

poster

Remote operation electroshocking device

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We would like to present the simple method of a distance injection of high voltage pulses onto biological objects. The method can be affectively used for protection of important objects against the infringes of social order, criminals and terrorist attacks.

Electrical impulses are transmitted through the gas-dispersion channel. The channel itself is created in a track behind the air-flying body consisting of electroconductive particles. Then, with the help of a mechanical spring, condensed air or pyrotechnic means, the sprayed substance gains some initial velocity. Due to an action of incident air flow, the aerosol-made particles are being teared off intensively from the aerosol charge during a flight. As a result, the gas-dispersion channel is formed along the charge track. After that the high-voltage electric potential is applied to the gas-dispersion channel. Under influence of strong electric field, the particles are being polarized, with substantial amplification of external field between adjacent particles.



For a sufficient density of aerosol, the electric field strength on a total length of the gas-dispersion channel may exceed the short-circuit field strength. Under these conditions, the electric conductivity arises along a chain of such particles. The experiments showed that, using the present method for a transmission of high-voltage electrical pulses, it is possible to form an area contact with object of action and to transmit significant impulse current to it.

This method could be used for creation of remote operation electroshocking device with an area contact. At the present time we are also carrying out some medical studies in order to work out mans safety criteria's.