

ABSTRACT

An apparatus for producing water containing dissolved ozone which comprises (A) a piping for supplying ultrapure water through which ultrapure water is supplied, (B) a catalytic reaction portion which is connected with the piping for supplying ultrapure water and in which the ultrapure water is brought into contact with an oxidation-reduction catalyst, (C) a filtration apparatus by which the ultrapure water treated in the catalytic reaction portion is filtered and (D) an apparatus for dissolving ozone in which ozone is dissolved into the ultrapure water discharged from the filtration apparatus; and an apparatus for producing water containing dissolved ozone which comprises an apparatus for producing ultrapure water which is equipped with an apparatus for irradiating with ultraviolet light, an apparatus for dissolving ozone in which ozone is dissolved into the ultrapure water produced in the apparatus for producing ultrapure water and a catalytic reaction portion which is packed with an oxidation-reduction catalyst and disposed between the apparatus for irradiating with ultraviolet light and the apparatus for dissolving ozone. Substances promoting decomposition of ozone which are contained in ultrapure water in very small amounts are removed and water containing dissolved ozone which shows little decrease in the concentration of ozone and has a great residual fraction of ozone dissolved in water after transportation for a long distance can be obtained.

Figure 3