

Abstract

A membrane filtration device comprising a filtration mode for filtrating water to be treated by passing the water to be treated from a primary side to a secondary side of a filtration membrane and a filtration membrane cleaning mode for cleaning the filtration membrane by passing ozone water from the secondary side to the primary side of the filtration membrane, wherein the membrane filtration device is provided with an inter-membrane differential pressure controller for controlling an inter-membrane differential pressure ΔP , which is a differential between the liquid pressure on the primary side and the liquid pressure on the secondary side of the filtration membrane, and is configured such that in the filtration membrane cleaning mode, the inter-membrane differential pressure controller performs control so as to gradually lower the inter-membrane differential pressure ΔP from a predetermined initial differential pressure $\Delta P1$ to a final differential $\Delta P2$, which is a value lower than the $\Delta P1$.