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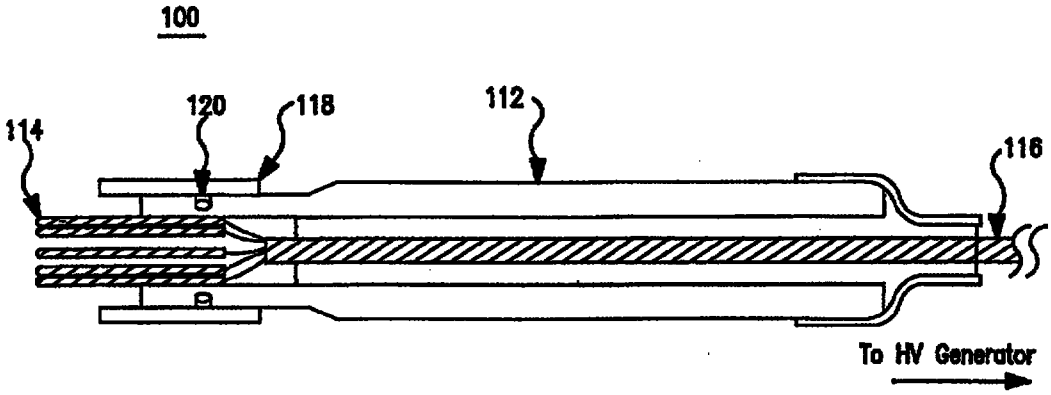
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(54) Title: METHOD AND APPARATUS FOR USING ELECTROPORATION MEDIATED DELIVERY OF DRUGS AND GENES



(57) Abstract

This invention is a method, and apparatus (100) for *in vivo* electroporation therapy. Using electroporation therapy (EPT) as described in the invention, tumors treated by a combination of electroporation using the apparatus (100) of the invention, and a chemotherapeutic agent caused regression of tumors *in vivo*. In one embodiment, the invention provides a method of EPT utilizing low voltage, and long pulse length for inducing cell death. One embodiment of the invention includes a system for clinical electroporation that includes a needle array electrode (114) having a "keying" element that determines the set point of the therapy voltage pulse, and/or selective array switching patterns. A number of electrode applicator designs permit access to, and treatment of a variety of tissue sites. Another embodiment provides a laparascopic needle applicator that is preferably combined with an endoscope for minimally invasive EPT.