(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 4 324 733 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
21.02.2024 Bulletin 2024/08

(21) Application number: **22207706.7**

(22) Date of filing: **16.11.2022**

(51) International Patent Classification (IPC):
B63B 7/08 *(2020.01)* ***B63B 34/22*** *(2020.01)*
B63B 73/46 *(2020.01)*

(52) Cooperative Patent Classification (CPC):
B63B 34/22; B63B 2221/10

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
KH MA MD TN

(30) Priority: **18.08.2022 KR 20220103299**

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(54) **INFLATABLE KAYAK**

(57) Disclosed is an inflatable kayak in which side tubes have inclined outer surfaces to appropriately implement the inclined solid body structure of a general kayak, and vacant spaces are removed from connection parts between a bottom tube and the side tubes to solve problems caused by inflow of water into the vacant spaces. The inflatable kayak includes a bottom tube (10), side tubes (20) provided on both sides of the upper surface of the bottom tube (10), upper tapes (30) adhered to the upper parts of both open sides of the bottom tube (10), lower tapes (40) adhered to the lower parts of the open sides of the bottom tube (10) and adhered to the upper tapes (30), and side tapes (50) adhered to both open sides of the side tubes (20) and configured such that ends of the upper tapes (30) are adhered to the side tapes (50).

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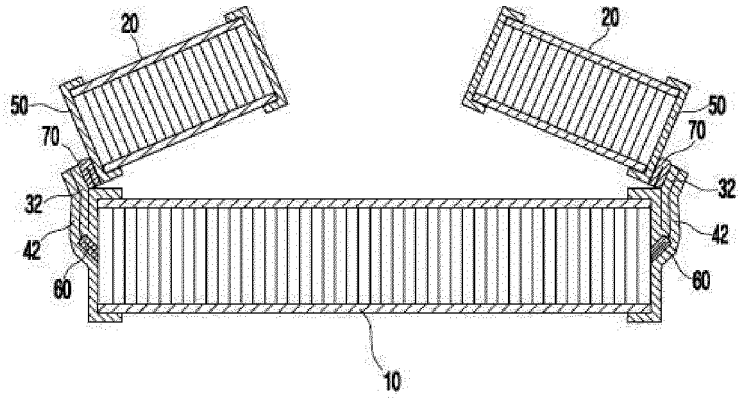

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Description

BACKGROUND OF THE INVENTION

Field of the Invention

[0001] The present invention relates to an inflatable kayak used in leisure activities, such as fishing, and more particularly, to an inflatable kayak in which side tubes have inclined outer surfaces so as to appropriately implement the inclined solid body structure of a general kayak, and vacant spaces are removed from connection parts between a bottom tube and the side tubes so as to solve problems and defects caused by inflow of water into the vacant spaces.

Description of the Related Art

[0002] In general, a kayak is a lightweight and small-sized long narrow boat that is pointed at both ends, i.e., at the bow and the stern, and is moved by at least one paddle. Recently, interest in kayaks as a leisure sport is rising as standards of living increase.

[0003] Traditional kayaks were mostly one-seater or two-seater kayaks which were used in sea hunting in summer, and the hulls of the kayaks had a length of about 7 m and a width of about 50 cm, were made with wood, and were covered with fur-free seal leather.

[0004] A kayak operator wears a waterproof jacket, sits in the cockpit seat in a circular hole of a kayak, lifts the legs, slides the feet into the cockpit, and moves the kayak by paddling using a paddle. The hull of the kayak is so light that the kayak operator may carry it by himself or herself, and the kayak may endure high waves because the speed of the kayak is high and the center of gravity of the kayak is low, and may be restored to the original state thereof using the paddle even when the kayak is overturned.

[0005] Hereinafter, the configuration of a conventional inflatable kayak will be described with reference to FIG. 11 showing one example of the conventional inflatable kayak. As shown in FIG. 11, the conventional inflatable kayak includes a bottom tube 100 formed in a hollow air tube type so that air is injected there into, and having a plurality of shape maintenance lines S provided with both ends coupled to inner surfaces of the bottom tube 100 and a pair of first sealing tapes 101 adhered along both sides of the bottom tube 100, a pair of side tubes 200 provided on both sides of the upper surface of the bottom tube 100, formed in a hollow air tube type so that air is injected thereinto, and having a plurality of shape maintenance lines S provided with both ends coupled to inner surfaces of the side tubes 200 and a pair of second sealing tapes 201 adhered along both sides of the side tubes 200, and a pair of side adhesive tapes 300 adhered along the outer surfaces of the bottom tube 100 and the side tubes 200 so as to connect the first sealing tapes 101 to the second sealing tapes 201.

[0006] However, the above-described conventional inflatable kayak has the following problems.

[0007] The bottom tube 100 and the side tubes 200 of the conventional inflatable kayak are formed in the structure of a horizontal plate, and do not appropriately implement the solid body structure of a general kayak having smooth and inclined upper and lower surfaces, and thus, the conventional inflatable kayak has reduced overall aesthetics and marketability.

