

(19)



(11)

**EP 2 852 525 B1**

(12)

## EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention  
of the grant of the patent:

**13.04.2016 Bulletin 2016/15**

(51) Int Cl.:

**B63B 35/79 (2006.01)**

(86) International application number:

**PCT/GB2013/000232**

(21) Application number: **13725725.9**

(22) Date of filing: **21.05.2013**

(87) International publication number:

**WO 2013/175160 (28.11.2013 Gazette 2013/48)**

(54) **AN INFLATABLE STAND UP PADDLEBOARD**

AUFBLASBARES STAND UP PADDLE BOARD

PLANCHE À PAGAYER DEBOUT GONFLABLE

(84) Designated Contracting States:

**AL AT BE BG CH CY CZ DE DK EE ES FI FR GR  
HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL  
PT RO RS SE SI SK SM TR**

(30) Priority: **23.05.2012 GB 201209205**

(43) Date of publication of application:

**01.04.2015 Bulletin 2015/14**

(73) Proprietor: **Tushingham Sails Ltd.**

**Totnes, Devon TQ9 7LQ (GB)**

(72) Inventors:

- **TUSHINGHAM, Roger**  
**Pateley Bridge**  
**North Yorkshire HG3 5BN (GB)**

• **HACKFORD, David John**

**Blackawton**  
**Devon TQ9 7AY (GB)**

• **HIBBARD, John David**

**Thurlestone**  
**Devon TQ7 3NP (GB)**

(74) Representative: **Jones, Graham Henry**

**Graham Jones & Company**  
**77 Beaconsfield Road**  
**Blackheath, London SE3 7LG (GB)**

(56) References cited:

**DE-A1- 2 700 887 NL-A- 7 312 340**  
**US-A- 3 577 576**

**EP 2 852 525 B1**

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

## Description

**[0001]** This invention relates to paddleboards and, more especially, this invention relates to an inflatable stand up paddleboard.

**[0002]** Inflatable stand up paddleboards need to be inflated to a relatively high pressure in order to be used with optimum effect on water. For example, the inflatable stand up paddleboards are ideally inflated to 20 pounds per square inch (137894.90 Newtons per square metre). If the inflatable stand up paddleboards are inflated by hand, for example using a hand pump, a problem often occurs in inflating to the required A stand up paddleboard according to the features of the preamble of claim 1 is known by US3577576.

**[0003]** It is an aim of the present invention to obviate or reduce the above mentioned problem.

**[0004]** Accordingly, the present invention provides an inflatable stand up paddleboard comprising a body which is inflatable for use of the inflatable stand up paddleboard and which is deflatable for storage and/or transportation of the inflatable stand up paddleboard, at least one strengthening member for increasing the rigidity of the body when the body is inflated, and retainer means for the strengthening member, and characterised in that the retainer means releasably retains the strengthening member along a side of the body whereby the strengthening member is able to be retained along the side of the body when the body is inflated and to be removed from the side of the body when the body is deflated, and the retainer means is a pocket with an open end and a closed end, the open end facing a rear part of the inflatable stand up paddleboard whereby the retainer means provides minimal resistance to water during use of the inflatable stand up paddleboard.

**[0005]** The provision of the strengthening member enables the inflatable stand up paddleboard to be inflated to a satisfactory operating pressure which is less than the pressure that would be required without the strengthening member. This in turn enables the inflatable stand up paddleboard more easily to be inflated by hand. For example, the inflatable stand up paddleboard may only need to be inflated to half the previously required pressure. Thus the inflatable stand up paddleboard could be inflated to only 10 pounds per square inch (68947.45 Newtons per square meter) instead of the previously required 20 pounds per square inch. The inflatable stand up paddleboard may still be inflated to higher pressures if desired, for example to 20 pounds per square inch or higher.

**[0006]** Preferably, the inflatable stand up paddleboard is one in which the retainer means is configured to provide minimal resistance to water during use of the inflatable stand up paddleboard.

**[0007]** The retainer means may be one in which the pocket is of a length which is just short of the length of the strengthening member and such that the pocket covers all of the strengthening member except for an end

portion which is available for being gripped in order to pull the strengthening member from the pocket.

**[0008]** Preferably, the inflatable stand up paddleboard is one in which the retainer means and/or the strengthening member have surfaces which facilitate a sliding action between the strengthening member and the retainer means. With such surfaces, the strengthening member may be one which is slid into and slid out of the retainer means, with the sliding action being facilitated by the surfaces of the retainer means and/or the strengthening means, and with the surfaces not being unduly worn by repeated sliding of the strengthening member into the retainer means.

**[0009]** The inflatable stand up paddleboard may be one in which the strengthening member acts solely to increase the rigidity of the body when the body is inflated. In this case, the strengthening member may be a thin bar which is rectangular in cross section. Other cross sectional shapes for the strengthening member may be employed.

