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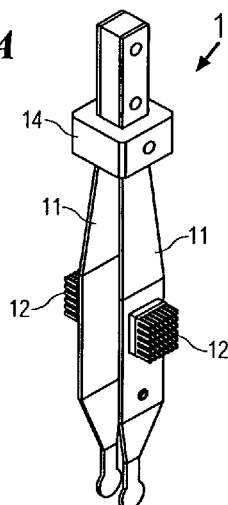
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(54) Title: APPARATUS FOR ELECTROPORATION WITH COOLING SYSTEM

FIG. 1A



(57) Abstract: The present invention provides an apparatus for conducting electroporation with minimal thermal effect on a treated sample. The apparatus has an electroporation module for receiving the sample and executing electroporation thereon; and a cooling system for enhancing dissipation of the heat generated by the electroporation module. In one embodiment, the electroporation module comprises a pair of electrodes, and the cooling system has two cooling units, each of which is directly attached to one of the electrode. In another embodiment, the electroporation module comprises an array of electroporation wells accommodated in an enclosure, and the cooling system is designed to thermally control the ambient temperature in the enclosure.