Claims

1. Ship for long period stationing at sea, comprising a hull (2) which extends along a longitudinal axis (X) between a bow (3) and a stern (4), characterised by the fact that the hull (2) comprises at least one protuberance (10) having a flattened shape which forms a shelf extending from the hull in the direction of the width of the ship, said protuberance being positioned at the bow or at the stern and extending in a longitudinal direction astride the bow or stern of the ship (1) towards the midship, at least partially encompassing the fore or aft part of the hull on both sides (5 , 6) with two separate branches (10a, 10b), said protuberance (10) being positioned in relation to the hull (2) so as to always be below the waterline (B) of the ship and posing resistance to the movements in vertical direction of the ship (1) at sea generated by the swell, thus dampening the pitching and heaving movements.

2. Ship according to claim 1, wherein the highest part of the protuberance (10) is at not less than 5 metres below the waterline (B) of the ship.

3. Ship according to claim 1 or 2, wherein said protuberance (10) defines a top surface (11), which is substantially facing upwards.

4. Ship according to claim 1, 2 or 3, wherein said

protuberance (10) defines a bottom surface (12), which is substantially facing downwards.

5. Ship according to claims 3 and 4, the protuberance (10) has a rounded surface (13) which connects the top surface (11) to the bottom surface (12).

6. Ship according to claim 4 or 5, the bottom surface (12) of the protuberance 10 connects to the bottom (8) of the ship.

7. Ship according to one or more of the previous claims, wherein the bottom (8) of the ship (1) is flat.

8. Ship according to claims 6 and 7, wherein the bottom surface (12) of the protuberance (10) connects to the flat bottom (8) of the ship without steps.

9. Ship according to claims 3 and 4, wherein the protuberance (10) has a predefined height (H) comprised between the top surface (11) and the bottom surface (12).

10. Ship according to claim 9, wherein the height (H) of the protuberance (10) may vary along the longitudinal extension of the protuberance.

11. Ship according to claim 9 or 10, wherein the height (H) of the protuberance (10) increases as it moves towards the bow or stern end.

12. Ship according to one or more of the previous claims, wherein the protuberance (10) is positioned astride the stem.

13. Ship according to one or more of the previous claims, wherein each branch (10a, 10b) of the protuberance (10) has a predefined width (W) in the direction of the width of the ship (1).

14. Ship according to claim 13, wherein said width (W) may vary along the longitudinal extension of each branch of the protuberance.

15. Ship according to claim 13 or 14, wherein said width (W) increases as it moves towards the bow or stern end.

16. Ship according to one or more of the previous claims, wherein the two branches (10a, 10b) of the protuberance (10) connect to each other at bow or stern at the centreline of the ship (1).

17. Ship according to claim 16, wherein the two branches (10a, 10b) of the protuberance (10) project at least in relation to the base of the stem or of the stern-post.

18. Ship according to one or more of the previous claims, wherein the protuberance (10) has a maximum longitudinal extension which does not exceed the point of maximum length of the ship at bow or at stern.

19. Ship according to one or more of the previous claims, wherein the hull (2) comprises centrally a section of cylindrical body (9), at which the ship (1) has its maximum extension in width.

20. Ship according to claim 19, wherein the two branches

(10a, 10b) of the protuberance (10) extend in a longitudinal direction as far as said section of cylindrical body (9).

21. Ship according to claim 20, each branch (10a, 10b) of the protuberance (10) connects to the cylindrical cross-section body (9).

22. Ship according to one or more of the previous claims, comprising a double bottom (14), the protuberance (10) being connected to said double bottom (14).

23. Ship according to one or more of the previous claims, wherein the protuberance (10) extends symmetrically in relation to the longitudinal axis (X) of the ship (1).

24. Ship according to one or more of the previous claims, comprising a first protuberance (10') at the bow and a second protuberance (10'') at the stern.

