(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 April 2008 (24.04.2008)

PCT

(10) International Publication Number
WO 2008/048632 A1

(51) International Patent Classification:
A61N 1/32 (2006.01)

(21) International Application Number:
PCT/US2007/022139

(22) International Filing Date: 17 October 2007 (17.10.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/852,149	17 October 2006 (17.10.2006)	US
60/978,982	10 October 2007 (10.10.2007)	US

(71) Applicant *(for all designated States except US)*: **VGX PHARMACEUTICALS, INC.** [US/US]; 450 Sentry Parkway, Blue Bell, PA 19422 (US).

(71) Applicant and
(72) Inventor *(for all designated States except US)*: **BROWN, Patricia, A.** [CA/US]; 1826 Cattle Drive, Magnolia, TX 77354 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **DRAGHIA-AKLI, Ruxandra** [US/US]; 5215 Starkridge Drive, Houston, TX 77035 (US). **KHAN, Amir, S.** [US/US]; 8900 Rerseach Park Drive #1704, The Woodlands, TX 77381 (US). **POPE, Melissa, A.** [US/US]; 55 Thundercreek Place, The Woodlands, TX 77381 (US).

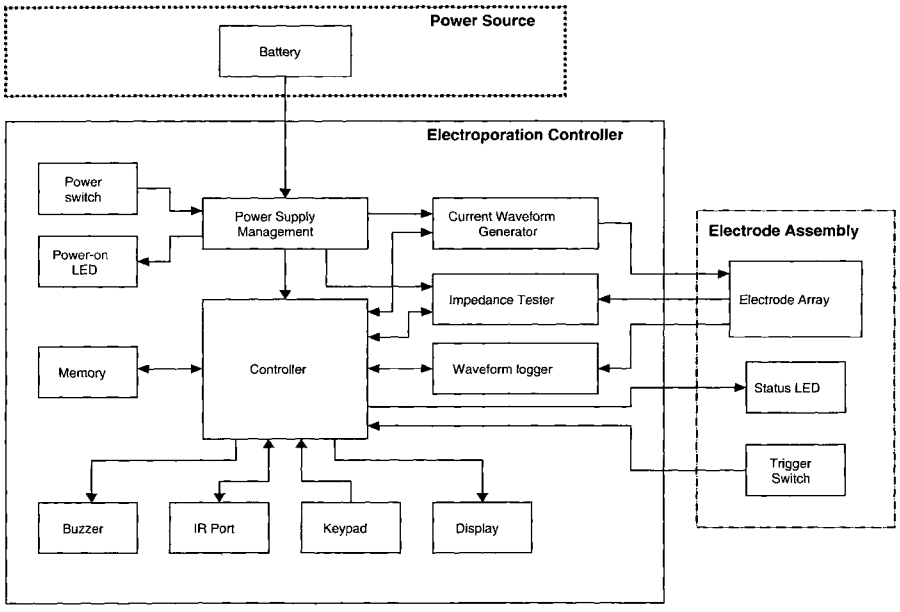
(74) Agents: **LUCCI, Joseph,** et al.; Woodcock Washburn LLP, 2929 Arch Street - 12th Floor, Philadelphia, PA 19104-2857 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

(54) **Title:** ELECTROPORATION DEVICES AND METHODS OF USING SAME FOR ELECTROPORATION OF CELLS IN MAMMALS



(57) **Abstract:** Aspects of the present invention relate to electroporation devices and methods of using same to effectively facilitate the introduction of a biomolecule into cells of a selected tissue in a body, in particular skin such as intradermic or subcutaneous tissue. In some aspects, the present invention is a skin EP device, which produces a pulse of energy and delivers same to the skin tissue using a skin electrode array and maintains a constant current in the same skin tissue based on user input, including a preset current, and allows the storage and acquisition of current waveform data.

WO 2008/048632 A1