[0008] When the bottom tube 100 and the side tubes 200 of the conventional inflatable kayak are adhered to each other using the side adhesive tapes 300, vacant spaces A are formed among the bottom tube 100, the side tubes 200 and the side adhesive tapes 300, and water filling the vacant spaces A causes damage to adhered parts, and may thus shorten the lifespan of the inflatable kayak.

RELATED ART DOCUMENT

PATENT DOCUMENT

[0009] (Patent Document 1) Korean Patent Registration No. 1577279 "Inflatable Kayak" (Registration Date: December 8, 2015)

SUMMARY OF THE INVENTION

[0010] Therefore, the present invention has been made in view of the above problems, and it is an object of the present invention to provide an inflatable kayak in which side tubes have inclined outer surfaces so as to appropriately implement the inclined solid body structure of a general kayak, and vacant spaces are removed from connection parts between a bottom tube and the side tubes so as to solve problems and defects caused by inflow of water into the vacant spaces.

[0011] It is another object of the present invention to provide an inflatable kayak in which a straight section formed in a convex shape on the lower surface of a bottom tube so as to improve straightness and to have a stable structure through prevention of bending of the inflatable kayak due to weight of the kayak itself or external force, and the bottom tube has an inclined lower surface similar to a general kayak formed of a solid body.

[0012] In accordance with the present invention, the above and other objects can be accomplished by the provision of an inflatable kayak including a bottom tube formed in an air tube type configured such that an outer circumference thereof is open, a pair of side tubes provided on both sides of an upper surface of the bottom tube, and formed in an air tube type configured such that an outer circumference thereof is open, upper tapes provided along the outer circumference of the bottom tube so as to cover upper parts of both open sides of the bottom tube, each upper tape including an upper adhesive part formed at an upper end of the upper tape so as to be adhered along an upper surface of the bottom tube,

and a first outer adhesive part configured to extend outwards from a lower end of the upper tape, lower tapes provided along the outer circumference of the bottom tube so as to cover lower parts of the open sides of the bottom tube, each lower tape including a lower adhesive part formed at a lower end of the lower tape so as to be adhered along a lower surface of the bottom tube, and a second outer adhesive part configured to extend outwards from an upper end of the lower tape such that an upper surface of the second outer adhesive part is adhered to a lower surface of the first outer adhesive part, and side tapes provided to cover both open sides of the side tubes, each side tape including a pair of side adhesive parts horizontally bent from an upper end and a lower end of each side tape so as to be adhered to an upper surface and a lower surface of a corresponding one of the side tubes along an outer side and an inner side of the corresponding one of the side tubes, wherein the side tubes are connected to the bottom tube by adhering upper surfaces of the first outer adhesive parts to outer surfaces of the side adhesive parts provided at the outer sides of the side tubes in a state in which the first outer adhesive parts and the second outer adhesive parts, adhered to each other, are bent upwards.

[0013] The inflatable kayak may further include first V tapes formed in a V shape, symmetrically provided at both sides of the bottom tube, and configured such that outer surfaces of the first V tapes are adhered to inner ends of the first outer adhesive parts and the second outer adhesive parts.

[0014] The inflatable kayak may further include second V tapes formed in a V shape, symmetrically provided at the outer sides of the side tubes, and configured such that upper ends of the first outer adhesive parts and the second outer adhesive parts, adhered to each other, are adhered to one side surface of each of the second V tapes, and opposite side surfaces of the second V tapes are adhered to the outer surfaces of the side tapes.

[0015] The bottom tube and the side tubes may have a plurality of shape maintenance lines configured such that both ends thereof are coupled to inner surfaces of the bottom tube and the side tubes.

[0016] The pair of side tubes may be configured such that both ends of the side tubes are connected to each other so as to be integrated into one tube.

[0017] The inflatable kayak may further include a straight section formed on a lower surface of the bottom tube to be convex in a straight line along a longitudinal direction of the inflatable kayak so as to secure straightness of the bottom tube.

[0018] The straight section may include a folded part formed on the upper surface of the bottom tube to be folded in a concave shape along the longitudinal direction, a third V tape configured such that a lower surface thereof is adhered to an upper surface of the folded part in a V shape, a straight concave part formed in a concave shape in the straight line along the longitudinal direction on an upper surface of the third V tape on the upper surface of the bottom tube, and a straight convex part formed in a convex shape in the straight line along the longitudinal direction on the lower surface of the bottom tube so as to correspond to the straight concave part.

[0019] The inflatable kayak may further include a water barrier mounted in the front ends of the side tubes to be rounded, and provided to be inclined towards the front ends of the side tubes so as to block water drops to prevent the water drops from entering into the inflatable kayak.

[0020] The bottom tube may have a sharpened front end, and the bottom tube may include a front end cap formed in a cylindrical shape and mounted at the sharpened front end of the bottom tube.

