Claims

1. Retractable thruster system for moving a thruster (1) on a vessel between an extended position, in which the thruster is extended below a hull's bottom, and at least one retracted position, in which the thruster is located above the hull's bottom, the system comprising a canister (2) to which a thruster is mountable, wherein the canister is configured to be movable in a trunk (3) in a vessel's hull structure between said extended position and said at least one retracted position, wherein the canister is arranged to provide frictional contact between at least one canister contact surface (4) on said canister and at least one corresponding trunk contact surface (5) on the trunk when the thruster is in said extended position in order to transfer thrust load from the thruster in operation onto the vessel's hull structure.

2. Retractable thruster system according to claim 1, wherein said at least one canister contact surface comprises a substantially frustoconical contact surface arranged to provide frictional forces and compressive forces between said at least one canister contact surface and said at least one corresponding trunk contact surface.

3. Retractable thruster system according to any of the preceding claims, wherein said at least one canister contact surface comprises a substantially horizontal contact surface arranged to provide substantially horizontal frictional forces between said at least one canister contact surface and said at least one corresponding trunk contact surface.

4. Retractable thruster system according to any of the preceding claims, wherein said at least one canister contact surface comprises a substantially vertical contact surface arranged to provide compressive forces between said at least one canister contact surface and said at least one corresponding trunk contact surface.

5. Retractable thruster system according to any of the preceding claims, wherein the at least one canister contact surface is arranged in a bottom area of the canister.

6. Retractable thruster system according to any of the preceding claims, wherein said at least one trunk contact surface comprises a substantially frustoconical contact surface arranged to provide frictional forces and compressive forces between said at least one trunk contact surface and said at least one corresponding canister contact surface.

7. Retractable thruster system according to any of the preceding claims, wherein said at least one trunk contact surface comprises a substantially horizontal contact surface arranged to provide substantially horizontal frictional forces between said at least one trunk contact surface and said at least one corresponding canister contact surface.

8. Retractable thruster system according to any of the preceding claims, wherein said at least one trunk contact surface comprises a substantially vertical contact surface arranged to provide compressive forces between said trunk contact surface and said at least one corresponding canister contact surface.

9. Retractable thruster system according to any of the preceding claims, wherein the at least one trunk contact surface is arranged on at least one canister support structure provided on the trunk, and/or wherein said at least one canister support structure is located in a bottom area of the trunk.

10. Retractable thruster system according to any of the preceding claims, further comprising a pressure unit arranged to increase the pressure of the canister onto said at least one trunk contact surface.

11. Retractable thruster system according to claim 10, wherein said pressure unit is arranged to push the canister onto said at least one trunk contact surface.

12. Retractable thruster system according to claim 11, wherein said pressure unit comprises an articulated arm movable between a disengaged position, and an engaged position in which the canister is pushed onto the at least one trunk contact surface, and/or wherein the arm of said pressure unit is articulated in such a way that the arm of the pressure unit is blocked in an engaged position without application of an external force on said arm.

13. Retractable thruster system according to any of the claims 10-12, wherein said pressure unit comprise an articulated arm movable between a disengaged position, and an engaged position in which the canister is pushed onto the at least one trunk contact surface and/or, wherein an inner wall of said trunk comprises an engagement element arranged to receive a first end of an articulated arm of the pressure unit in an engaged position.

14. Retractable thruster system according to claim 10, wherein said pressure unit is arranged to pull the canister onto said at least one trunk contact surface.

15. Retractable thruster system according to any of the preceding claims, further comprising a lifting system arranged to move the canister in the trunk between said extended position and said at least one retracted position.

16. Method for fixating a canister in a trunk of a vessel's hull, comprising
- movably arrange the canister in the trunk, such that the canister is movable between an extended position, in which a thruster, mountable to the canister, is extended below a hull's bottom, and at least one retracted position, in which the thruster is located above a hull's bottom;
- providing at least one canister contact surface on the canister

- providing at least one trunk contact surface on the trunk corresponding to the canister contact surface;
- moving the canister with respect to the trunk such that the at least one canister contact surface is in contact with the at least one corresponding trunk contact surface to provide frictional contact between the at least one canister contact surface on said canister and said at least one corresponding trunk contact surface on the trunk when the thruster is in said extended position in order to transfer thrust load from the thruster in operation onto a vessel's hull structure.

17. Method according to claim 16, wherein a pressure unit pushes the canister onto said at least one trunk contact surface, preferably without application of an external force.

18. Method according to claim 17, wherein an actuator moves an articulated arm of the pressure unit from a disengaged position into an engaged position, in which the canister is pushed onto the at least one trunk contact surface, or from said engaged position into said disengaged position.