**[0010]** Alternatively, the inflatable stand up paddleboard may be one in which the strengthening member acts firstly to increase the rigidity of the body when the body is inflated, and which acts secondly to modify the profile of the side of the body when the body is inflated and such as to improve the water-travel characteristics of the body as compared to the body without the strengthening member. In this case, the strengthening member may be of a cross sectional shape which causes the profile of the side of the body to be angular when the body is inflated. The strengthening member may be a bar which is rectangular in cross section. Other cross sectional shapes for the strengthening member may be employed. The improved water travel characteristics may be better speed and better handling.

**[0011]** In all embodiments of the invention, the strengthening member may be made of a composite material. Preferred composite materials are glass reinforced plastics material and carbon fibre composite material. The composite material may be produced as an elongate member of constant cross section by a continuous process known as Pultrusion. In all embodiments of the invention, the strengthening member may be of any suitable cross sectional shape, for example rectangular as mentioned above or a figure-of-eight shape.

**[0012]** The strengthening member may be slightly flexible when it is removed from the body, whereby the strengthening member is able to more easily follow any external curve in the body.

**[0013]** The strengthening member may include grip means for facilitating the removal by pulling of the strengthening member from the side of the body. The grip means may be a flexible loop of material. The material may be cord, rope or a plastics material. Other types of grip means such for example as a handle may be employed.

**[0014]** The inflatable stand up paddleboard may be one in which there are two of the strengthening members,

in which there is one of the two strengthening members on opposite sides of the body, and in which each strengthening member has one of the retainer means.

**[0015]** The inflatable stand up paddleboard is typically 3-4 metres long and 0.8 metres wide at its middle point. The strengthening member may then typically be 1 metre long and 4 mm wide. Other measurements for the stand up paddleboard and the strengthening member may be employed.

**[0016]** The inflatable stand up paddleboard may be made from any suitable and appropriate materials, including those currently in use for inflatable stand up paddleboards. The body may be made of polyvinyl chloride. Part of the body may be made of polyvinyl chloride that is known as drop stitch polyvinyl chloride, whereby the depth of inflation of the body may be controlled. Other depth control means for controlling the depth of inflation of the body may be employed. Other materials may be employed such for example as a thermoplastic olefin, for example thermoplastic urethane or a thermoplastic polyurethane.

**[0017]** The retainer means may be made of any suitable and appropriate material, for example in dependence upon the type of retainer means employed. The retainer means may be made of the same material as the material from which the body of the inflatable stand up paddleboard is made. The retainer means may be formed as a composite material with polyvinyl chloride on the outside, and woven polyester sailcloth on the inside. The woven polyester sail cloth provides a surface which facilitates a sliding action between the strengthening means and the retainer means. Other materials may be employed, including single materials and composite materials.

**[0018]** Embodiments of the invention will now be described solely by way of example and with reference to the accompanying drawings in which:

Figure 1 is an exploded perspective view of a first inflatable stand up paddleboard of the present invention and in an inflated condition;

Figure 2 shows the inflatable stand up paddleboard of Figure 1 in a deflated condition, and illustrates the operation of a strengthening member forming part of the inflatable stand up paddleboard;

Figure 3 shows the inflatable stand up paddleboard of Figure 1 in its inflated condition;

Figure 4 is an exploded view of a second inflatable stand up paddleboard of the present invention and in an inflated condition;

Figure 5 shows the second inflatable stand up paddleboard of Figure 4 in a deflated condition, and illustrates the use of two strengthening members forming part of the inflatable stand up paddleboard;

Figure 6 shows the inflatable stand up paddleboard of Figure 4 in an inflated condition;

Figure 7 is a cross section through a middle part of a third inflatable stand up paddleboard; and

Figure 8 is a cross section through a rear part of the third inflatable stand up paddleboard.

**[0019]** Referring to Figures 1 - 3, there is shown an inflatable stand up paddleboard 2 comprising a body 4 which is inflatable for use of the inflatable stand up paddleboard 2, and which is deflatable for storage and/or transportation of the inflatable stand up paddleboard 2. The inflatable stand up paddleboard 2 also comprises a strengthening member 6 for increasing the rigidity of the body 4 when the body 4 is inflated. The inflatable stand up paddleboard 2 further comprises retainer means 8 for releasably retaining the strengthening member 6 along a side 10 of the body 4. The strengthening member 6 is able to be retained along the side 10 of the body 4 by the retainer means 8 when the body 4 is inflated, and to be removed from the side 10 of the body 4 when the body 4 is deflated.

**[0020]** The strengthening member 6 is such that it enables the inflatable stand up paddleboard 2 to be inflated manually to an optimum operational pressure which is less than that which would be required in the absence of the strengthening member 6. By reducing the required optimal operating pressure, the inflatable stand up paddleboard 2 can more easily be inflated manually and especially when using a hand pump of the type often used for inflating inflatable paddleboards. Thus the inflatable stand up paddleboard 2 is able to operate at the required rigidity, but with a lower inflation pressure that would be the case without the use of the strengthening member 6. There will usually be two of the strengthening members 6 employed, with there being one of the strengthening members 6 on opposite sides of the body 4. If desired however only one strengthening member 6 could be employed.