[0021] The bottom tube may have a sharpened rear end, and the bottom tube may include a rear end cap formed in a cylindrical shape and mounted at the sharpened rear end of the bottom tube.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] The above and other objects, features and other advantages of the present invention will be more clearly understood from the following detailed description taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a schematic perspective view of an inflatable kayak according to one embodiment of the present invention;

FIG. 2 is a schematic exploded longitudinal-sectional view of the inflatable kayak according to one embodiment of the present invention;

FIG. 3 is a schematic partially-exploded longitudinal-sectional view of the inflatable kayak according to one embodiment of the present invention;

FIG. 4 is a schematic longitudinal-sectional view of the inflatable kayak in an assembled state according to one embodiment of the present invention;

FIG. 5 is an enlarged view of an essential portion of FIG. 4;

FIG. 6 is a schematic structural diagram showing the inflatable kayak according to one embodiment of the present invention;

FIG. 7 is a schematic longitudinal-sectional view of an inflatable kayak according to another embodiment of the present invention;

FIG. 8 is a bottom view of the inflatable kayak shown in FIG. 7;

FIG. 9 is a structural diagram showing the inflatable kayak shown in FIG. 7;

FIG. 10 is a schematic perspective view of an inflatable kayak according to yet another embodiment of the present invention; and

FIG. 11 is a schematic longitudinal-sectional view of a conventional inflatable kayak.

DETAILED DESCRIPTION OF THE INVENTION

[0023] Hereinafter, reference will be made in detail to exemplary embodiments of the present invention, examples of which are illustrated in the accompanying drawings, to make the description of the present invention thorough. The embodiments of the present invention are not limited to the aspects disclosed herein but may be implemented in various different forms.

[0024] FIGs. 1 to 6 are schematic views showing an inflatable kayak according to one embodiment of the present invention. As shown in these figures, the inflatable kayak according to one embodiment of the present invention includes a bottom tube 10 formed in an air tube type, side tubes 20 provided on both sides of the upper surface of the bottom tube 10, upper tapes 30 adhered to the upper parts of both open sides of the bottom tube 10, lower tapes 40 adhered to the lower parts of the open sides of the bottom tube 10 and adhered to the upper tapes 30, and side tapes 50 adhered to both open sides of the side tubes 20 and configured such that ends of the upper tapes 30 are adhered to outer surfaces of the side tapes 50.

[0025] The bottom tube 10 is formed in the air tube type configured such that the outer circumference thereof is open, and serves to form the bottom part of the inflatable kayak. If is natural that the bottom tube 10 is provided with a well-known air inlet so that a user may inject air into the bottom tube 10 or may discharge air from the bottom tube 10 through the air inlet.

[0026] The bottom tube 10 has the plurality of shape maintenance lines 11, both ends of which are coupled to inner surfaces of the bottom tube 10, and the shape maintenance lines 11 are well-known to interconnect the inner surfaces of the bottom tube 10 formed in the air tube type so as to allow the bottom tube 10 to maintain a designated flat shape.

[0027] Such an air tube in which the shape maintenance lines 11 are adhered to the inside of the air tube forming the bottom tube 10 so as to maintain the shape of the bottom tube 10 is referred to as a "Drop Stitch Material" in the art.

[0028] The side tubes 20 are provided in a pair so as to be provided on both sides of the upper surface of the bottom tube 10 and to be formed in the air tube type configured such that the outer circumference thereof is open, and serve to form both side parts of the inflatable kayak. It is natural that the side tubes 20 are provided with a well-known air inlet so that the user may inject air into the side tubes 20 or may discharge air from the side tubes 20 through the respective air inlets.

[0029] The side tubes 20 have a plurality of shape maintenance lines 21, both ends of which are coupled to inner surfaces of the side tubes 20, in the same manner as the bottom tube 10, and the shape maintenance lines 21 are well-known to interconnect the inner surfaces of the side tubes 20 formed in the air tube type so as to allow the side tubes 20 to maintain a designated flat shape.

[0030] The side tubes 20 provided in a pair may be configured such that both ends thereof are connected to each other so as to be integrated into one tube, and integration of the side tubes 20 into one tube may increase structural stability while facilitating adhesion and connection of the side tubes 20 to the bottom tube 10.

[0031] The upper tapes 30 are provided along the outer circumference of the bottom tube 10 so as to cover the upper parts of both open sides of the bottom tube 10, and each upper tape 30 includes an upper adhesive part 31 formed at the upper end of the upper tape 30 so as to be adhered along the upper surface of the bottom tube 10 and a first outer adhesive part 32 configured to extend outwards from the lower end of the upper tape 30, and the upper tapes 30 serve to cover the upper parts of both open side surfaces of the bottom tube 10 and to provide parts adhered to the side tubes 20 so as not to form vacant spaces into which water flows.

[0032] The upper adhesive parts 31 of the upper tapes 30 serve to provide parts adhered to both sides of the upper surface of the bottom tube 10, and the first outer adhesive parts 32 of the upper tapes 30 serve to provide parts adhered to the lower tapes 40 and parts adhered to the side tubes 20.

[0033] The lower tapes 40 are provided along the outer circumference of the bottom tube 10 so as to cover the lower parts of both open sides of the bottom tube 10, and each lower tape 40 includes a lower adhesive part 41 formed at the lower end of the lower tape 40 so as to be adhered along the lower surface of the bottom tube 10 and a second outer adhesive part 42 configured to extend outwards from the upper end of the lower tape 40 such that the upper surface of the second outer adhesive part 42 is adhered to the lower surface of the first outer adhesive part 32, and the lower tapes 40 serve to cover the lower parts of both open side surfaces of the bottom tube 10 and to provide parts adhered to the side tubes 20 so as not to form vacant spaces into which water flows.

