METHOD FOR PRODUCING OZONE GAS-DISSOLVED WATER AND METHOD FOR CLEANING ELECTRONIC MATERIAL

ABSTRACT

Ozone gas-dissolved water which has high dissolved ozone gas concentration and in which the formation of bubbles by an oxygen gas on site is suppressed is produced. An electronic material is efficiently cleaned with the produced ozone gas-dissolved water by avoiding troubles, such as uneven cleaning and mechanical breakage, due to bubbles. When the ozone gas-dissolved water is produced in such a manner that a mixed gas of an ozone gas and an oxygen gas and degassed water are supplied to an ozone-dissolving section and the mixed gas is dissolved in the dissolved gas, the amount of the mixed gas supplied to the ozone-dissolving section is controlled such that the sum of the dissolved oxygen gas concentration of the degassed water and the increment of the dissolved oxygen gas concentration calculated from the amount of the oxygen gas in the mixed gas and the amount of the degassed water on the assumption that ozone in the mixed gas entirely decomposes into oxygen is less than or equal to the saturated solubility of the oxygen gas under conditions using the obtained ozone gas-dissolved water.

FIGURE 1