US]) 24 May 2018 (2018-05-24) * paragraph [0015] - paragraph [0064]; claims 1, 2; figures 1-10 *	1-4, 8-11,14	
X	KR 101 312 865 B1 (LEE YOUNG SUB [KR]) 30 September 2013 (2013-09-30) * paragraph [0007] - paragraph [0107]; claims 1, 2; figures 1-14 *	1-10,14, 15	
X	US 10 758 018 B1 (DAWKINS THOMAS [US]) 1 September 2020 (2020-09-01) * column 2, line 212 - column 3, line 65; claims 1, 6, 8, 10; figures 1-5 *	1-5, 8-11,14, 15	TECHNICAL FIELDS SEARCHED (IPC) A45C A45F
X	US 2015/041342 A1 (DOUROS SR JONATHAN D [US]) 12 February 2015 (2015-02-12) * paragraph [0040] - paragraph [0065]; claims 1-8; figures 1-11 *	1-10,14, 15	

2 The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	1 February 2022	Ehrsam, Sabine

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 21 19 5835

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01-02-2022

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 3256020 A1	20-12-2017	EP 3256020 A1	20-12-2017
		US 2018020791 A1	25-01-2018
		US 2018228260 A1	16-08-2018
		US 2018228261 A1	16-08-2018
		WO 2016130876 A1	18-08-2016
US 2012008880 A1	12-01-2012	NONE	
US 2018141741 A1	24-05-2018	US 2018141741 A1	24-05-2018
		WO 2018094415 A1	24-05-2018
KR 101312865 B1	30-09-2013	NONE	
US 10758018 B1	01-09-2020	NONE	
US 2015041342 A1	12-02-2015	NONE	

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