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

(11) Publication number : **0 672 580 A1**

(12) EUROPEAN PATENT APPLICATION

(21) Application number : **95830028.7**

(51) Int. Cl.[6] : **B63B 7/08**

(22) Date of filing : **02.02.95**

(30) Priority : **17.03.94 IT MI940195 U**

(43) Date of publication of application :
20.09.95 Bulletin 95/38

(84) Designated Contracting States :
DE ES FR GB GR PT

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(54) Inflatable boat with improved contour tubular side elements.

(57) The present invention relates to an inflatable boat with improved contour tubular side elements, which comprises a rigid keel, to which the side tubular elements are coupled.

The main feature of the invention is that the side tubular elements are provided with a front portion (4) at a top level and a rear portion (5) at a bottom level.

Between the front portion and rear portion a fitting middle portion (6) being provided. The front portion is positioned at a top level to prevent high impact of waves on the tubular elements.

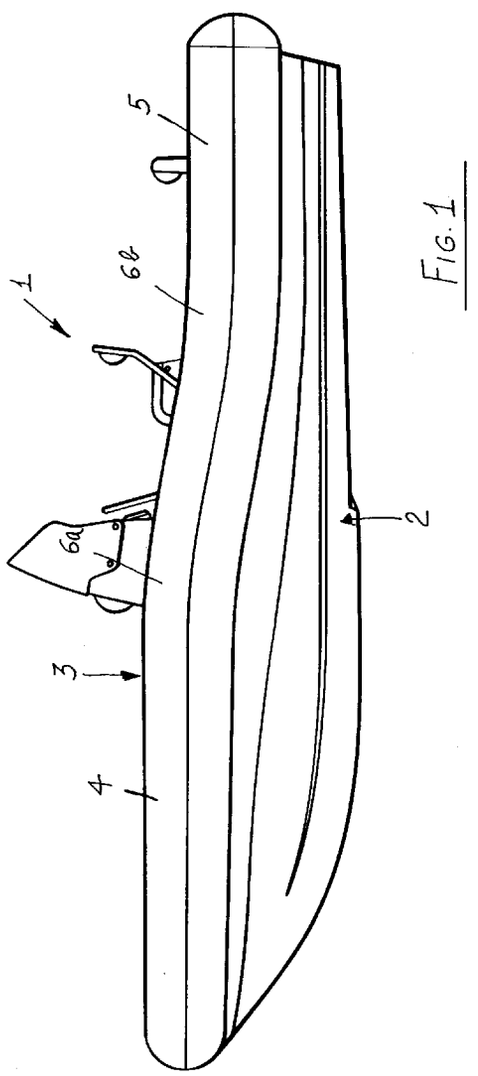

FIG. 1

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BACKGROUND OF THE INVENTION

The present invention relates to an inflatable boat with improved contour tubular side elements.

As is known, inflatable boats are available on the market, which comprise a rigid keel to which there are applied side tubular elements which, usually, rectilinearly extend.

In this arrangement, the front portion, or bow portion of the boat has the tubular elements which are arranged comparatively near the water surface.

Accordingly, during the sailing, the waves impact against the front portion of the tubular elements, thereby generating noise and sprays, with a consequent reduction of the exploitable power.

Moreover, another drawback is that the waves continuously impact on the boat tubular elements, which causes a lot of drawbacks.

SUMMARY OF THE INVENTION

Thus, the aim of the present invention is to solve the above mentioned problem, by providing an inflatable boat with improved-contour side tubular elements, specifically designed for preventing waves from impacting on the boat tubular elements.

Within the scope of the above mentioned aim, a main object of the present invention is to provide side tubular elements for inflatable boats having such a contour adapted to prevent the waves from impacting against the front portion of the tubular elements, thereby facilitating the advancing movement of the boat even on a water surface with strong waves.

Another object of the present invention is to provide side tubular elements for inflatable boats which are specifically designed to increase the advancing speed of the boat, the boat operating power being the same, with a reduction of the water sprays by the boat advancing through the water.