[0034] The lower adhesive parts 41 of the lower tapes 40 serve to provide parts adhered to both sides of the lower surface of the bottom tube 10, and the second outer adhesive parts 42 of the lower tapes 40 serve to provide parts adhered to the first outer adhesive parts 32 and parts adhered to the side tubes 20, together with the first outer adhesive parts 32.

[0035] The side tapes 50 are provided to cover both open sides of the side tubes 30, and each of the side tapes 50 includes a pair of side adhesive parts 51 horizontally bent from the upper end and the lower end of each side tape 50 so as to be adhered to the upper surface and the lower surface of a corresponding one of the side tubes 20 along the outer side and the inner side of the corresponding one of the side tubes 20, and serve to cover the open sides of the corresponding side tube 20 while sealing the side tube 20. The side adhesive parts 51 serve to provide parts adhered to the upper and lower surfaces of both sides of the side tubes 20.

[0036] In the inflatable kayak having the above configuration according to one embodiment of the present invention, the side tubes 20 are connected to the bottom tube 10 by adhering the upper surfaces of the first outer adhesive parts 32 to the outer surfaces of the side adhesive parts 51 provided at the outer sides of the side tubes 20 in the state in which the first outer adhesive parts 32 and the second outer adhesive parts 42, which are adhered to each other, are bent upwards, and thereby, the bottom tube 10 and the side tubes 20 may be easily connected to each other while preventing formation of vacant spaces between the bottom tube 10 and the side tubes 20 through a simple structure.

[0037] The inflatable kayak further includes first V tapes 60 formed in a V shape, symmetrically provided at both sides of the bottom tube 10, and configured such that the outer surfaces of the first V tapes 60 are adhered to the inner ends of the first outer adhesive parts 32 and the second outer adhesive parts 42. The first V tapes 60, having the outer surfaces adhered to the first outer adhesive parts 32 and the second outer adhesive parts 42, serve to more firmly connect the first outer adhesive parts 32 and the second outer adhesive parts 42to each other so as to seal the first outer adhesive parts 32 and the second outer adhesive parts 42.

[0038] Further, the inflatable kayak further includes second V tapes 70 formed in a V shape, symmetrically provided at the outer sides of the side tubes 20, and configured such that the upper ends of the first outer adhesive parts 32 and the second outer adhesive parts 42, which are adhered to each other, are adhered to one side surface of each of the second V tapes 70, and opposite side surfaces of the second V tapes 70 are adhered to the outer surfaces of the side tapes 50. The second V tapes 70, having the outer surfaces adhered to the upper ends of the first outer adhesive parts 32 and the second outer adhesive parts 42 and to the outer surfaces of the side tapes 50, serve to more firmly connect the first outer adhesive parts 31 and the side tapes 50 to each other so as to seal the first outer adhesive parts 31 and the side tapes 50.

[0039] The inflatable kayak having the above configuration according to one embodiment of the present invention is configured such that, when air is injected into the bottom tube 10 and the side tubes 20, the upper surfaces of the side tubes 20 are inclined, as shown in FIG. 6, and thus, has an outer surface formed in a similar shape to the outer surface of a general kayak formed of a solid body.

[0040] FIGs. 7 to 9 are schematic views of an inflatable kayak according to another embodiment of the present invention. As shown in these figures, the inflatable kayak according to another embodiment of the present invention further includes a straight section 80 formed on the lower surface of the bottom tube 10.

[0041] The straight section 80 is formed on the lower surface of the bottom tube 10 to be convex in a straight line along the longitudinal direction of the inflatable kayak, and thus improves the straightness and stiffness of the bottom tube 10, and has a stable structure through prevention of bending of the inflatable kayak in the forward and rearward directions due to weight of the kayak itself or external force.

[0042] The straight section 80 includes a folded part 81 formed on the upper surface of the bottom tube 10 to be folded in a concave shape along the longitudinal direction, a third V tape 82 configured such that the lower surface thereof is adhered to the upper surface of the folded part 81 in a V shape, a straight concave part 83 formed in a concave shape in a straight line along the longitudinal direction on the upper surface of the third V tape 82 on the upper surface of the bottom tube 10, and a straight convex part 84 formed in a convex shape in the straight line along the longitudinal direction on the lower surface of the bottom tube 10 so as to correspond to the straight concave part 83.

[0043] The folded part 81 is formed in a straight line on the upper surface of the bottom tube 10 to be folded in the concave shape, and serves to form a depression in a straight line on the upper surface of the bottom tube 10. The third V tape 82 is adhered to the upper surface of the folded part 81 so as to maintain the folded state of the folded part 81.

[0044] The straight concave part 83 is formed in the concave shape in the straight line on the upper surface of the bottom tube 10 by the folded part 81, the straight convex part 84 is formed in the convex shape in the straight line on the lower surface of the bottom tube 10 by the folded part 81, and thus, the straight concave part 83 and the straight convex part 84 serve to improve the straightness of the bottom tube 10.

