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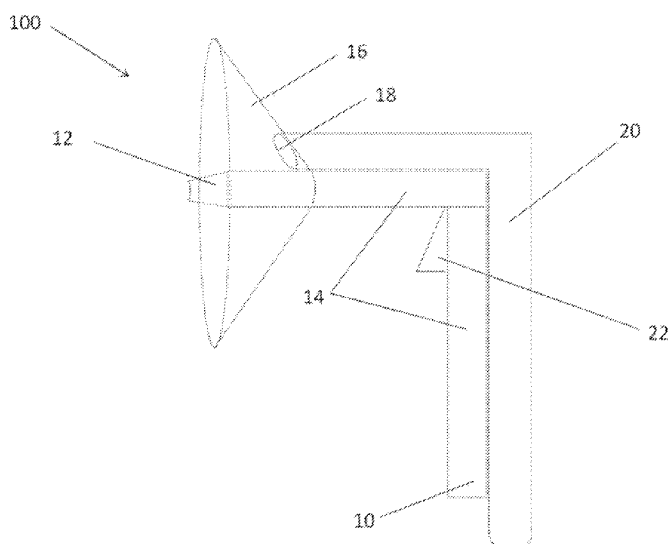


FIG. 1

(57) Abstract: The invention provides methods of oxidizing, sanitizing, disinfecting, and/or sterilizing a target. The method includes: ejecting a gas stream of a gaseous mixture comprising 50 to 30,000 ppmv chlorine dioxide from a gas source at a velocity of 25 to 900 ft/sec; and contacting the gas stream with the target. A device for oxidizing, sanitizing, disinfecting, and/or sterilizing a target is also provided. The device includes: a chlorine dioxide inlet configured for intake of a gaseous mixture comprising 50 to 30,000 ppmv chlorine dioxide; and a gas source configured to eject a gas stream of the gaseous mixture at a velocity of 50 to 900 ft/sec.