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(71) Applicant: **Sarda Roig, Prudenci**
08700 Igualada (ES)

(72) Inventor: **Sarda Roig, Prudenci**
08700 Igualada (ES)

(74) Representative: **Torras Toll, Jorge**
MarquesPatent, S.L.
Tuset 34 Pral.
08006 Barcelona (ES)

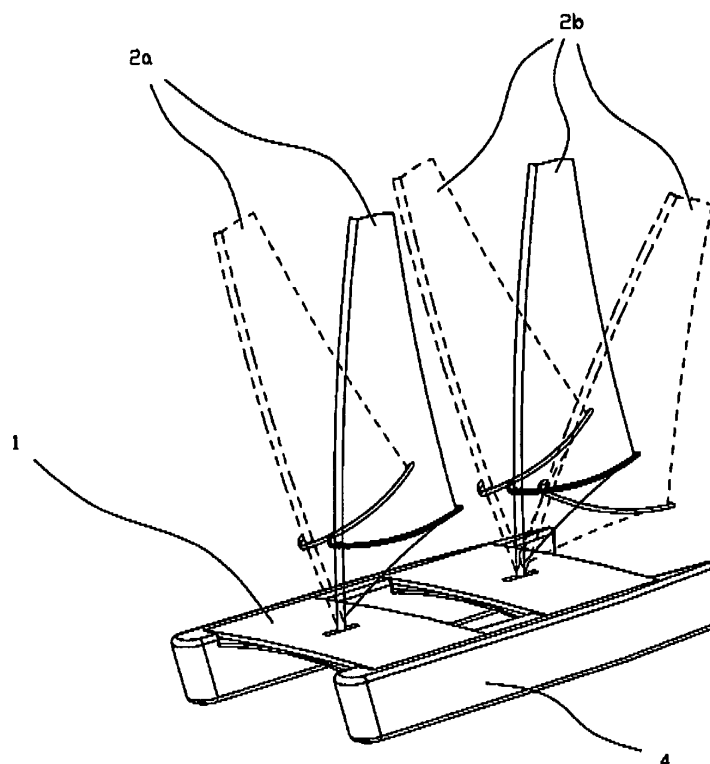
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(54) **Light sail craft**

(57) "Light sail craft" lacking rudder and steered by means of the movement and positioned of the sails (2), characterized essentially because it consists of a hull of any type monohull, catamaran or multihull, with enough stability to the overturn, on which you/they prepare two

or more sails (2) of pivoting mast and characteristic rock-ing-revolvable, identical to those used in the windsurf charts, prepared symmetrically regarding the center of lateral resistance of the underbody (4) and in tandem on the sheer line, being considered a crew anyway of, as minimum, a navigator for each harnessed sail.

FIG. 2



Description

[0001] The object of the present invention, such and like it is expressed in the one enunciated of this descriptive memory, it consists on a new concept of light sail vessel, of sport character, lacking rudder.

[0002] The steering of the new craft is carried out by means of the displacement of the center of the sail plan in connection with the center of lateral resistance of the hull.

[0003] The new craft of light sail is defined, in principle, for any hull (monohull, Catamaran, multihulls, etc.) type although the preferable configuration for functionality is that of catamaran or multihulls. The craft is thought to navigate without rudder and with 2 or more sails similar to those used in the windsurf boards. The craft has been designed in such a way that can navigate with several sails and several navigators, those, which they will act coordinated for a correct steering of the same one.

[0004] The craft has anchorage rails in the deck or some other anchorage system, located throughout the sheer line (longitudinal axis of the ship) on deck, where they will fix the feet of mast of the sails, being installed these in tandem on this axis, being able to of this way to be endowed with two or three or until more sails (depending on the longitude of the hull) of characteristic rocking-revolvable, with fixations pivoting insertables in the described anchorage rails, similar to those used in the windsurf charts and adapted, therefore, to the design evolutions and benefits of the same ones.

[0005] The craft is lacking rudder, for what its steering should be carried out by movement and positioned of the sails, which are managed directly by the crew, constituted with a navigator for each rig sail.