**[0021]** The body 4 is a longitudinally extending body.

**[0022]** The retainer means 8 is configured to provide minimal resistance to water during use of the inflatable stand up paddleboard 2. The retainer means 8 is in the form of a pocket. The pocket 8 has an open end 8a and a closed end 8b. The open end 8a faces a rear part of the inflatable stand up paddleboard 2 as shown in Figures 2 and 3. The pocket is of a length which is just short of the length of the strengthening member 6 and such that the pocket covers all of the strengthening member 6 except for an end portion which is available for being gripped in order to pull the strengthening member 6 from the pocket.

**[0023]** The retainer means 8 has a surface which facilitates a sliding action between the strengthening member 6 and the retainer means 8. The sliding action facilitates the insertion and removal of the strengthening member 6 into the retainer means 8. Also, the facilitation of the sliding action helps to avoid wear on the inside of the retainer means and/or on the outside of the side 10 of the body 4 caused by pushing and pulling of the strengthening member 6 into and out of the retainer means 8.

**[0024]** The strengthening member 6 operates solely to increase the rigidity of the body 4 when the body 4 is inflated. As can be seen from Figures 1 - 3, the strengthening member 6 is in the form of a thin bar which is rectangular in cross section. The strengthening member 6 is slightly flexible so that it is able to curve to conform to the curve of the side 10 of the body 4 when it is inserted into the retainer means 8.

**[0025]** Apart from the provision of the strengthening member 6 and the retainer means 8, the inflatable stand up paddleboard 2 may be of a standard known shape and size. Thus, for example, the body 4 is provided with fins 12.

**[0026]** Referring now to Figures 4, 5 and 6 there is shown a second inflatable stand up paddleboard 14. The views as shown in Figures 4, 5 and 6 correspond to the views in Figures 1, 2 and 3 respectively for the inflatable stand up paddleboard 2. Similar parts have been given the same reference numerals for ease of comparison and understanding.

**[0027]** In the inflatable stand up paddleboard 14, there are shown two of the strengthening members 6, with one of the strengthening members 6 being on opposite sides 10 of the body 4, and each strengthening member 6 having its own retainer means 16. The retainer means 16 in the inflatable stand up paddleboard 14 is different from the retainer means 8 employed in the inflatable stand up paddleboard 2. More specifically, the retainer means 16 is still a pocket having a closed end and an open end facing a rear part of the inflatable stand up paddleboard 2. However, the retainer means 16 is formed of a composite material. The composite material comprises an outer polyvinyl chloride covering 18, and an inner sleeve 20 which receives the strengthening member 6. The inner sleeve 20 is made of a friction-reducing material in the form of 210gm woven polyester sail cloth. A preferred such material is known under the Registered Trade Mark Dacron.

**[0028]** The sleeve 20 is formed by folding the material of the sleeve 20 along one edge 22 and stitching along the other edge 24. The covering 18 and the sleeve 20 may be stitched, stuck or otherwise secured together.

**[0029]** Referring now to Figures 7 and 8, Figure 7 is a cross section through a middle part of a third inflatable stand up paddleboard 24, and Figure 8 is a cross section through an end part of the third inflatable stand up paddleboard 24. The inflatable stand up paddleboard 24 may be of the same general appearance as the inflatable stand up paddleboards 2, 14. Similar parts have been given the same reference numerals for ease of comparison and understanding.

**[0030]** In the inflatable stand up paddleboard 24, two strengthening members 26 have been employed. These strengthening members 26 are like the strengthening member 6 shown in Figures 1 - 3 except that the strengthening member 6 is of a thicker cross sectional shape than the cross sectional shape of the strengthening member 6. This thicker cross sectional shape of the strengthening

member 26 enables the strengthening member 26 to act in two ways. More specifically, the strengthening member 26 acts firstly to increase the rigidity of the body 4 when the body 4 is inflated, and which acts secondly to modify the profile of the side of the body 4 when the body 4 is inflated. This modified profile is such as to improve the water-travel characteristics of the body 4 as compared to the body 4 without the strengthening member 26. The improved water-travel characteristics may be better speed and better handling. The strengthening member 26 with its thicker cross sectional shape is of a cross sectional shape which causes the profile of the side 10 of the body 4, as defined by the pocket retainer means 8, to be angular when the body 4 is inflated. This angularity is shown by sharp edges 28 of the retaining means 8. These sharp edges 28 are not present in the retainer means 8 shown in the inflatable stand up paddleboard 2, this being due to the fact that the strengthening member 6 is of a smaller rectangular cross sectional shape than the rectangular cross sectional shape of the strengthening member 26. Improved water-travel characteristics of the body 4 afforded by the use of the strengthening member 26 include improved speed and improved board control through water. A thicker and/or longer strengthening member may be employed.

**[0031]** The inflatable stand up paddleboard 24 is such that parts of its body 4 are constructed of depth control means in the form of drop stitch polyvinyl chloride 30. The drop stitch polyvinyl chloride 30 controls the depth of inflation of the inflatable stand up paddleboard 24 by restricting the maximum depth of inflation.