[0045] The above-described straight section 80 may be formed in a straight line from the front end to the rear end of the bottom tube 10, without being limited thereto, or may be formed to a desired length or in a desired region depending on manufacturer's intention.

[0046] The inflatable kayak having the above configuration according to another embodiment of the present invention is configured such that, when air is injected into the bottom tube 10 and the side tubes 20, the upper surfaces of the side tubes 20 are inclined, as shown in FIG. 9, and thus, has an outer surface formed in a similar shape to the outer surface of a general kayak formed of a solid body, and simultaneously, the bottom tube 10 has a downward convex structure in the straight section 80, and thus, the inflatable kayak has a bottom surface formed in a similar shape to the bottom surface of the general kayak formed of the solid body.

[0047] FIG. 10 is a schematic perspective view of an inflatable kayak according to yet another embodiment of the present invention. As shown in this figure, the inflatable kayak according to yet another embodiment of the present invention further includes a water barrier 90 mounted in the front ends of the side tubes 20 to be rounded, and provided to be inclined towards the front ends of the side tubes 20. The water barrier 90 serves to block

water drops in front of a driver during paddling of the inflatable kayak.

[0048] The bottom tube 10 has a sharpened front end, and the bottom tube 10 includes a front end cap 12 formed in a cylindrical shape and mounted at the sharpened front end of the bottom tube 10. The front end cap 12 serves to reduce damage to the bottom tube 10 due to an external object approaching the front end of the bottom tube 10 and to improve the forward driving performance of the inflatable kayak.

[0049] Further, the bottom tube 10 has a sharpened rear end, and the bottom tube 10 includes a rear end cap 13 formed in a cylindrical shape and mounted at the sharpened rear end of the bottom tube 10. The rear end cap 13 serves to reduce damage to the bottom tube 10 due to an external object approaching the rear end of the bottom tube 10 and to improve the rearward driving performance of the inflatable kayak.

[0050] As is apparent from the above description, in an inflatable kayak according to the present invention, side tubes have inclined outer surfaces so as to appropriately implement the inclined solid body structure of a general kayak, and may thus form outer surfaces formed in a similar shape to a general kayak formed of a solid body so as to improve aesthetics and marketability, and vacant spaces are removed from connection parts between a bottom tube and the side tubes so as to solve problems and defects caused by inflow of water into the vacant spaces and thus to secure a long lifespan while preventing damage to adhered parts.

[0051] Further, the inflatable kayak according to the present invention includes a straight section formed in a convex shape on the lower surface of the bottom tube, and may thus improve the straightness of the bottom tube, may have a stable structure through prevention of bending of the inflatable kayak due to weight of the kayak itself or external force, may remarkably improve stability in use through improvement in the stiffness of the kayak, and may allow the bottom tube to have an inclined lower surface similar to the general kayak formed of the solid body.

[0052] Although the exemplary embodiments of the present invention have been disclosed for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims. It is clear that the present invention can be equally applied by appropriately modifying the above embodiments. Accordingly, the above description is not intended to limit the scope of the present invention which is defined by the limits of the following claims.

[0053] On the other hand, although specific embodiments have been described in the detailed description of the present invention, it will be apparent to those of ordinary skill in the art that various modifications are possible without departing from the scope of the present invention.

Claims

1. An inflatable kayak comprising:

   a bottom tube (10) formed in an air tube type configured such that an outer circumference thereof is open;
   a pair of side tubes (20) provided on both sides of an upper surface of the bottom tube (10), and formed in an air tube type configured such that an outer circumference thereof is open;
   upper tapes (30)provided along the outer circumference of the bottom tube (10) so as to cover upper parts of both open sides of the bottom tube (10), each upper tape (30) comprising an upper adhesive part (31) formed at an upper end of the upper tape (30) so as to be adhered along an upper surface of the bottom tube (10), and a first outer adhesive part (32) configured to extend outwards from a lower end of the upper tape (30);
   lower tapes (40) provided along the outer circumference of the bottom tube (10) so as to cover lower parts of the open sides of the bottom tube (10), each lower tape (40) comprising a lower adhesive part (41) formed at a lower end of the lower tape (40) so as to be adhered along a lower surface of the bottom tube (10), and a second outer adhesive part (42) configured to extend outwards from an upper end of the lower tape (40)such that an upper surface of the second outer adhesive part (42) is adhered to a lower surface of the first outer adhesive part (32); and
   side tapes (50) provided to cover both open sides of the side tubes (30), each side tape (50) comprising a pair of side adhesive parts (51) horizontally bent from an upper end and a lower end of each side tape (50) so as to be adhered to an upper surface and a lower surface of a corresponding one of the side tubes (20) along an outer side and an inner side of the corresponding one of the side tubes (20),
   wherein the side tubes (20) are connected to the bottom tube (10) by adhering upper surfaces of the first outer adhesive parts (32) to outer surfaces of the side adhesive parts (51) provided at the outer sides of the side tubes (20) in a state in which the first outer adhesive parts (32) and the second outer adhesive parts (42), adhered to each other, are bent upwards.

2. The inflatable kayak according to claim 1, further comprising:
   first V tapes (60) formed in a V shape, symmetrically provided at both sides of the bottom tube (10), and configured such that outer surfaces of the first V tapes (60) are adhered to inner ends of the first outer

adhesive parts (32) and the second outer adhesive parts (42).

