

ABSTRACT OF THE DISCLOSURE

A pure-water production apparatus 1 comprises a retention tank 2 for retaining water W0 being treated, and water-flow piping 3 connected to the retention tank 2, the water-flow piping 3 being provided, in the following order, a liquid-sending pump 4, a second reverse osmosis membrane 5 for which the permeation flux per 1 MPa of effective pressure is $0.8 \text{ m}^3/(\text{m}^2 \cdot \text{day})$ or greater, a first reverse osmosis membrane 6 for which the permeation flux per 1 MPa of effective pressure is $2.0 \text{ m}^3/(\text{m}^2 \cdot \text{day})$ or greater, and an ion exchange device 7. An NaOH aqueous solution addition means 8 is connected at a stage preceding the first reverse osmosis membrane 6, it being possible for the amount of NaOH aqueous solution added to be controlled by a control mechanism in accordance with the flow rate of the water-flow piping 3 and the pH of the water W0 being treated, such that water being treated by the first reverse osmosis membrane 6 reaches a prescribed pH. A multi-stage reverse osmosis membrane treatment system is composed of the second reverse osmosis membrane 5, the first reverse osmosis membrane 6, and the NaOH aqueous solution addition means 8. Using such a multi-stage reverse osmosis membrane treatment system makes it possible to obtain treated water having a prescribed level of quality while reducing the energy needed for operation.