**[0032]** It is to be appreciated that the embodiments of the invention described above with reference to the accompanying drawings have been given by way of example only and that modifications may be effected. Thus, for example, different types of strengthening members 6, 26 having different cross sectional shapes, may be employed. Materials other than polyvinyl chloride may be employed. Individual components shown in the drawings are not limited to use in their drawings and they may be used in other drawings and in all aspects of the invention.

## Claims

1. An inflatable stand up paddleboard (2) comprising a body (4) which is inflatable for use of the inflatable stand up paddleboard (2) and which is deflatable for storage and/or transportation of the inflatable stand up paddleboard (2), at least one strengthening member (6) for increasing the rigidity of the body (4) when it is inflated, and retainer means (8) for the strengthening member (6), and **characterised in that** the retainer means (8) releasably retains the strengthening member (6) along a side (10) of the body (4) whereby the strengthening member (6) is able to be retained along the side (10) of the body (4) when the

body (4) is inflated and to be removed from the side (10) of the body (4) when the body (4) is deflated, and the retainer means (8) is a pocket (8) with an open end (8a) and a closed end (8b), the open end (8a) facing a rear part of the inflatable stand up paddleboard (2) whereby the retainer means (8) provides minimal resistance to water during use of the inflatable stand up paddleboard (2).

2. An inflatable stand up paddleboard (2) according to claim 1 in which the pocket (8) is of a length which is just short of the length of the strengthening member (6) and such that the pocket (8) covers all of the strengthening member (6) except for an end portion which is available for being gripped in order to pull the strengthening member (6) from the pocket (8).
3. An inflatable stand up paddleboard (2) according to claim 1 or claim 2 in which the retainer means (8) and/or the strengthening member (6) have surfaces which facilitate a sliding action between the strengthening member (6) and the retainer means (8).
4. An inflatable stand up paddleboard (2) according to any one of the preceding claims in which the strengthening member (6) acts solely to increase the rigidity of the body (4) when the body (4) is inflated.
5. An inflatable stand up paddleboard (2) according to claim 4 in which the strengthening member (6) is a thin bar which is rectangular in cross section.
6. An inflatable stand up paddleboard (2) according to any one of claims 1 - 3 in which the strengthening member (6) acts firstly to increase the rigidity of the body (4) when the body (4) is inflated, and which acts secondly to modify the profile of the side (10) of the body (4) when the body (4) is inflated and such as to improve the water travel characteristics of the body (4) as compared to the body (4) without the strengthening member (6).
7. An inflatable stand up paddleboard (2) according to claim 6 in which the strengthening member (6) is of a cross sectional shape which causes a profile of the side (10) of the body (4) to be angular when the body (4) is inflated.
8. An inflatable stand up paddleboard (2) according to claim 7 in which the strengthening member (6) is a thick bar which is rectangular in cross section.
9. An inflatable stand up paddleboard (2) according to any one of the preceding claims in which the strengthening member (6) is made of a glass reinforced plastics material.
10. An inflatable stand up paddleboard (2) according to

any one of the preceding claims in which the strengthening member (6) includes grip means for facilitating the removal by pulling of the strengthening member (6) from the side (10) of the body (4).

11. An inflatable stand up paddleboard (2) according to claim 10 in which the grip means is a flexible loop of material.
12. An inflatable stand up paddleboard (2) according to any one of the preceding claims in which there are two of the strengthening members (6), in which there is one of the two strengthening members (6) on opposite sides of the body (4), and in which each strengthening member (6) has one of the retainer means (8).

### Patentansprüche

1. Aufblasbares Stand Up Paddleboard (2), umfassend einen Körper (4), der für die Verwendung des aufblasbaren Stand Up Paddleboards (2) aufblasbar ist und der zur Lagerung und/oder zum Transport des aufblasbaren Stand Up Paddleboards (2) entleert werden kann, mindestens ein Verstärkungselement (6) zum Erhöhen der Steifigkeit des Körpers (4), wenn dieser aufgeblasen ist, und Halterungsmittel (8) für das Verstärkungselement (6), **dadurch gekennzeichnet, dass** die Halterungsmittel (8) lösbar das Verstärkungselement (6) entlang einer Seite (10) des Körpers (4) halten, wodurch das Verstärkungselement (6) entlang der Seite (10) des Körpers (4) gehalten werden kann, wenn der Körper (4) aufgeblasen ist, und von der Seite (10) des Körpers (4) entfernt werden kann, wenn der Körper (4) entleert wird, wobei das Halterungsmittel (8) eine Tasche (8) mit einem offenen Ende (8a) und einem geschlossenen Ende (8b) ist, wobei das offene Ende (8a) zu einem hinteren Teil des aufblasbaren Stand Up Paddleboards (2) zeigt, wodurch das Halterungsmittel (8) einem minimalen Widerstand für Wasser während der Verwendung des aufblasbaren Stand Up Paddleboards (2) bereitstellt.
2. Aufblasbares Stand Up Paddleboard (2) nach Anspruch 1, wobei die Tasche (8) eine Länge aufweist, die nur etwas kürzer als die Länge des Verstärkungselements (6) ist, sodass die Tasche (8) das gesamte Verstärkungselement (6) bedeckt, außer einem Endabschnitt, der zum Ergreifen verfügbar ist, um das Verstärkungselement (6) aus der Tasche (8) zu ziehen.
3. Aufblasbares Stand Up Paddleboard (2) nach Anspruch 1 oder Anspruch 2, wobei die Halterungsmittel (8) und/oder das Verstärkungselement (6) Oberflächen aufweisen, die eine Gleitbewegung zwi-

schen dem Verstärkungselement (6) und dem Halterungsmittel (8) erleichtern.

