

(51) International Patent Classification:
G01N 33/00 (2006.01)(21) International Application Number:
PCT/IB2014/002077(22) International Filing Date:
31 July 2014 (31.07.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/860,292 31 July 2013 (31.07.2013) US

(71) Applicant: SENTEC PTE. LTD. [SG/SG]; 35 Selegie Road, #10-05 Parklane Shopping Mall, Singapore 188307 (SG).

(72) Inventor; and

(71) Applicant (for US only): AZARNIA, Roobik [US/US]; 5911 SW 81st Street, Miami, FL 33142 (US).

(72) Inventor: RAY, Robert, Allen; 4532 SW Gray Court, Port Saint Lucie, FL 34953 (US).

(74) Agent: HARRIS, Sonya C.; Invention Services, 185 Ajk Blvd #246, Lewisburg, PA 17837 (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, BN, 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, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, KM, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report (Rule 48.2(g))

(54) Title: SYSTEMS, DEVICES, MEDIA, AND METHODS FOR MEASURING ANALYTES IN BIOLOGICAL FLUIDS

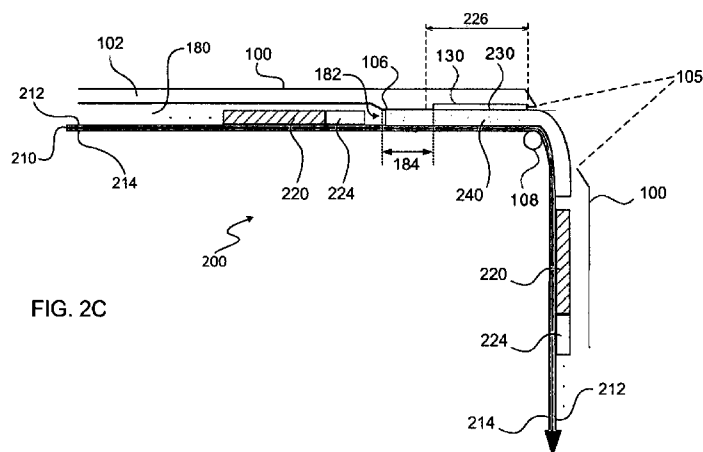


FIG. 2C

(57) Abstract: A replaceable cartridge for a biological analyte measurement device includes housing configured for removable engagement therefrom, and a support medium disposed within the housing. The support medium carries test pads made of a thin layer of fluid transporting material, and hermetic isolation pads made of a fluid impermeable material. The housing provides a port through which test pads are exposable to an external environment; and a set of sealing elements that define a cross sectional area within a channel internal to the housing, through which the support medium, test pads, and hermetic isolation pads are displaceable. Engagement of a hermetic isolation with the set of sealing elements results in the formation of a hermetic seal within the housing. Hermetic isolation pads can be formed as portions of cleanse pads that can be wiped across surfaces corresponding to a set of sensors, or as sealing pads separate from cleanse pads.