

ABSTRACT

An electrodeionization apparatus and a method for operating the apparatus are provided. With this, concentration diffusion of boron from a concentrating chamber can be suppressed to obtain product water having a very low boron concentration. Raw water is introduced into a desalting chamber 16, and product water is discharged from the desalting chamber 16. A part of the product water is introduced into a concentrating chamber 15 in a single pass in the direction opposite to the flow in the desalting chamber 16. Water discharged from the concentrating chamber 15 is drained out of a system. An inlet of the concentrating chamber 15 is provided at a side of an outlet for discharging product water from the desalting chamber 16, and an outlet of the concentrating chamber 15 is provided at a side of an inlet for introducing raw water into the desalting chamber 16. Concentrated water discharged from the concentrating chamber has a boron concentration of 500 times or less than that of the product water or of 10 ppb or less.