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## (54) Apparatus for practicing water and/or snow sports

(57) The present invention relates to an apparatus for practicing water and/or snow sports, comprising a towing element (1) with a driving assembly, and a supporting element (10) for supporting in the air a user associated with the towing element through a towing cable (20).

Control means (21), associated to the supporting element, for controlling the driving assembly being moreover provided.

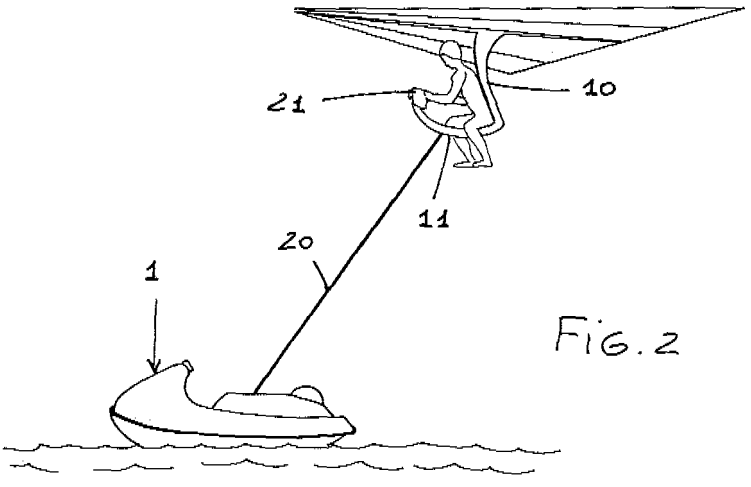


FIG. 2

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## Description

### BACKGROUND OF THE INVENTION

**[0001]** The present invention relates to an apparatus for practicing water and/or snow sports.

**[0002]** Are already known sports in which a person is pulled through a pulling or towing cable, such as, for example, water skiing: however, said sport practices are severely limited and, most importantly, require a person for driving the pulling or towing apparatus.

**[0003]** Thus, it should be apparent that the above mentioned limitation is very objectable, since a person engaged in such a sport cannot manage at will the sports performance and the patterns and/or paths to be followed.

### SUMMARY OF THE INVENTION

**[0004]** Accordingly, the aim of the present invention is to solve the above mentioned problem, by providing an apparatus for practicing water and/or snow sports, allowing a user to directly control the sport activity performance, thereby fitting to a broad range of sports situations.

**[0005]** within the scope of the above mentioned aim, a main object of the invention is to provide such an apparatus which can be freely used both for nautical or water sports and for snow sports, while providing the user with a maximum degree of movement freedom.

**[0006]** Another object of the present invention is to provide such an apparatus for practicing nautical or water and/or snow sports which, owing to its specifically designed features is very reliable and safe in operation.

**[0007]** Another object of the present invention is to provide such a sports apparatus which can be easily made starting from easily available elements and materials and which, moreover, is very competitive from a mere economic standpoint.

**[0008]** 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 apparatus for practicing nautical or water and/or snow sports, characterized in that said apparatus comprises a towing element with a driving assembly, and a supporting element for supporting in the air a user associated with said towing element through a towing cable, control means for controlling said driving assembly, associated to said supported element, being moreover provided.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0009]** Further characteristics and advantages of the present invention will become more apparent hereinafter from the following disclosure of some preferred, though not exclusive, embodiments of an apparatus for practicing nautical or water and/or snow sports, which is illustrated, by way of an indicative, but not limitative, example in the accompanying drawings, where:

Figure 1 is a schematic view showing the apparatus according to the invention for a water use, with a user arranged on the towing element thereof;

Figure 2 shows that same apparatus with the user suspended in the air;

Figure 3 shows that same apparatus with the user arranged on the towing element and with a supporting element including a supporting rotor; and

Figure 4 shows the embodiment of figure 3, with the user raised and/suspended in the air.

### DESCRIPTION OF THE PREFERRED EMBODIMENTS

**[0010]** With reference to the number references of the above mentioned figures, the apparatus for practicing nautical or water and/or snow sports, according to the present invention, comprises a towing element, generally indicated by the reference number 1, which can comprise a boat, such as a water motorcycle or the like, in a case in which the subject apparatus is used for practicing nautical sports or, optionally, a snowcat, if the apparatus is used on snow.

