

ABSTRACT

ION EXCHANGE DEVICE AND METHOD OF USING SAME

An ion exchange device is used that includes an anion exchange tank, a cation exchange tank and a tower body side
5 portion, in which the anion exchange tank and the cation exchange tank are allowed to communicate by communication means that is arranged around the outside of the anion exchange tank and the cation exchange tank. The ion exchange device also includes supply/discharge pipes for supplying or
10 discharging a liquid to or from an upper portion and a lower portion of the anion exchange tank, and supply/discharge pipes for supplying or discharging a liquid to or from an upper portion and a lower portion of the cation exchange tank. A water collection/distribution member that allows
15 water to pass therethrough but prevents passage of an ion-exchange resin is provided in a flat plate. An end of each of an upper supply/discharge pipe, a first communication pipe, a second communication pipe and a lower supply/discharge pipe is connected to the water
20 collection/distribution member.

FIG. 2