C L A I M S

1. Rudder arrangement on a ship, comprising a rudder blade (10) which is suitable to be fastened via a rudder stock (32) to the aft end (16) of the ship

- the rudder blade (10) is a rudder blade of suspension type, comprising a first rudder blade part (12) and a second rudder blade part (14), arranged above and below each other, respectively,

- the rudder stock (32) is mounted in and fastened to the rudder blade (10) and is suitable to extend up into the aft end (16) of the ship, where the rudder stock suitable to be coupled at the upper end to a steering gear (20) arranged at the aft end (16) of the ship, and

- an outer tube (34) is arranged about the rudder stock (32), where the outer tube (34) is fastened in the first, upper rudder blade part (12) and is suitable to be fastened to the aft end (16) of the ship, respectively,

characterised in that

- the rudder stock (32) extends through the outer tube (34) and down into the second, lower rudder blade part (14), and

- a lower radial bearing (38) is arranged about the outer tube (34) in the upper rudder blade part (12), and that an upper radial bearing (36) is arranged about the outer tube (34) and is suitable to be arranged to the aft end (16) of the ship.

2. Rudder arrangement according to claim 1, characterised in that a sleeve coupling (40) is arranged in an upper part of the lower rudder blade part (14) and that a lower part of the rudder stock (32) is mounted in the sleeve coupling (40).

3. Rudder arrangement according to claim 2, characterised in that the sleeve coupling (40) is connected to the upper rudder blade part (12).

4. Rudder arrangement according to claim 1, characterised in that the two rudder blade parts (12,14) are coupled together in a bolt connection (30) that lies in an area above the central axis (28) which corresponds to the shaft of the propeller (18).

5. Rudder arrangement according to claim 1, characterised in that the rudder blade (10) is a twisted rudder blade of suspension type, comprising the first rudder blade part (12) and the second rudder blade part (14) arranged above and below each other, respectively, where said rudder blade parts (12,14) further comprise a first rudder blade profile (22) and a second rudder blade profile (24) that are twisted in relation to each other.

6. Rudder arrangement according to claims 4 and 5, characterised in that said central axis (28) makes up a divide between the two corresponding, twisted rudder blade profiles (22,24).

7. Rudder arrangement according to claim 6, characterised in that the lower rudder blade part (14) comprises the whole of the lower rudder blade profile (24) and also parts of the upper rudder blade profile (22), and that the upper rudder blade part (12) comprises the rest of the upper rudder blade profile (22).

8. Rudder arrangement according to one or more of the preceding claims, c h a r a c t e r i s e in that the two rudder blade profiles (22,24) are formed to be correspondingly alike and are formed with an approximately parabolic-formed nose section (46) which runs, on one side, in a gently arched shape towards and beyond, the largest profile thickness of the rudder blade (10) and runs, on the other side, in a more pronounced arched shape towards and beyond, the largest profile thickness of the rudder blade (10), and that from an area where said arched shapes end the rudder blade profiles (22,24) run symmetrically toward a rear edge (44) of the rudder blade (10) in a concave shape.

9. Rudder arrangement according to claim 1, characterised in that the rudder blade (10) is equipped, at the rear end (44), with a vertically arranged flaps (60).

10. Rudder arrangement according to claim 9, characterised in that the flaps (60) comprises an upper and a lower part (60a,60b) arranged above and below each other, respectively.

11. Rudder arrangement according to claim 10, characterised in that the upper and the lower parts (60a,60b) of the flaps (60) are placed in upper and lower hinges (68a,68b;66a,66b) respectively, where the upper hinge (68a) of the upper part (60a) of the flaps (60) is placed in an upper part of the rudder blade (10) and the lower hinge (68b) to the upper part (60a) of the flaps (60) is placed in an area above the central axis (28) that corresponds to the shaft of the propeller, and the upper hinge (66a) of the lower part (60b) of the flaps (60) is placed adjoining or in the central axis (28) that corresponds with the shaft of the propeller, and the lower hinge (66b) of the lower part (60b) of the flaps (60) is placed in a lower part of the rudder blade (10).

12. Rudder arrangement according to claim 10, characterised in that the lower part (60b) of the flaps (60) is rotary mounted in a lower hinge (66b) in the lower rudder blade part (14) and in an upper hinge (66a) in the lower rudder blade part (14), where the upper hinge (66a) is placed in or adjoining a central axis (28) that corresponds with the shaft of the propeller.

13. Rudder arrangement according to claim 10, characterised in that the upper part (60a) of the flaps (60) is rotary mounted in a lower hinge (68b) in the upper rudder blade part (12), where the lower hinge (68b) is placed adjoining an area where the two rudder blade parts (12,14) are connected, and in an upper hinge (68a) in the upper rudder blade part (12).

14. Rudder arrangement according to claims 12-13, characterised in that the lower part (60b) of the flaps (60) extends from an area adjoining the lower hinge (66b) in the lower rudder blade part (14) to an area adjoining the lower hinge (68b) in the upper rudder blade part (12), and the upper part (60a) of the flaps (60) extends from an area adjoining the lower hinge (68b) to an area adjoining the upper hinge (68a) in the upper rudder blade part (12).

15. Rudder arrangement according to claims 12-13, characterised in that the lower part (60b) of the flaps (60) is rotary mounted on a fastening shaft (62) placed between the lower hinge (66b) and the upper hinge (66a) in the lower rudder blade part (14).

16. Rudder arrangement according to claims 12-13, characterised in that the upper part (60a) of the flaps (60) is rotary mounted on a fastening shaft (64) placed between the lower hinge (68b) and the upper hinge (68a) in the upper rudder blade part (12).

17. Rudder arrangement according to claim 16, characterised in that the fastening shaft (64) for the upper part (60a) of the flaps (60) extends into a further hinge (66c) placed in the upper part of the lower rudder blade part (14).

18. Rudder arrangement according to claim 10, characterised in that the upper part (60a) and the lower part (60b) of the flaps (60) are connected via a coupling piece (70) where the coupling piece (70) is set up to function as a shear pin.

19. Rudder arrangement according to claim 9, characterised in that the rudder blade (10) comprises a steering device (80) connected to a fastening shaft (64) of the upper part (60a) of the flaps (60) and/or to a fastening shaft (62) of the lower part (60b) of the flaps (60), where the steering device (80) comprises at least one arm (84) connected to a steering rod (86) and where the steering rod (86) is connected to the steering gear (20) and that the steering device (80) is arranged for joint, or individual, rotation of the upper part (60a) and the lower part (60b) of the flaps (60).