**[0011]** With the towing element is associated a driving assembly, designed for allowing the towing element to independently move.

**[0012]** More specifically, on the towing element is coupled a supporting element, generally indicated by the reference number 10 in figures 1 and 2, which is advantageously made of a parakite type of construction, to which is coupled a saddle portion 11, allowing the use to be properly arranged.

**[0013]** As shown in figure 1, the saddle portion 11 is coupled to the towing element 1.

**[0014]** For practicing the intended sports activity, it is necessary to allow the towing element to achieve a given speed, thereby causing the supporting element to be raised in the air, and, to that end, a towing cable 20 is herein provided.

**[0015]** The main feature of the invention is that the driving or control means, generally indicated by the reference number 21, are arranged on the supporting element, to allow the user, controlling the towing element, to further control, by suitable control elements, either the raising or lowering movements of the parakite, to perform all the desired air movement patterns.

**[0016]** In this connection it should be pointed out that the commands may be transmitted either directly, through transmitting cables, or through an electric coupling, of the so-called "fly by wire" type.

**[0017]** According to a modified embodiment based on the same concept of the above disclosed embodiment, and which is shown in figures 3 and 4, the supporting element, which is herein indicated by the reference number 30, comprises a rotor 31, as an helicopter, and includes a plurality of foldable blades, made of a plastics

material, or a combined plastics and cloth material, and including several parts, which can be threaded into one another, and being preferably foldable and their length being susceptible to be easily increased or decreased.

**[0018]** In this embodiment too, the supporting element allows the user to freely fly; in such an activity, the user will directly control the towing element which, as above disclosed, can comprise either a boat or, optionally, a snowcat.

**[0019]** From the above disclosure it should be apparent that the invention fully achieves the intended aim and objects.

**[0020]** In fact, the invention has provided a very operatively flexible construction, i.e. an apparatus allowing a user to freely choose his/her sports pattern, while easily controlling all the sports movements.

**[0021]** The invention, as disclosed, is susceptible to several modifications and variations, all of which will come within the scope of the invention.

**[0022]** Moreover, all the constructional details can be replaced by other technically equivalent elements.

**[0023]** In practicing the invention, the used materials, as well as the contingent size and shapes, can be any, depending on requirements.

## Claims

1. An apparatus for practicing water and/or snow sports, **characterized in that** said apparatus comprises a towing element including a driving assembly, and a supporting element for supporting in the air a user associated with said towing element, through a towing cable, control means for controlling said driving assembly, associated with said supporting element, being moreover provided.

2. An apparatus, according to the preceding claim, **characterized in that** said towing element comprises a boat.

3. An apparatus, according to the preceding claims, **characterized in that** said towing element comprises a snowcat.

4. An apparatus, according to one or more of the preceding claims, **characterized in that** said supporting element comprises a parakite.

5. An apparatus, according to one or more of the preceding claims, **characterized in that** said supporting element comprises a rotor construction.

6. An apparatus, according to one or more of the preceding claims, **characterized in that** said rotor construction comprises a plurality of foldable blades made of a plastics material or of a plastics-cloth material.

7. An apparatus, according to one or more of the preceding claims, **characterized in that** said rotor comprises straight plastics or plastics and cloth blades including a plurality of blade parts, which can be threaded into one another or folded, and with a variable length.

8. An apparatus, according to one or more of the preceding claims, **characterized in that** on said supporting element are provided control or driving means for controlling the raising and lowering movements of the supporting element.

9. An apparatus, according to one or more of the preceding claims, **characterized in that** said driving assembly control means comprises control cables.

10. An apparatus, according to one or more of the preceding claims, **characterized in that** said driving assembly control means comprise electric controls of a so-called "fly by wire" type.