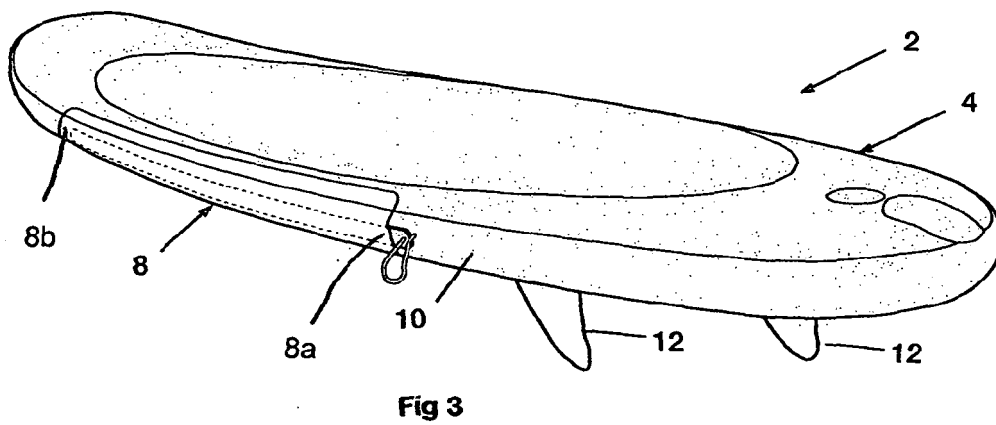
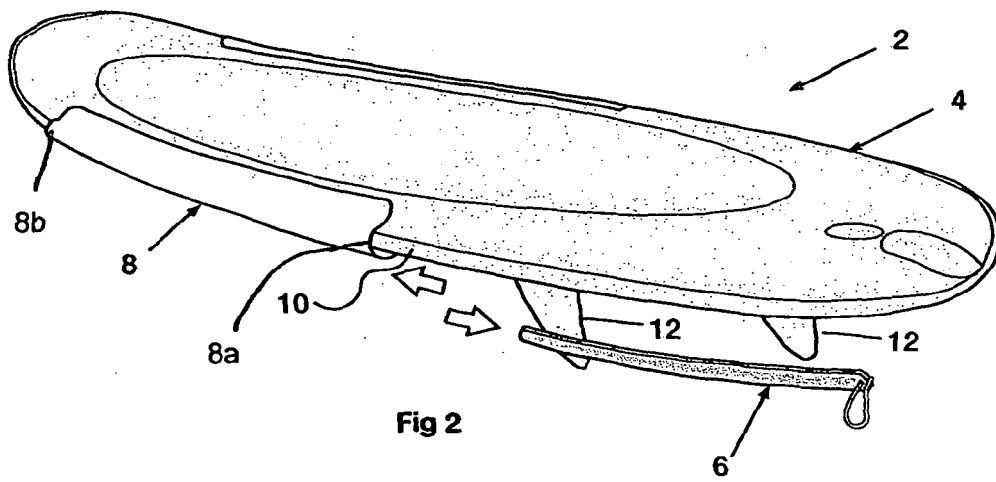
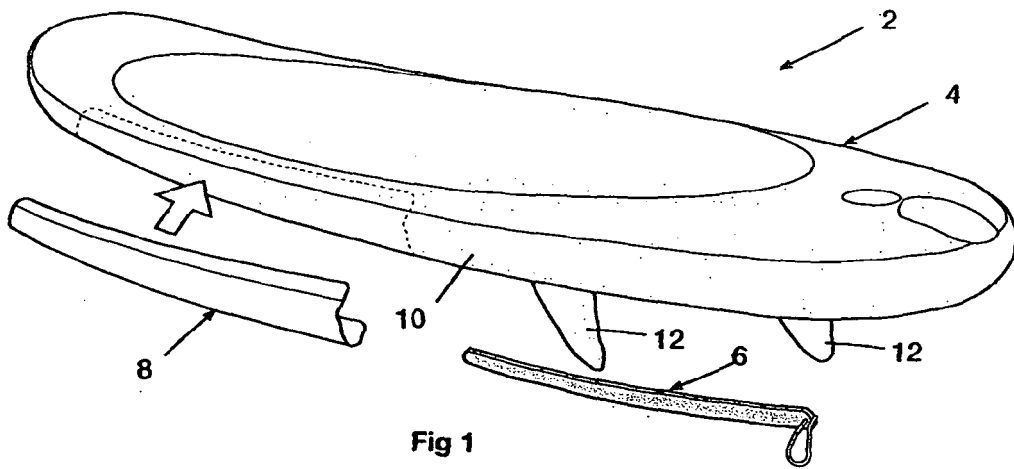
4. Aufblasbares Stand Up Paddleboard (2) nach einem der vorhergehenden Ansprüche, wobei das Verstärkungselement (6) nur die Erhöhung der Steifigkeit des Körpers (4) bewirkt, wenn der Körper (4) aufgeblasen ist. 5
5. Aufblasbares Stand Up Paddleboard (2) nach Anspruch 4, wobei das Verstärkungselement (6) eine dünne Stange mit rechteckigem Querschnitt ist. 10
6. Aufblasbares Stand Up Paddleboard (2) nach einem der Ansprüche 1 bis 3, wobei das Verstärkungselement (6) zunächst wirkt, um die Steifigkeit des Körpers (4) zu erhöhen, wenn der Körper (4) aufgeblasen wird, und zweitens wirkt, um das Profil der Seite (10) des Körpers (4) zu modifizieren, wenn der Körper (4) aufgeblasen wird, um die Wasserfahreigenschaften des Körpers (4) im Vergleich zu einem Körper (4) ohne Verstärkungselement (6) zu verbessern. 15 20
7. Aufblasbares Stand Up Paddleboard (2) nach Anspruch 6, wobei das Verstärkungselement (6) eine Querschnittsform aufweist, die bewirkt, dass ein Profil der Seite (10) des Körpers (4) einen Winkel aufweist, wenn der Körper (4) aufgeblasen wird. 25 30
8. Aufblasbares Stand Up Paddleboard (2) nach Anspruch 7, wobei das Verstärkungselement (6) eine dicke Stange mit rechteckigem Querschnitt ist. 35
9. Aufblasbares Stand Up Paddleboard (2) nach einem der vorhergehenden Ansprüche, wobei das Verstärkungselement (6) aus einem glasverstärkten Kunststoffmaterial hergestellt ist. 40
10. Aufblasbares Stand Up Paddleboard (2) nach einem der vorhergehenden Ansprüche, wobei das Verstärkungselement (6) Griffmittel zum Erleichtern der Entfernung durch Ziehen des Verstärkungsmittels (6) von der Seite (10) des Körpers (4) aufweist. 45
11. Aufblasbares Stand Up Paddleboard (2) nach Anspruch 10, wobei das Griffmittel eine flexible Materialschleife ist. 50
12. Aufblasbares Stand Up Paddleboard (2) nach einem der vorhergehenden Ansprüche, wobei zwei Verstärkungselemente (6) vorliegen, wobei sich eines der zwei Verstärkungselemente (6) auf gegenüberliegenden Seiten des Körpers (4) befindet, wobei jedes Verstärkungselement (6) eines der Halterungsmittel (8) aufweist. 55

