Claims

1. A device for recovering an unmanned underwater vehicle (2) with a tender garage (4) for receiving the underwater vehicle (2) and with means for centering the underwater vehicle (2) in an entrance area (7) in front of a gate (5) of the tender garage (4) by means of at least one positioning current (8), which is generatable by these means outside of the peripheral area of the gate (5) and is oriented toward the entrance area (7).

2. The device according to claim 1,
characterized in that
the means for centering the underwater vehicle (2) in an entrance area (7) in front of a gate (5) of the tender garage (4) include several positioning nozzles (9) for generating positioning currents (8), which are disposed in such a manner that they are located in the mantle of a funnel widening in the entrance area (7).

3. The device according to claim 1 or 2,
characterized in that
the positioning nozzles (9) are disposed in a nozzle holder (10) fastened to the tender garage (4), the nozzle holder (10) including two or more nozzle arms (11) mounted in a pivotable manner on the tender garage (4) and which respectively carry a row of positioning nozzles (9).

4. The device according to one of the afore-mentioned claims,
characterized in that
a receiving head (16), onto which the unmanned underwater vehicle (2) is dockable, is disposed in the tender garage (4) so as to be longitudinally movable.

5. The device according to one of the afore-mentioned claims,
characterized in that
the tender garage (4) includes a suction pump (14), which is disposed in such a manner that a suction current is generated in the intended direction

of introduction (15) of the underwater vehicle (2) into the tender garage (4), the suction pump (14) being connected on its pressure side (17) to the positioning nozzles (9), the suction pump (14) and the positioning nozzles (9) being connected to each other in such a manner that the suction current is partially recirculatable into the entrance area (7) for generating the positioning currents (8).

6. The device according to claim 5,
characterized in that
a suction side (20) of the suction pump (14) is connected to the receiving head (16) in such a manner that the suction current is generatable by way of the receiving head (16).

7. The device according to one of the claims 3 to 6,
characterized by
a recovery rope (23) to be arranged at the bow (22) of the unmanned underwater vehicle (2), the receiving head (16) being configured to receive the recovery rope (23) or a floating body (24) disposed on the recovery rope (23).

8. The device according to one of the afore-mentioned claims,
characterized in that
the tender garage (4) is configured to receive torpedoes.

9. A method for recovering an unmanned underwater vehicle (2) in a flooded tender garage (4), the underwater vehicle (2) being centered in an entrance area (7) in front of a gate (5) of the tender garage (4) by means of at least one positioning current (8), which is generated outside of the peripheral area of the gate (5) and is oriented toward the entrance area (7), and the underwater vehicle (2) being subsequently introduced into the tender garage (4).

10. The method according to claim 9,
characterized in that

several positioning currents (8) are emitted in the mantle area of a funnel widening in the entrance area (7) of the tender garage (4).

11. The method according to claim 9 or 10,
characterized in that
the underwater vehicle (2) is docked on a receiving head (16) disposed in the tender garage (4) so as to be longitudinally movable and is guided with the receiving head (16) into the interior of the tender garage (4).

12. The method according to claim 11,
characterized in that
a suction current is generated by means of a suction pump (14) in the tender garage (4) in the direction of introduction (15) of the underwater vehicle (2), the suction current being partially fed back into the entrance area (7) for generating the positioning currents (8).

13. The method according to claim 12,
characterized in that
the suction pump (14) generates the suction current by way of the receiving head (16).

14. The method according to one of the claims 9 to 13,
characterized in that
a recovery rope (23) fastened to the bow (22) of the unmanned underwater vehicle (2) or a floating body (24) disposed on the recovery rope (23) is aspirated into the tender garage (4) and the underwater vehicle (2) is subsequently pulled by means of the recovery rope (23) into the tender garage (4).

The invention claimed is:

1. A device for recovering an unmanned underwater vehicle (2) with a tender garage (4) for receiving the underwater vehicle (2) and with means for centering the underwater vehicle (2) in an entrance area (7) in front of a gate (5) of the tender garage (4) by means of at least one positioning current (8), which is generatable by these means outside of the peripheral area of the gate (5) and is oriented toward the entrance area (7).

2. The device according to claim 1, wherein that the means for centering the underwater vehicle (2) in an entrance area (7) in front of a gate (5) of the tender garage (4) include several positioning nozzles (9) for generating positioning currents (8), which are disposed in such a manner that they are located in the mantle of a funnel widening in the entrance area (7).

3. The device according to claim 1, wherein the positioning nozzles (9) are disposed in a nozzle holder (10) fastened to the tender garage (4), the nozzle holder (10) including two or more nozzle arms (11) mounted in a pivotable manner on the tender garage (4) and which respectively carry a row of positioning nozzles (9).

4. The device according to claim 1, wherein a receiving head (16), onto which the unmanned underwater vehicle (2) is dockable, is disposed in the tender garage (4) so as to be longitudinally movable.

5. The device according to claim 1, wherein the tender garage (4) includes a suction pump (14), which is disposed in such a manner that a suction current is generated in the intended direction of introduction (15) of the underwater vehicle (2) into the tender garage (4), the suction pump (14)

being connected on its pressure side (17) to the positioning nozzles (9), the suction pump (14) and the positioning nozzles (9) being connected to each other in such a manner that the suction current is partially recirculatable into the entrance area (7) for generating the positioning currents (8).

6. The device according to claim 5, wherein a suction side (20) of the suction pump (14) is connected to the receiving head (16) in such a manner that the suction current is generatable by way of the receiving head (16).

7. The device according to claim 3, wherein a recovery rope (23) to be arranged at the bow (22) of the unmanned underwater vehicle (2), the receiving head (16) being configured to receive the recovery rope (23) or a floating body (24) disposed on the recovery rope (23).

8. The device according to claim 1, wherein the tender garage (4) is configured to receive torpedoes.

9. A method for recovering an unmanned underwater vehicle (2) in a flooded tender garage (4), the underwater vehicle (2) being centered in an entrance area (7) in front of a gate (5) of the tender garage (4) by means of at least one positioning current (8), which is generated outside of the peripheral area of the gate (5) and is oriented toward the entrance area (7), and the underwater vehicle (2) being subsequently introduced into the tender garage (4).

10. The method according to claim 9, wherein that several positioning currents (8) are emitted in the mantle area of a funnel widening in the entrance area (7) of the tender garage (4).

11. The method according to claim 9, wherein the underwater vehicle (2) is docked on a receiving head (16) disposed in the tender garage (4) so as to be longitudinally movable and is guided with the receiving head (16) into the interior of the tender garage (4).

12. The method according to claim 11, wherein a suction current is generated by means of a suction pump (14) in the tender garage (4) in the direction of introduction (15) of the underwater vehicle (2), the suction current being partially fed back into the entrance area (7) for generating the positioning currents (8).

13. The method according to claim 12, wherein the suction pump (14) generates the suction current by way of the receiving head (16).

14. The method according to claim 9, wherein a recovery rope (23) fastened to the bow (22) of unmanned underwater vehicle (2) or a floating body (24) disposed on the recovery rope (23) is aspirated into the tender garage (4) and the underwater vehicle (2) is subsequently pulled by means of the recovery rope (23) into the tender garage (4).