Yet another object of the present invention is to provide such an inflatable boat in which it is possible to greatly increase the bow load of the boat shell so as to further improve the sailing comfort.

Yet another object of the present invention is to provide improved contour side tubular elements for inflatable boats, which can be made by a simple method and at a comparatively low cost with respect to conventional methods.

According to one aspect of the present invention, the above mentioned aim and objects, as well as yet other objects, which will become more apparent hereinafter, are achieved by an inflatable boat with improved-contour side tubular elements, comprises a rigid keel, to which said side tubular elements are coupled, characterized in that said tubular side elements comprise a front portion arranged at a top level and a rear portion arranged at a bottom level, between said front portion and rear portion a fitting middle portion being provided.

BRIEF DESCRIPTION OF THE DRAWING

Further characteristics and advantages of the present invention will become more apparent hereinafter from the following detailed disclosure of an inflatable boat provided with improved-contour side tubular elements, which is illustrated, by way of an indicative, but not limitative example, in the accompanying drawing, the single figure of which illustrates an elevation view of the inflatable boat provided with the improved side tubular elements according to the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to the number references of the figure, the inflatable boat with improved-contour side tubular elements according to the invention, which has been generally indicated by the reference number 1, comprises a rigid keel 2, which is connected, at the top portion thereof, to side tubular elements, which have been generally indicated by the reference number 3.

The main feature of the invention is that each tubular side element is provided with a front portion arranged at a top or higher level 4, which extends substantially for 2/5 of the length of the boat.

Moreover, a further rear portion has been provided, arranged at a bottom or lower level 5, affecting the stern region of the boat.

The portion 4 and portion 5 are coupled to one another by a middle fitting portion 6, which substantially rectilinearly extends and which is slanted at an angle α with respect to the ideal extension line of the top portion 4.

Advantageously, the angle α is included between 5° and 15°.

Moreover, the middle portion 6, which, as stated, is rectilinear and slanted, connects or meets with the portion 4, by means of a fitting portion 6a, having a top convex portion and with the rear portion 5 by means of a rear fitting portion 6b having a bottom convexity.

Another important feature of the invention is that the portions 4 and 5 are substantially parallel to one another and are arranged substantially in a horizontal plane.

The contour of the rear portion of the tubular side elements is parallel to the front contour and, accordingly, owing to the provision of the slanted portion, it is arranged at a slightly lower level.

In this connection it should be pointed out that the "cut" and, accordingly, the specific contour of the side tubular elements of the boat, will allow the boat to raise, during the sailing, its front portion from the wa-

ter, thereby preventing the waves from impacting on the tubular side elements of the boat.

Moreover, the waves, during the sailing, are cut by the rigid keel and will be displaced away from the boat shell without impacting against the front portions of the side tubular elements, thereby facilitating the boat advancing movement even in strong waves.

Moreover, the driving power and speed of the boat being the same, it is possible to greatly increase the bow load of the boat, thereby providing a very good sailing comfort.

From the above it should be apparent that the invention fully achieves the intended aim and objects.

In particular, it should be apparent that the improved contour of the tubular side elements allows to achieve great advantages.

In practicing the invention, the used materials, provided that they are compatible to the intended use, as well as the contingent size and shapes, can be any, depending on requirements.

Claims

1. An inflatable boat with improved-contour side tubular elements, comprises a rigid keel, to which said side tubular elements are coupled, characterized in that said tubular side elements comprise a front portion arranged at a top level and a rear portion arranged at a bottom level, between said front portion and rear portion a fitting middle portion being provided.

2. An inflatable boat, according to Claim 1, characterized in that said fitting middle portion is substantially rectilinear and is slanted with respect to said front and rear portions.

3. An inflatable boat, according to Claims 1 and 2, characterized in that said front portion substantially extends for 2/5 of the length of the boat.

4. An inflatable boat, according to one or more of the preceding Claims, characterized in that said middle portion is slanted at an angle from 5° to 15° with respect to the front portion.

5. An inflatable boat, according to one or more of the preceding claims, characterized in that said front portion is substantially parallel to said rear portion.