3. The inflatable kayak according to claim 1, further comprising:
second V tapes (70) formed in a V shape, symmetrically provided at the outer sides of the side tubes (20), and configured such that upper ends of the first outer adhesive parts (32) and the second outer adhesive parts (42), adhered to each other, are adhered to one side surface of each of the second V tapes (70), and opposite side surfaces of the second V tapes (70) are adhered to the outer surfaces of the side tapes (50).

4. The inflatable kayak according to claim 1, wherein the bottom tube (10) and the side tubes (21) have a plurality of shape maintenance lines (11, 21) configured such that both ends thereof are coupled to inner surfaces of the bottom tube (10) and the side tubes (21).

5. The inflatable kayak according to claim 1, wherein the pair of side tubes (20) is configured such that both ends of the side tubes (20) are connected to each other so as to be integrated into one tube.

6. The inflatable kayak according to claim 1, further comprising a straight section (80) formed on a lower surface of the bottom tube (10) to be convex in a straight line along a longitudinal direction of the inflatable kayak so as to secure straightness of the bottom tube (10).

7. The inflatable kayak according to claim 6, wherein the straight section (80) comprises:

a folded part (81) formed on the upper surface of the bottom tube (10)to be folded in a concave shape along the longitudinal direction;
a third V tape (82)configured such that a lower surface thereof is adhered to an upper surface of the folded part (81) in a V shape;
a straight concave part (83) formed in a concave shape in the straight line along the longitudinal direction on an upper surface of the third V tape (82) on the upper surface of the bottom tube (10); and
a straight convex part (84) formed in a convex shape in the straight line along the longitudinal direction on the lower surface of the bottom tube (10)so as to correspond to the straight concave part (83).

8. The inflatable kayak according to claim 1, further comprising a water barrier (90) mounted in the front ends of the side tubes (20) to be rounded, and provided to be inclined towards the front ends of the side tubes (20) so as to block water drops to prevent the water drops from entering into the inflatable kayak.

9. The inflatable kayak according to claim 1, wherein:

the bottom tube (10) has a sharpened front end; and
the bottom tube (10) comprises a front end cap (12) formed in a cylindrical shape and mounted at the sharpened front end of the bottom tube (10).

10. The inflatable kayak according toclaim 1, wherein:

the bottom tube (10) has a sharpened rear end; and
the bottom tube (10) comprises a rear end cap (13) formed in a cylindrical shape and mounted at the sharpened rear end of the bottom tube (10).

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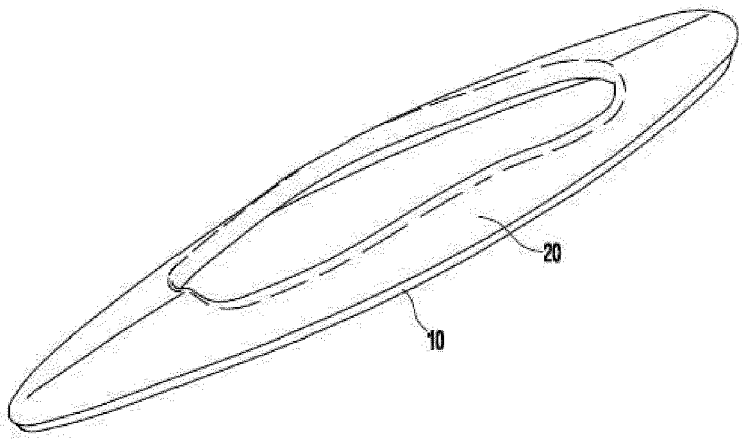

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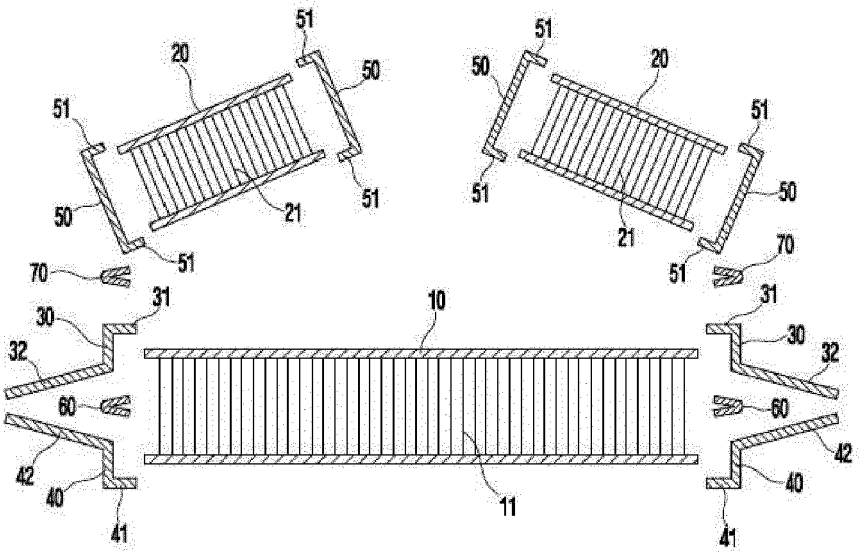

