ABSTRACT

IMPROVED APPARATUS FOR ELECTRICALLY MEDIATED DELIVERY OF THERAPEUTIC AGENTS

Apparatus for the delivery of an electrical field which facilitates the intracellular delivery of a therapeutic agent to a predetermined site within the tissue of a patient. The apparatus will comprise a plurality of penetrating electrodes arranged in a predetermined spatial relationship, each electrode with a cross sectional area contributing to the total cross sectional area of all electrodes, and structural means incorporating an inanimate source of energy operatively connected to the plurality of electrodes for deploying the electrodes, wherein the source of energy is sufficient to impart a force of at least 1000 pounds per square inch (0.7 kilogram per square millimeter) of total cross sectional area of all electrodes at the initiation of the deployment of the electrodes. The apparatus will also comprise means for generating an electrical field which facilitates the intracellular delivery of a therapeutic agent, which means is operatively connected to said electrodes at least in their deployed state.

Figure 3