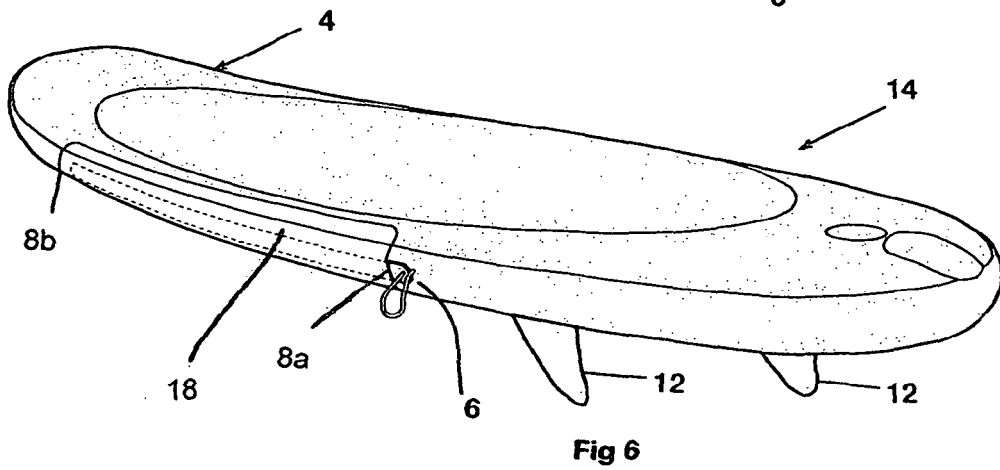
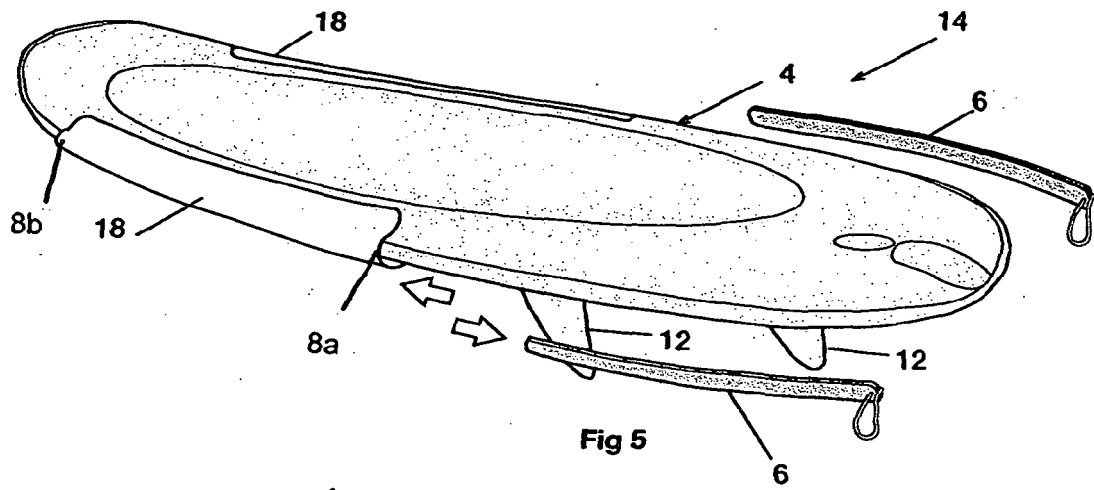
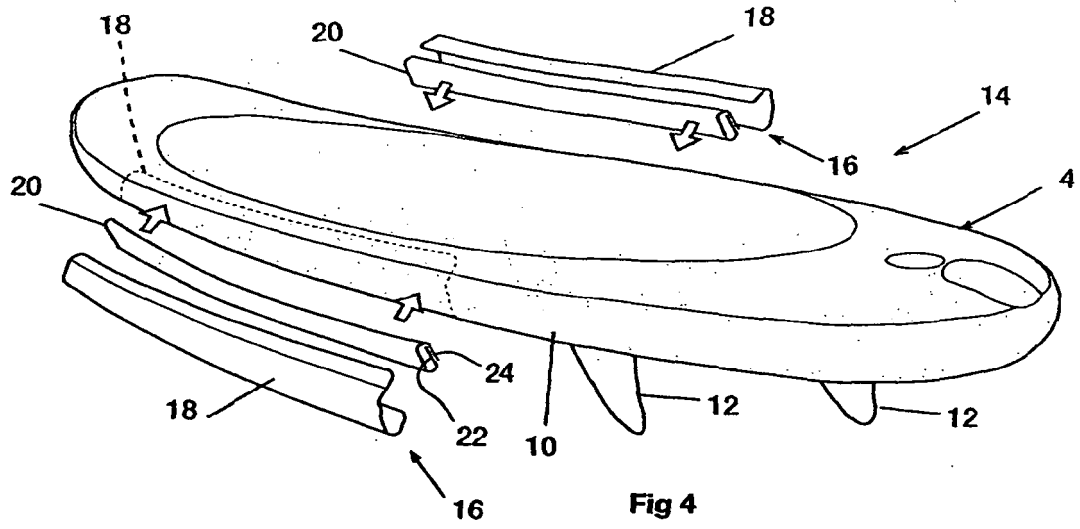
## Revendications