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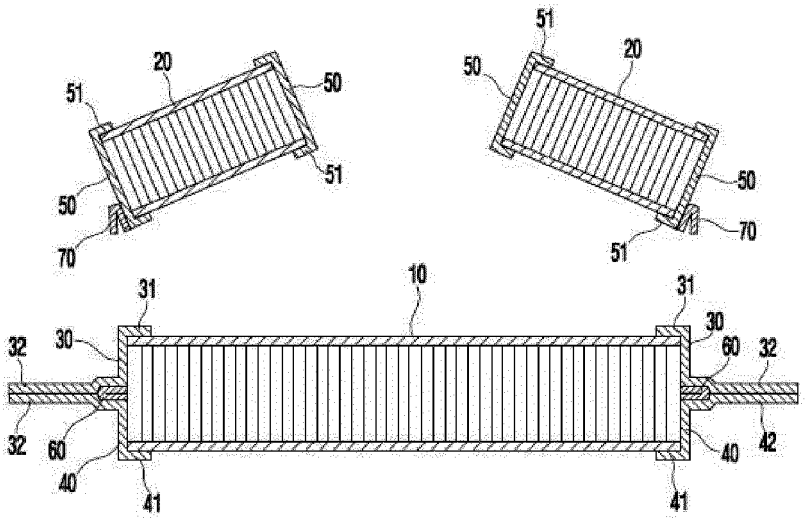
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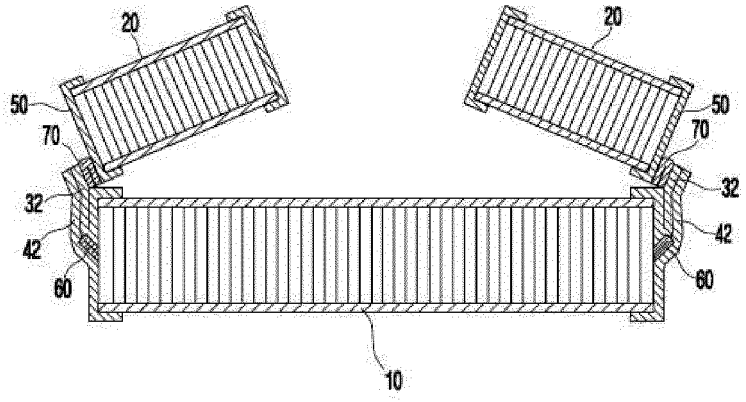
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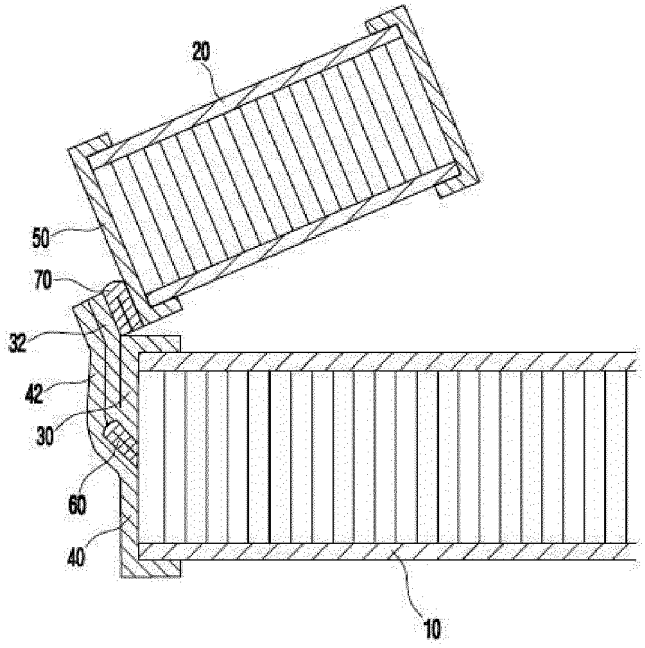
【D 5】



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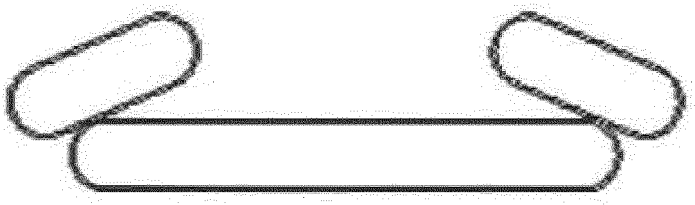

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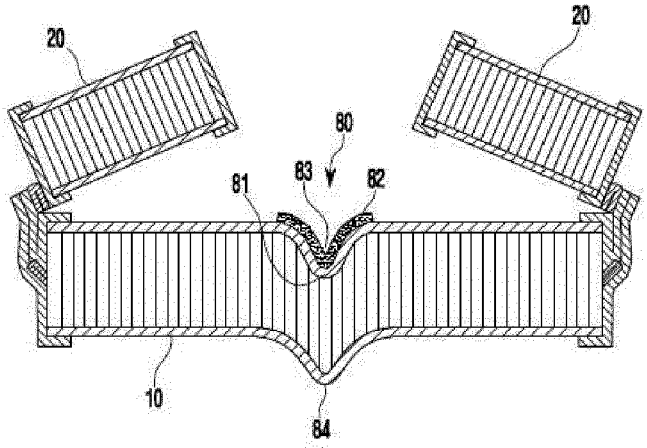

