

AIR PURIFICATION SYSTEM AND PROTECTIVE CLOTHING

[ABSTRACT]

5 An air purification system (1) includes a linear electrode (20)
that generates electromagnetic resonance; an electric field probe
(40) that measures the electric field intensity; and a controller (70)
that controls power supplied to the linear electrode (20). The
controller (70) adjusts the frequency of the power supplied to the
10 linear electrode (20) and the position at which the power is supplied
to the linear electrode (20), to maximize an output value of a signal
indicating the electric field intensity. Feedback control is performed
to make the amount of ozone always constant, by monitoring the
amount of ozone generated and adjusting the amplitude modulation
15 of the power supplied, so that ozone necessary for decomposing
viruses is generated but harmful nitrogen oxides are not generated
as a result of applying, to gas molecules contained in influent gas, an
energy that is at least the dissociation energy of oxygen molecules
and no greater than the dissociation energy of nitrogen molecules.

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Fig. 2