25. Ship according to claim 24, wherein said first (10') and said second protuberance (10'') are identical.

26. Ship according to one or more of the previous claims, characterised by the fact of being a drillship.

Claims

1. Ship for long period stationing at sea, comprising a hull (2) which extends along a longitudinal axis (X) between a bow (3) and a stern (4), characterised by the fact that the hull (2) comprises at least one protuberance (10) having a flattened shape which forms a shelf extending from the hull in the direction of the width of the ship, said protuberance being positioned at the bow or at the stern and extending in a longitudinal direction astride the bow or stern of the ship (1) towards the midship, at least partially encompassing the fore or aft part of the hull on both sides (5 , 6) with two separate branches (10a, 10b), said protuberance (10) being positioned in relation to the hull (2) so as to always be below the waterline (B) of the ship and posing resistance to the movements in vertical direction of the ship (1) at sea generated by the swell, thus dampening the pitching and heaving movements.

2. Ship according to claim 1, wherein the highest part of the protuberance (10) is at not less than 5 metres below the waterline (B) of the ship.

3. Ship according to claim 1 or 2, wherein said protuberance (10) defines a top surface (11), which is substantially facing upwards.

4. Ship according to claim 1, 2 or 3, wherein said

protuberance (10) defines a bottom surface (12), which is substantially facing downwards.

5. Ship according to claims 3 and 4, the protuberance (10) has a rounded surface (13) which connects the top surface (11) to the bottom surface (12).

6. Ship according to claim 4 or 5, the bottom surface (12) of the protuberance 10 connects to the bottom (8) of the ship.

7. Ship according to one or more of the previous claims, wherein the bottom (8) of the ship (1) is flat.

8. Ship according to claims 6 and 7, wherein the bottom surface (12) of the protuberance (10) connects to the flat bottom (8) of the ship without steps.

9. Ship according to claims 3 and 4, wherein the protuberance (10) has a predefined height (H) comprised between the top surface (11) and the bottom surface (12).

10. Ship according to claim 9, wherein the height (H) of the protuberance (10) may vary along the longitudinal extension of the protuberance.

11. Ship according to claim 9 or 10, wherein the height (H) of the protuberance (10) increases as it moves towards the bow or stern end.

12. Ship according to one or more of the previous claims, wherein the protuberance (10) is positioned astride the stem.

13. Ship according to one or more of the previous claims, wherein each branch (10a, 10b) of the protuberance (10) has a predefined width (W) in the direction of the width of the ship (1).

14. Ship according to claim 13, wherein said width (W) may vary along the longitudinal extension of each branch of the protuberance.

15. Ship according to claim 13 or 14, wherein said width (W) increases as it moves towards the bow or stern end.

16. Ship according to one or more of the previous claims, wherein the two branches (10a, 10b) of the protuberance (10) connect to each other at bow or stern at the centreline of the ship (1).

17. Ship according to claim 16, wherein the two branches (10a, 10b) of the protuberance (10) project at least in relation to the base of the stem or of the stern-post.

18. Ship according to one or more of the previous claims, wherein the protuberance (10) has a maximum longitudinal extension which does not exceed the point of maximum length of the ship at bow or at stern.

19. Ship according to one or more of the previous claims, wherein the hull (2) comprises centrally a section of cylindrical body (9), at which the ship (1) has its maximum extension in width.

20. Ship according to claim 19, wherein the two branches

(10a, 10b) of the protuberance (10) extend in a longitudinal direction as far as said section of cylindrical body (9).

21. Ship according to claim 20, each branch (10a,10b) of the protuberance (10) connects to the cylindrical cross-section body (9).

22. Ship according to one or more of the previous claims, comprising a double bottom (14), the protuberance (10) being connected to said double bottom (14).

23. Ship according to one or more of the previous claims, wherein the protuberance (10) extends symmetrically in relation to the longitudinal axis (X) of the ship (1).

24. Ship according to one or more of the previous claims, comprising a first protuberance (10') at the bow and a second protuberance (10'') at the stern.

25. Ship according to claim 24, wherein said first (10') and said second protuberance (10'') are identical.

26. Ship according to one or more of the previous claims, characterised by the fact of being a drillship, a pipe-laying ship or an offshore production ship.