[0006] With this extremely sport craft of character, an integral enjoyment is gotten from the sailing to sail in direct connection with the natural means, where the navigators sustaining and guiding the sails personally, similar to those used in the windsurf charts, they get the displacement of the ship with the wanted direction but without the inconveniences characteristic of the lack of stability of these small crafts, where the initiation and evolution in this sport are a very slow and heavy practice.

[0007] Another interesting point of the invention is that the steering of the craft is carried out in team, fact that contributes an additional incentive to the own sportsmanship of the craft.

[0008] Next, the way of use of the new craft is described.

[0009] Because the craft is lacking rudder, the steering of the same one is based on the variation of the position of his center of the sail plan in connection with the center of lateral resistance of the hull in the water.

[0010] Basically, the new craft of light sail is conceived in principle for a concrete sailing way: with several sails, fixed symmetrically throughout the sheer line of the craft, each one with their corresponding navigator.

[0011] Navigating with several sails placed respective-

ly in tandem throughout the axis central bow-stern (fixed in the anchorages described previously), each one with their corresponding navigator, the new craft can carry out, among other, the following maneuvers:

- To come up. He/she will move the center of the sail plan toward stern, staying the sail or sails located between the center of the craft and the sheet in stern, while the sail or sails located between the center of the craft and the bow will stay sheet out, being gotten a desalination this way among the center of the sail plan and the center of lateral resistance of the underbody that it will provoke a direction change in the craft, making it fall toward where the wind proceeds (coming up)
- To bear off. He/she will move the center of the sail plan toward bow, staying the sail or sails located between the center of the craft and the sheet in bow, while the sail or sails located between the center of the craft and the stern will stay sheet out, being gotten a desalination this way between the center of the sail plan and the center of lateral resistance of the underbody that it will provoke a direction change in the craft. Making it fall toward the contrary to that of where the wind proceeds (bear off).
- To tack. He/she will move the center of the sail plan toward stern, staying the sail or sails located between the center of the craft and the sheet in stern, while the sail or sails located between the center of the craft and the bow will stay sheet out, being gotten a desalination this way between the center of the sail plan and the center of lateral resistance of the underbody that it will provoke a direction change in the craft, making it fall toward where the wind proceeds. He/she will stay the center of the sail plan in this position until the longitudinal axis of the craft overcomes the line of the direction of the wind and be carried out the tack change. In that moment, the crewmembers will move to the windward side and they will decide the new direction of the craft, positioning the center of the sail plan to such an effect.
- To jibe. He/she will move the center of the sail plan toward bow, staying the sail or sails located between the center of the craft and the sheet in bow, while the sail or sails located between the center of the craft and the stern will stay sheet out, being gotten a desalination this way among the center of the sail plan and the center of lateral resistance of the underbody that it will provoke a direction change in the craft. Making it fall toward the contrary direction of where the wind proceeds. He/she will stay the center of the sail plan in this position until the longitudinal axis of the craft overcomes the line of direction of the wind and be carried out the fin change. In that moment, the crewmembers will move to the windward side and they will decide the new direction of the craft, positioning the center of the sail plan to such an effect.

DESCRIPTION OF THE DRAWINGS

[0012] In order to illustrating as much as up to now it has been exposed, it accompanies to the present descriptive memory and forming an integral part of the same one, a group of drawings in those that are represented of simplified and schematic way, some examples of practical realization only explanatory although not limitative of the characteristics of the new sophisticated light sail craft.

[0013] The figure 1 shows a perspective view of the craft with two sails, in tandem, fixed on deck.

[0014] The figure 2 shows a perspective view of the craft with two sails, in those that the advance and setback movements are shown that it can make the masts and their corresponding sails.

[0015] The figure 3 shows a view in plant superior of the new craft with two sails, carrying out the maneuver of coming up, with the sail of sheet in stern and the bow sheet out.

[0016] The figure 4 shows a view in plant superior of the new craft with two sails, carrying out the maneuver of bear off, with the sail of sheet in bow and the stern sheet out.

[0017] The figure 5 shows a view in plant superior of the new craft with two sails, carrying out the maneuver of tack, with the sail of sheet in stern and the bow sheet out.