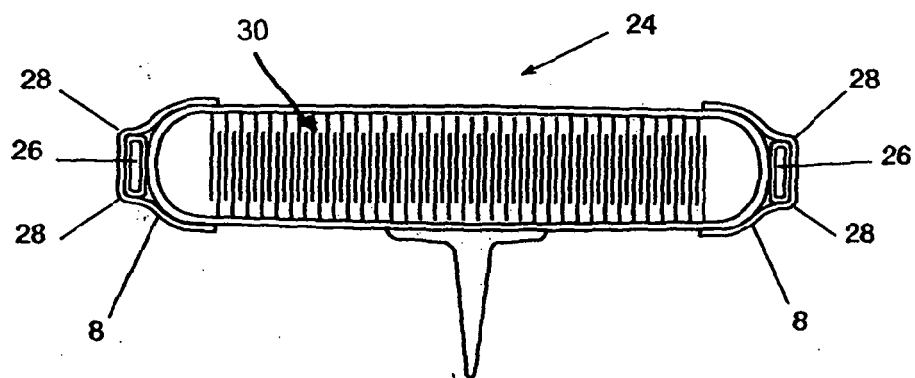
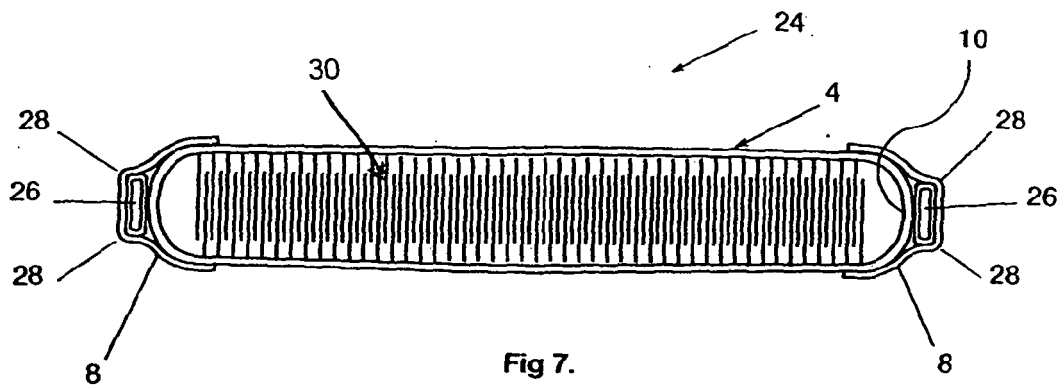
1. Planche de stand-up paddle (planche à rame) gonflable (2) comprenant un corps (4) qui est gonflable en vue de l'utilisation de la planche de stand-up paddle gonflable (2) et qui est dégonflable en vue du rangement et/ou du transport de la planche de stand-up paddle gonflable (2), au moins un élément de renforcement (6) servant à augmenter la rigidité du corps (4) lorsqu'il est gonflé, et des moyens de retenue (8) pour l'élément de renforcement (6), et **caractérisée en ce que** les moyens de retenue (8) retiennent, de manière libérable, l'élément de renforcement (6) le long d'un côté (10) du corps (4), l'élément de renforcement (6) pouvant ainsi être retenu le long du côté (10) du corps (4) lorsque le corps (4) est gonflé et être ôté du côté (10) du corps (4) lorsque le corps (4) est dégonflé, et les moyens de retenue (8) se présentant sous la forme d'une poche (8) comportant une extrémité ouverte (8a) et une extrémité fermée (8b), l'extrémité ouverte (8a) se trouvant face à une partie arrière de la planche de stand-up paddle gonflable (2), les moyens de retenue (8) assurant ainsi une résistance minimale vis-à-vis de l'eau lors de l'utilisation de la planche de stand-up paddle gonflable (2).
2. Planche de stand-up paddle gonflable (2) selon la revendication 1, dans laquelle la poche (8) présente une longueur qui est légèrement inférieure à la longueur de l'élément de renforcement (6) et telle que la poche (8) recouvre l'intégralité de l'élément de renforcement (6) à l'exception d'une partie d'extrémité qui peut être saisie en vue de tirer l'élément de renforcement (6) hors de la poche (8).
3. Planche de stand-up paddle gonflable (2) selon la revendication 1 ou la revendication 2, dans laquelle les moyens de retenue (8) et/ou l'élément de renforcement (6) comportent des surfaces qui facilitent une action de glissement entre l'élément de renforcement (6) et les moyens de retenue (8).
4. Planche de stand-up paddle gonflable (2) selon l'une quelconque des revendications précédentes, dans laquelle l'élément de renforcement (6) agit uniquement pour augmenter la rigidité du corps (4) lorsque le corps (4) est gonflé.
5. Planche de stand-up paddle gonflable (2) selon la revendication 4, dans laquelle l'élément de renforcement (6) est une barre mince qui présente une section transversale rectangulaire.
6. Planche de stand-up paddle gonflable (2) selon l'une quelconque des revendications 1 à 3, dans laquelle l'élément de renforcement (6) agit d'abord pour augmenter la rigidité du corps (4) lorsque le corps (4)