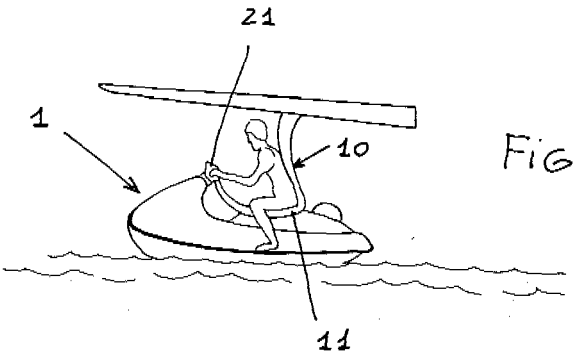


FIG. 1

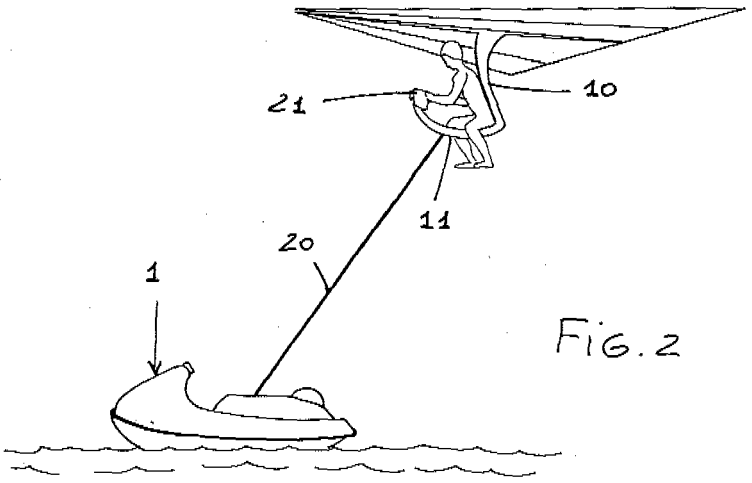


FIG. 2

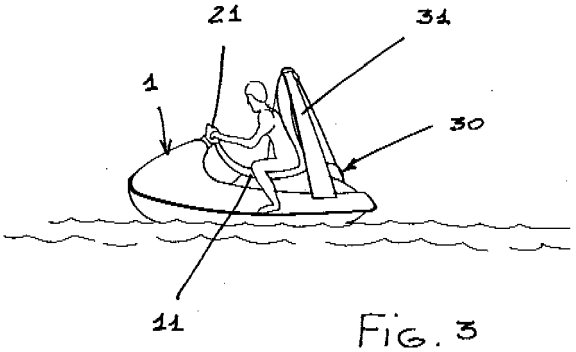


Fig. 3

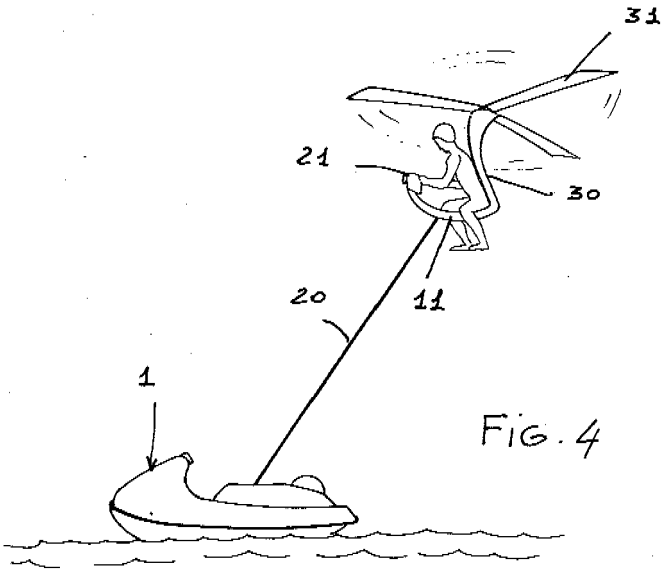


Fig. 4

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# EUROPEAN SEARCH REPORT

Application Number
EP 07 01 3699

## DOCUMENTS CONSIDERED TO BE RELEVANT

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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 |
|---|---|---|
| Munich | 20 September 2007 | Pedersen, Kenneth |

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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EPO FORM 1503 03.82 (P04C01)

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 07 01 3699

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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20-09-2007

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