


**SYSTEMS AND METHODS FOR DELIVERING PULSED ELECTRIC FIELDS TO SKIN TISSUE (Ramot)****code:** 8-2015-916

Michael Belkin, T.A.U Tel Aviv University, Medicine-Sackler Faculty, Goldshlager Eye Center-Sheba

Systems and methods for controlling a tissue of a subject using applied pulsed electric fields. The system for controlling a therapy provided to a tissue of a subject using applied pulsed electric fields. The system includes an electrode assembly configured to engage a skin tissue of a subject to deliver a series of electric field pulses to the skin tissue and a user input configured to receive an operational instruction for the series of electric field pulses. The operational instruction defines at least one of a pulse duration, a pulse frequency, a pulse number, and a pulse amplitude. The system also includes at least one processor configured to access the operational instruction received by the user input and, using the operational instruction, create an electric field profile to be generated by the electrode assembly about the skin tissue of the subject to control a fibroblast characteristic while preserving a vascular perfusion in at least a portion of the skin tissue. The processor is also caused to control the electrode assembly using the electric field profile to deliver the series of electric field pulses to control the fibroblast characteristic.

**Contact for more information:**Noam Greenspoon ,

Ramot at Tel Aviv University Ltd. P.O. Box 39296, Tel Aviv 61392 ISRAEL

Phone: +972-3-6406608

Fax: +972-3-6406675