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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
8 November 2012 (08.11.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/151527 A3

(51) International Patent Classification:
G01N 27/02 (2006.01) *G01N 33/48* (2006.01)
C12Q 1/68 (2006.01) *B41J 2/315* (2006.01)

(21) International Application Number:
PCT/US2012/036598

(22) International Filing Date:
4 May 2012 (04.05.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/518,399 5 May 2011 (05.05.2011) US

(71) Applicant *(for all designated States except US)*: **DAKTARI DIAGNOSTICS, INC.** [US/US]; 85 Bolton Street, Cambridge, MA 02140 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **ETHEREDGE, Robert, Winston, III** [US/US]; 5 Oakhill Road, Natick, MA 01760 (US). **OPPENHEIMER, Aaron** [US/US]; 160 Pleasant Street, Cambridge, MA 02138 (US).

(74) Agents: **SHIPSIDES, Geoffrey, P.** et al.; Fish & Richardson P.C., P.O. Box 1022, Minneapolis, MN 55440-1022 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

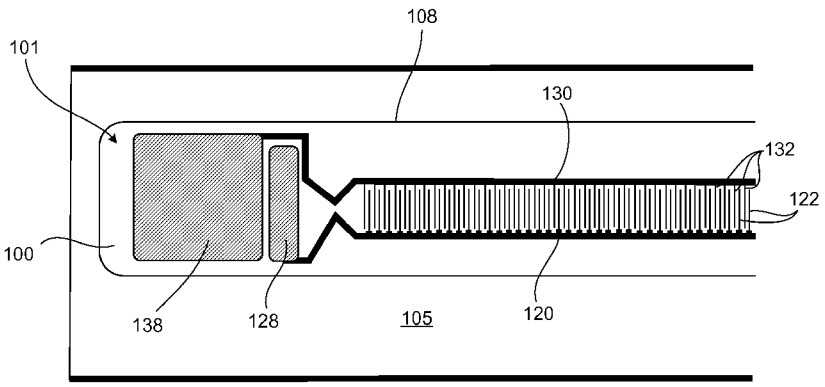
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *with international search report (Art. 21(3))*

(88) Date of publication of the international search report:
21 March 2013

(54) Title: CONDUCTIVE PATTERNS AND METHODS FOR MAKING CONDUCTIVE PATTERNS



(57) Abstract: This document provides conductive patterns, electrical sensors including conductive patterns, and methods of making conductive patterns used in electrical sensors. In some cases, the conductive patterns can define one or more microelectrodes. For example, thermal transfer printing techniques are described. In some cases, a microfluidics device can include one or more micro-electrodes in a micro-channel.

WO 2012/151527 A3