

ABSTRACT

This system includes: an ozone generating device(3) having discharge electrodes(30) that form a discharge space(305); a gas supplying device(1); a power source device that supplies power to the discharge electrodes(30); a temperature adjustment device(7) that adjusts a temperature of the discharge electrodes(30); a control unit(4) that controls an operation of the ozone generating device(3); and a detection unit(25) that detects an ozone generation parameter(Di) in the ozone generating device(3); wherein, the control unit(4) causes the temperature of the discharge electrodes(30) to increase up to a vaporizing temperature of dinitrogen pentoxide by controlling the temperature adjustment device(7) and the gas supplying device(1) or the temperature adjustment device(7) and the power source device in their cooperative manner, based on the ozone generation parameter(Di) output from the detection unit(25), to thereby switch the operation from a normal operation mode to a cleaning operation mode in which surfaces of the discharge electrodes(30) and the discharge space(305) are cleaned up in a state of continuing generation of ozone in the discharge space(305).