In a first aspect, there is provided~~The invention relates to~~ a device for reducing the content of hydrogen peroxide and peracetic acid in a water stream (1), comprising a first measuring device (2) for determining the flow rate of the water stream, a second measuring device (3) for determining the concentration of hydrogen peroxide in the water stream, a third measuring device (4) for determining the concentration of peracetic acid in the water stream, an additional measuring device (7) for determining the salinity in the water stream, a metering device (5) for metering a reducing agent into the water stream downstream of the second and third measuring devices and a control device (6) which, from the flow rate of the water stream, the concentration of hydrogen peroxide in the water stream, ~~and~~ the concentration of peracetic acid in the water stream and the salinity, calculates an amount of reducing agent for reducing the content of hydrogen peroxide and peracetic acid to a desired value and actuates the metering device for metering the reducing agent.

In a second aspect, there is provided~~The invention additionally relates to~~ a method for reducing the content of hydrogen peroxide and peracetic acid in a water stream, comprising metering a liquid reducing agent into the water stream using a device according to the disclosure~~invention~~. The water stream is preferably withdrawn from ballast water tanks (10) of a ship.

Fig. 1 shows a device according to the invention in an embodiment having an additional measuring device (7) for determining the salinity and an arrangement of the second and the third measuring device in a side stream (9).

The device according to the invention comprises a first measuring device (2) for determining the flow rate of the water stream (1). For this purpose, measuring devices which which determine a mass flow rate as well as measuring devices which determine a volumetric flow rate are both suitable. For the device according to the invention, all measuring devices known from the prior art for determining the flow rate of a water stream may be used such as, for

Claims:

1. Device for reducing the content of hydrogen peroxide and peracetic acid in a water stream (1), comprising
a first measuring device (2) for determining the flow rate of the water stream,
a second measuring device (3) for determining the concentration of hydrogen peroxide in the water stream,
a third measuring device (4) for determining the concentration of peracetic acid in the water stream,
a metering device (5) for metering a reducing agent into the water stream downstream of the second and third measuring devices and
a control device (6) which, from the flow rate of the water stream, the concentration of hydrogen peroxide in the water stream, and the concentration of peracetic acid in the water stream, calculates an amount of reducing agent for reducing the content of hydrogen peroxide and peracetic acid to a desired value and actuates the metering device for metering the reducing agent.

2. Device according to Claim 1,
characterized in that
the measuring device for determining the concentration of hydrogen peroxide in the water stream comprises an amperometric sensor.

3. Device according to Claim 1 or 2,
characterized in that
the measuring device for determining the concentration of peracetic acid in the water stream comprises an amperometric sensor.

4. Device according to any one of Claims 1 to 3,
characterized in that
it comprises an additional measuring device (7) for

determining the salinity in the water stream and the control device calculates the amount of reducing agent with the salinity.

5. Device according to Claim 4, characterized in that the measuring device for determining the salinity comprises a conductivity sensor.

6. Device according to any one of Claims 1 to 5, characterized in that the metering device for metering a reducing agent comprises a storage vessel (8) and a controllable metering pump (5) for liquid reducing agent.

7. Device according to any one of Claims 1 to 6, characterized in that the second and third measuring devices are arranged in a side stream (9) of the water stream.

8. Method for reducing the content of hydrogen peroxide and peracetic acid in a water stream, comprising metering a liquid reducing agent into the water stream using a device according to any one of Claims 1 to 7.

9. Method according to Claim 8, characterized in that the water stream is withdrawn from ballast water tanks (10) of a ship.

10. Method according to Claim 8 or 9, characterized in that the liquid reducing agent is an aqueous solution of sodium sulphite.

Claims:

1. Device for reducing the content of hydrogen peroxide and peracetic acid in a water stream (1), comprising
a first measuring device (2) for determining the flow rate of the water stream,
a second measuring device (3) for determining the concentration of hydrogen peroxide in the water stream,
a third measuring device (4) for determining the concentration of peracetic acid in the water stream,
an additional measuring device (7) for determining the salinity in the water stream,
a metering device (5) for metering a reducing agent into the water stream downstream of the second and third measuring devices and
a control device (6) which, from the flow rate of the water stream, the concentration of hydrogen peroxide in the water stream, the concentration of peracetic acid in the water stream and the salinity, calculates an amount of reducing agent for reducing the content of hydrogen peroxide and peracetic acid to a desired value and actuates the metering device for metering the reducing agent.

2. Device according to Claim 1,
characterized in that
the measuring device for determining the concentration of hydrogen peroxide in the water stream comprises an amperometric sensor.

3. Device according to Claim 1 or 2,
characterized in that
the measuring device for determining the concentration of peracetic acid in the water stream comprises an amperometric sensor.

4. Device according to one of Claims 1 to 3,
characterized in that
the measuring device for determining the salinity comprises a conductivity sensor.

5. Device according to any one of Claims 1 to 4, characterized in that the metering device for metering a reducing agent comprises a storage vessel (8) and a controllable metering pump (5) for liquid reducing agent.

6. Device according to any one of Claims 1 to 5, characterized in that the second and third measuring devices are arranged in a side stream (9) of the water stream.

7. Method for reducing the content of hydrogen peroxide and peracetic acid in a water stream, comprising metering a liquid reducing agent into the water stream using a device according to any one of Claims 1 to 6.

8. Method according to Claim 7, characterized in that the water stream is withdrawn from ballast water tanks (10) of a ship.

9. Method according to Claim 7 or 8, characterized in that the liquid reducing agent is an aqueous solution of sodium sulphite.