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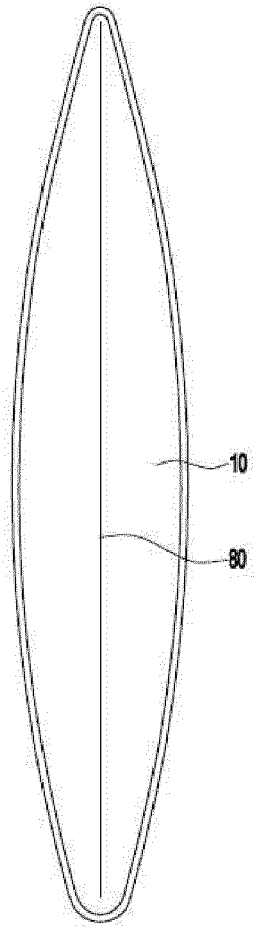

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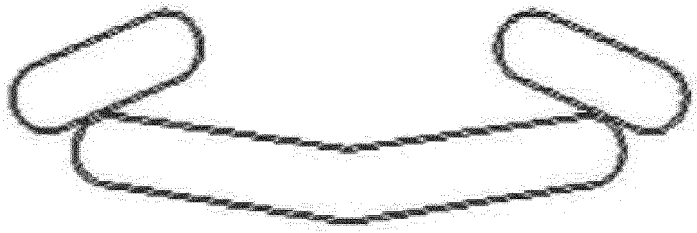

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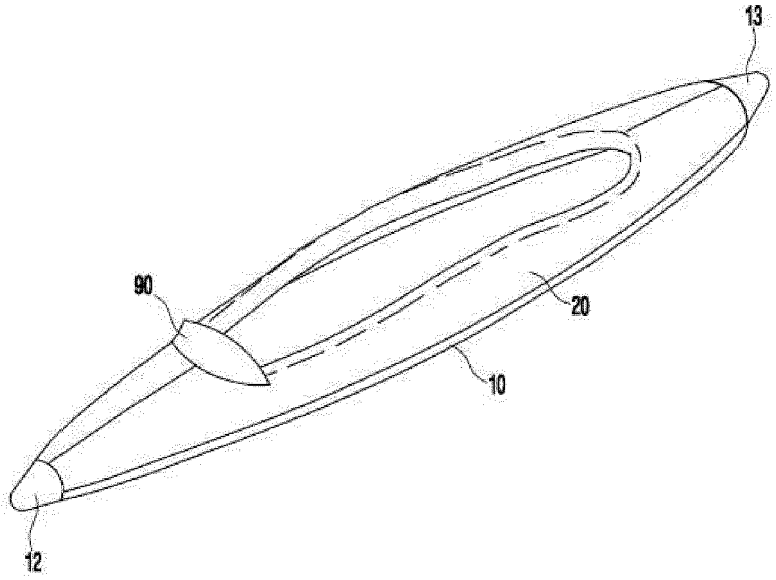

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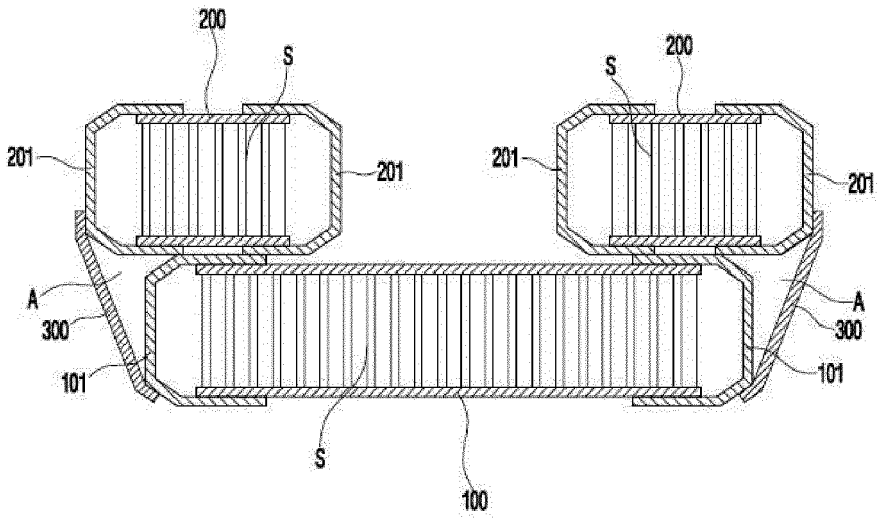

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EUROPEAN SEARCH REPORT

Application Number
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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	WO 2021/215738 A1 (WOOSUNG I B CO LTD [KR]) 28 October 2021 (2021-10-28) * paragraphs [0001], [0046] - [0070]; figures 1,5 *	1-10	INV. B63B7/08 B63B34/22 B63B73/46
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TECHNICAL FIELDS SEARCHED (IPC)

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	4 October 2023	Blazquez Lainez, R

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