CLAIMS

1. An apparatus for mixing at least a first fluid phase having a first density and a second fluid phase having a second density, the apparatus comprising;
at least one container (1), the container comprising at least one inlet (2) for a multiphase flow and at least one outlet (3) at a lower axial end of the container (1), a hollow flow regulating device (4) axially arranged within the container (1), wherein a first end of the flow regulating device (4) is arranged in a distance from the outlet (3) providing a drainage gap (5) between the flow regulating device (4) and the outlet (3), which drainage gap (5) has a drainage area,
the flow regulating device (4) comprising a number of perforations (6) along the axial length thereof and a discharge means (7) in a first end, which discharge means (7) opens towards the outlet (3), the flow regulating device (4) being connected to a position adjustment device (8), the position adjustment device (8) being arranged to move the flow regulating device (4) in the axial direction, thereby adjusting the drainage area of the drainage gap (5).

2. An apparatus according to claim 1, *characterized in that* the position adjustment device (8) is connected to a second end of the flow regulating device (4) via a flexible arrangement (11).

3. An apparatus according to claims 1-2, *characterized in that* the multiphase flow separates in at least the first fluid phase and the second fluid phase in the container (1), the inlet (2) and outlet (3) being arranged such that the fluid phase having the largest density separates at the lower axial end, closest to the outlet (3).

4. An apparatus according to claims 1-3, *characterized in that* the container (1) converges as an abutted cone at the outlet (3).

5. An apparatus according to claims 1-4, *characterized in that* the diameter of the flow regulating device (4) is substantially equal to the diameter of the outlet (3).

6. An apparatus according to claims 1-2, *characterized in that* the position adjustment device (8) comprises an external interface (9) arranged on the outside of the container (1).

7. An apparatus according to claim 6, *characterized in that* the external interface (9) is provided to be manipulated by the means of a ROV manipulator, a torque tool, or an actuator wired to a subsea control system.

8. An apparatus according to any of the preceding claims, *characterized in that* there is arranged a venturi downstream of the outlet.

9. Method of mixing at least a first fluid phase having a first density and a second fluid phase having a second density, the method comprising the steps of;
- providing at least one container (1), the container (1) comprising at least one inlet (2) for a multiphase flow and at least one outlet (3) at a lower axial end of the container (1),
- arranging a hollow flow regulating device (4) axially within the container (1), a first end of the flow regulating device (4) is arranged in a distance from the outlet (3) providing a drainage gap (5) between the flow regulating device (4) and the outlet (3), which drainage gap (5) has a drainage area, the flow regulating device (4) comprising a number of perforations (6) along the axial length thereof and a discharge means (7) in a first end, which discharge means opens towards the outlet (3),
- connecting the flow regulating device (4) to a position adjustment device (8),
- adjusting the drainage area of the drainage gap (5) by manipulating the position adjustment device (8).

CLAIMS

1. An apparatus for mixing at least a first fluid phase having a first density and a second fluid phase having a second density, the apparatus comprising;

at least one container, the container comprising at least one inlet for a multiphase flow and at least one outlet at a lower axial end of the container,

a hollow flow regulating device axially arranged within the container,

wherein a first end of the flow regulating device is arranged in a distance from the outlet providing a drainage gap between the flow regulating device and the outlet, which drainage gap has a drainage area,

the flow regulating device comprising a number of perforations along the axial length thereof and a discharge means in a first end, which discharge means opens towards the outlet, wherein the flow regulating device being connected to a position adjustment device, the position adjustment device being arranged to move the flow regulating device in the axial direction, thereby adjusting the drainage area of the drainage gap.

2. An apparatus according to claim 1, wherein the position adjustment device is connected to a second end of the flow regulating device via a flexible arrangement.

3. An apparatus according to claims 1-2, wherein the inlet and outlet are arranged such that when a multiphase flow is separated in at least a first fluid phase and a second fluid phase in the container, the fluid phase having the largest density will separate at the lower axial end, closest to the outlet.

4. An apparatus according to claims 1-3, wherein the container converges as an abutted cone at the outlet.

5. An apparatus according to claims 1-4, wherein the diameter of the flow regulating device is substantially equal to the diameter of the outlet.

6. An apparatus according to claims 1-2, wherein the position adjustment device comprises an external interface arranged on the outside of the container.

7. An apparatus according to claim 6, wherein the external interface is provided to be manipulated by the means of a ROV manipulator, a torque tool, or an actuator wired to a subsea control system.

8. An apparatus according to any of the preceding claims, wherein there is arranged a venturi downstream of the outlet.

9. Method of mixing at least a first fluid phase having a first density and a second fluid phase having a second density, the method comprising the steps of;

- providing at least one container, the container comprising at least one inlet for a multiphase flow and at least one outlet at a lower axial end of the container,

- arranging a hollow flow regulating device axially within the container, a first end of the flow regulating device is arranged in a distance from the outlet providing a drainage gap between the flow regulating device and the outlet, which drainage gap has a drainage area, the flow regulating device comprising a number of perforations along the axial length thereof and a discharge means in a first end, which discharge means opens towards the outlet,

- connecting the flow regulating device to a position adjustment device,

- adjusting the drainage area of the drainage gap by manipulating the position adjustment device.