[0018] The figure 6 shows a view in plant superior of the new craft with two sails, carrying out the maneuver of jibe, with the sail of sheet in bow and the stern sheet out.

[0019] The figure 7 shows a view in plant superior of the new craft with two sails, carrying out the maneuver of coming up, carrying out the coming up maneuver since it receives the wind for the fin until it receives it for the tack, with the sail of sheet in stern and the bow sheet out.

DESCRIPTION OF A PRACTICAL CASE

[0020] In the figures that accompany to the present memory it is described, by way of example, a case study of realization of the device object of the same one.

[0021] The new craft of light sophisticated sail is a craft with hull of type catamaran (1), with an enough longitude for sailing with two sails (2), located in tandem throughout the sheer line of the ship and fixed in the anchorages of the deck (3), with foot of universal mast similar to the one used in the windsurf charts.

[0022] The two sails (2) placed in tandem (of characteristic rocking-revolvable with pivoting fixation) are from characteristic equals to those used in the windsurf charts.

[0023] The craft is lacking rudder, for what their steering will be carried out by means of the movement and positioned of the sails, those which they will be managed directly by the crew; this will belong to a navigator for each harnessed sail.

[0024] Next, the way of use of the new craft is described.

[0025] Basically, the new craft of light sail is conceived in principle for a concrete sailing way: with two sails placed in tandem and symmetrically, each one inserted in their corresponding fixation (3) anchorage and with their corresponding navigator.

[0026] With this disposition of two sails (2a y 2b) fixed symmetrically in tandem in their corresponding fixation (3) anchorages, each one with their corresponding navigator, the new craft will be able to carry out, among other, the following maneuvers:

- To come up. He/she will move the center of the sail plan toward stern, staying the sail of sheet in stern (2a), while the bow sail (2b) will stay sheet out, being gotten a desalination this way among the center of the sail plan and the center of lateral resistance of the underbody (4) that it will provoke a direction change in the craft, making it fall toward the direction of where the wind proceeds (coming up).
- To bear off. He/she will move the center of the sail plan toward bow, staying the sail of sheet in bow (2a), while the stern sail (2b) will stay sheet out, being gotten this way a desalination among the center of the sail plan and the center of lateral resistance of the underbody (4) that it will provoke a direction change in the craft, making it fall toward the direction contrary of where the wind proceeds (bear off).
- To tack. He/she will move the center of the sail plan toward stern, staying the sail of sheet in stern (2b), while the bow sail (2a) will stay sheet out, being gotten a desalination this way among the center of the sail plan and the center of lateral resistance of the underbody (4) that it will provoke a direction change in the craft, making it fall toward the direction of where the wind proceeds. He/she will stay the center of the sail plan in this position until the longitudinal axis of the craft overcomes the line of direction of the wind and be carried out the tack change. In that moment, the crewmembers will move to the windward side and they will decide the new direction of the craft, positioning the center of the sail plan to such an effect.
- To jibe. He/she will move the center of the sail plan toward bow, staying the bow sail sheet in (2a), while the stern sail will stay sheet out (2b), being gotten this way a desalination among the center of the sail plan and the center of lateral resistance of the underbody (4) that it will provoke a direction change in the craft. Making it fall toward the contrary direction of where the wind proceeds. He/she will stay the center of the sail plan in this position until the longitudinal axis of the craft overcomes the line of direction of the wind and be carried out the fin change. In that moment, the crewmembers will move to the windward side and they will decide the new direction of the craft, positioning the center of the sail plan to such an effect.

[0027] They will be independent of the object of the present invention the materials that are used in the production of the different elements that compose it, as well as the forms, dimensions and accessories that it can present, being able to be replaced by other technically equivalent ones, whenever they don't affect to the essentiality of the same one neither move away from the environment defined in the recovery section.

[0028] It is also fits to mention that the sail plan surface of each one of the sails of the craft will be determined in function of the force of the existent wind in the moment of the sailing and of the capacity and the navigators' ability.

