

[ABSTRACT]

[TITLE OF INVENTION]

WATER TREATMENT DEVICE AND OPERATING METHOD FOR SAME

Provided is a water treatment device, which includes: a sub-reverse osmosis

5 membrane device (80S) having a primary casing (81) and a primary reverse osmosis membrane (86s) dividing an inside of the primary casing into a primary liquid passing part (91s) and a primary permeating part (92s); a low pressure water feed pump (11) for feeding seawater (SW) to the primary liquid passing part (91s) at a pressure that is equal to or lower than an osmotic pressure of the seawater (SW); a main reverse osmosis

10 membrane device (80M) having a secondary casing (81) and a secondary reverse osmosis membrane (86m) dividing an inside of the secondary casing into a secondary liquid passing part (91m) and a secondary permeating part (92m); and a high pressure water feed pump (71) for feeding a primary treated liquid (W1), which is a resultant product of the seawater passing through the primary liquid passing part (91s) and flowing out from

15 the primary liquid passing part (91s), to the secondary liquid passing part (91m) at a pressure higher than an osmotic pressure of the primary treated liquid (W1).

(Fig. 1)