ABSTRACT

According to an embodiment, an ozone generating apparatus includes a cylindrical high-voltage electrode and a cylindrical low-voltage electrode that is arranged coaxially with respect to the cylindrical high-voltage electrode. The ozone generating apparatus applies a predetermined high voltage between the high-voltage electrode and the low-voltage electrode via a dielectric substance to cause discharge for generating ozone, wherein a discharge gap length d is 0.3 to 0.5 mm, any one of the low-voltage electrode and the high-voltage electrode is formed as a metal electrode, and the other one is formed as a dielectric electrode, a projection group including a plurality of projections having dome shape, which are arranged on same circumference of the metal electrode, is arranged on an inner peripheral surface of metal electrode opposed to dielectric electrode for holding metal electrode to be coaxial with dielectric electrode while keeping discharge gap length, and projection group is arranged at three or more positions, that is, a center portion in a longitudinal direction of a discharging space and positions away from both ends of discharging space by a predetermined distance L_3 which satisfies the following expression, $0.0 \leq L_3/L \leq 0.1$ where L is length of discharging space.

ABSTRACT

An ozone generating apparatus according to an embodiment includes a cylindrical high-voltage electrode and a cylindrical low-voltage electrode that is arranged coaxially with respect to the cylindrical high-voltage electrode, and applies a predetermined high voltage between the high-voltage electrode and the low-voltage electrode via a dielectric substance to cause discharge for generating ozone. A discharge gap length d is assumed to be 0.3 mm to 0.5 mm. Any one of the low-voltage electrode and the high-voltage electrode is formed as a metal electrode, and the other one is formed as a dielectric electrode. A projection group including a plurality of projections is arranged on an inner peripheral surface of the metal electrode opposed to the dielectric electrode for holding the metal electrode to be coaxial with the dielectric electrode while keeping the discharge gap length.