[0029] Established the expressed concept, it is edited the note of recoveries next, synthesizing this way the novelties that are wanted to claim:

Claims

1. "Light sail craft" lacking rudder and steered by means of the movement and positioned of the sails (2), **characterized** essentially because it consists of a hull of any type monohull, catamaran or multihull, with enough stability to the overturn, on which you/ they prepare two or more sails (2) of pivoting mast and characteristic rocking-revolvable, identical to those used in the windsurf charts, prepared symmetrically regarding the center of lateral resistance of the underbody (4) and in tandem on the sheer line, being considered a crew anyway of, as minimum, a navigator for each harnessed sail.
2. "light sophisticated sail craft" according to the first claim, **characterized** because the harnessed sails (2) are fixed to the desk by means of fixation anchorages (3), located throughout their sheer line, on deck, where they will fix the feet of mast of the sails, being installed these in tandem on the line central bow-stern, being able to of this way to be gifted the craft for two, three or more sails (2), depending on the length and of the number of fixation anchorages foreseen. (3)
3. "Light sail craft" according to previous claim **characterized** essentially because the hull, for functionality and stability, will be, preferably, of type catamaran (1) or multihull.

FIG. 1

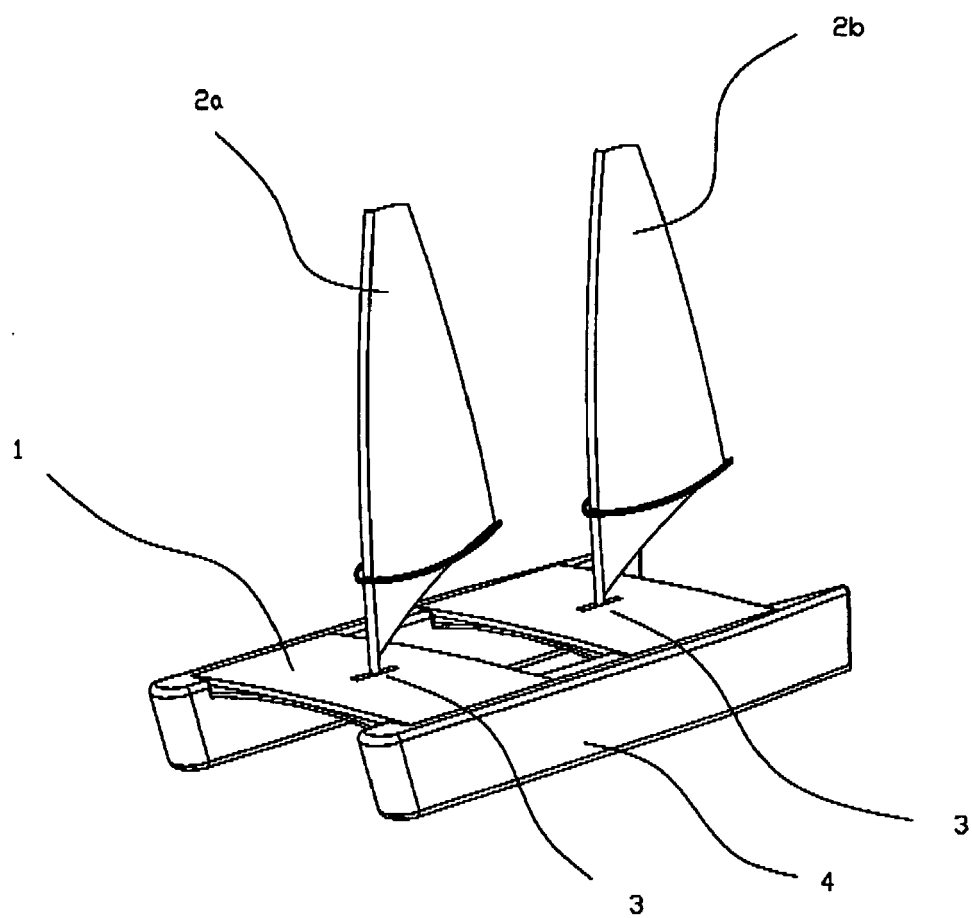


FIG. 2

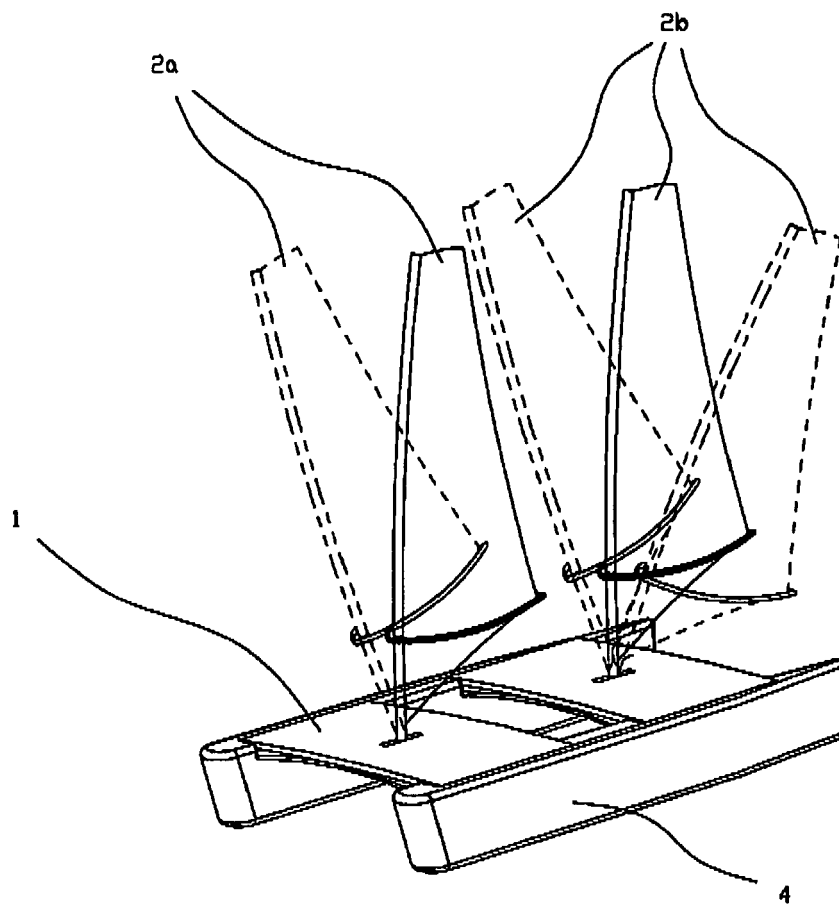


FIG 3

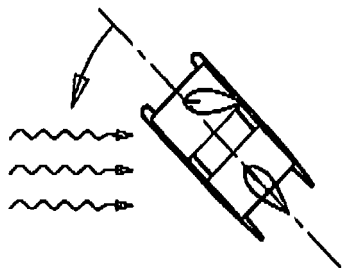


FIG. 4

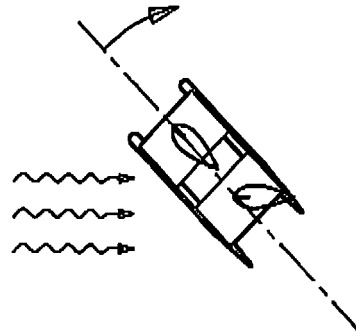


FIG. 5

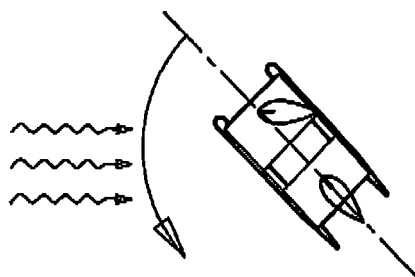


FIG. 6

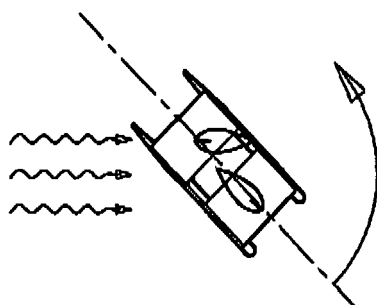


FIG. 7