est gonflé, et qui agit ensuite pour modifier le profil du côté (10) du corps (4) lorsque le corps (4) est gonflé et de manière à améliorer les caractéristiques de déplacement sur l'eau du corps (4) par comparaison avec un corps (4) dépourvu de l'élément de renforcement (6). 5

7. Planche de stand-up paddle gonflable (2) selon la revendication 6, dans laquelle l'élément de renforcement (6) présente une forme en section transversale qui a pour effet qu'un profil du côté (10) du corps (4) soit anguleux lorsque le corps (4) est gonflé. 10
8. Planche de stand-up paddle gonflable (2) selon la revendication 7, dans laquelle l'élément de renforcement (6) est une barre épaisse qui présente une section transversale rectangulaire. 15
9. Planche de stand-up paddle gonflable (2) selon l'une quelconque des revendications précédentes, dans laquelle l'élément de renforcement (6) est composé d'une matière plastique renforcée par du verre. 20
10. Planche de stand-up paddle gonflable (2) selon l'une quelconque des revendications précédentes, dans laquelle l'élément de renforcement (6) comprend des moyens de saisie permettant d'ôter facilement l'élément de renforcement (6) du côté (10) du corps (4) en le tirant. 25  
30
11. Planche de stand-up paddle gonflable (2) selon la revendication 10, dans laquelle les moyens de saisie se présentent sous la forme d'une boucle souple de matériau. 35
12. Planche de stand-up paddle gonflable (2) selon l'une quelconque des revendications précédentes, dans laquelle deux éléments de renforcement (6) sont prévus, dans laquelle un des deux éléments de renforcement (6) est prévu sur des côtés opposés du corps (4), et dans laquelle chaque élément de renforcement (6) a un des moyens de retenue (8). 40  
45  
50  
55







**REFERENCES CITED IN THE DESCRIPTION**

*This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.*

**Patent documents cited in the description**

- US 3577576 A [0002]