6. An inflatable boat, according to one or more of the preceding claims, characterized in that said middle portion meets with said front portion with a front fitting convexity which is upwardly turned and meets with said rear portion with a rear fitting convexity which is downwardly turned.

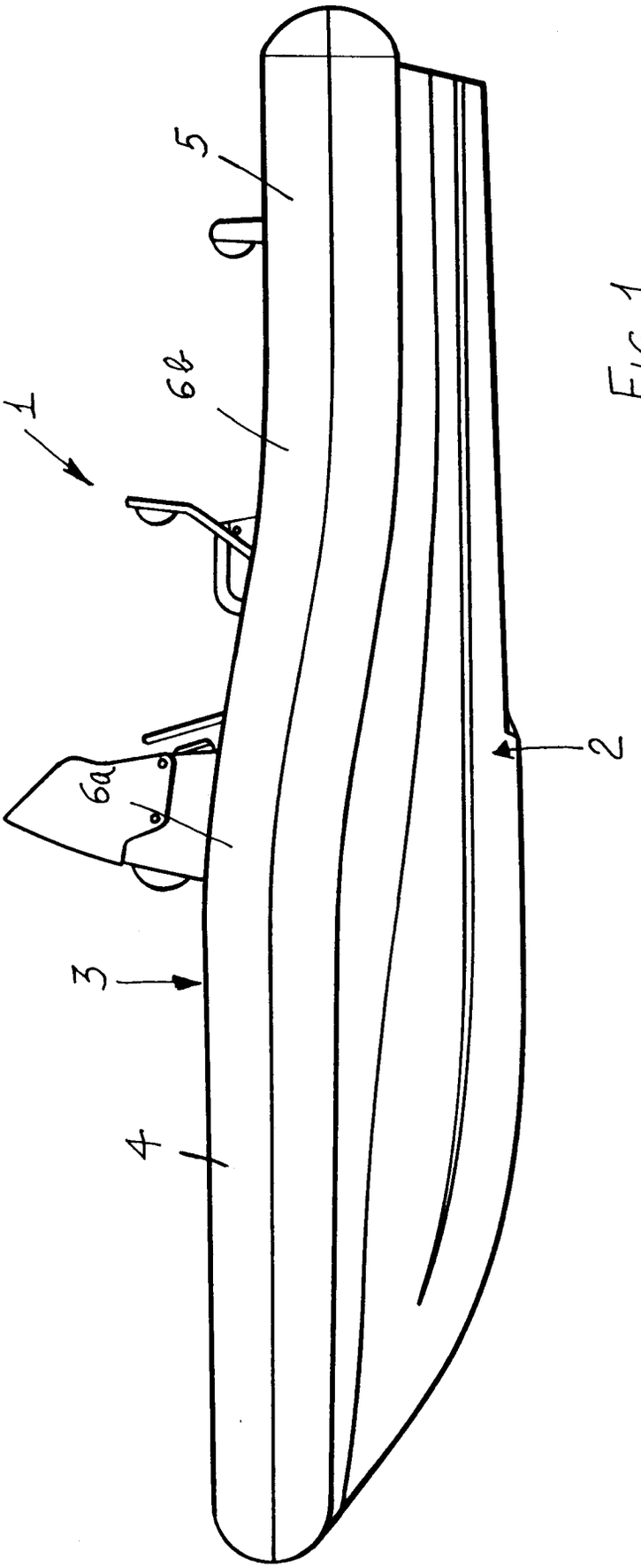

FIG. 1

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 95 83 0028

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP-A-0 274 359 (MARSHALL) * figures * ---	1-6	B63B7/08
X	SHIP & BOAT, vol. 90, no. 08, October 1989 LONDON, pages 31-33, XP 000084515 'Dundee pilots show the way with resilient fendered boat' * figures * -----	1-6	

TECHNICAL FIELDS SEARCHED (Int.Cl.6)

B63B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	16 June 1995	Stierman, E

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
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T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
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EPO FORM 1503 03.82 (P04C01)