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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
2 March 2006 (02.03.2006)

PCT

(10) International Publication Number
WO 2006/022807 A1

(51) International Patent Classification[7]: G01N 27/00, 27/26

(21) International Application Number: PCT/US2005/001872

(22) International Filing Date: 21 January 2005 (21.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
093121861 22 July 2004 (22.07.2004) TW

(71) Applicant *(for all designated States except US)*: **BIO-PROSPECT TECHNOLOGIES CO., LTD**; 13F-4, No. 2, Lane 150, Sec. 2, Sinyi Road, Sinyi District, Taipei City 110, Taiwan, R.O.C. (TW).

(71) Applicant and
(72) Inventor *(for US only)*: **LEE, Chih-Kung** [US/US]; 10805 Willow Run Court, Potomac, MD 20854 (US).

(72) Inventors: **WU, Wen-Jong**; 2F., No. 8, Alley 4, Lane 103, Sioufong St., Jhonghe City, Taipei County 235 (TW).

HSIAO, Wen-Hsin; 8F., No. 7-1, Lane 15, Bainian 2nd St., Longtan Township, Taoyuan County 325 (TW).

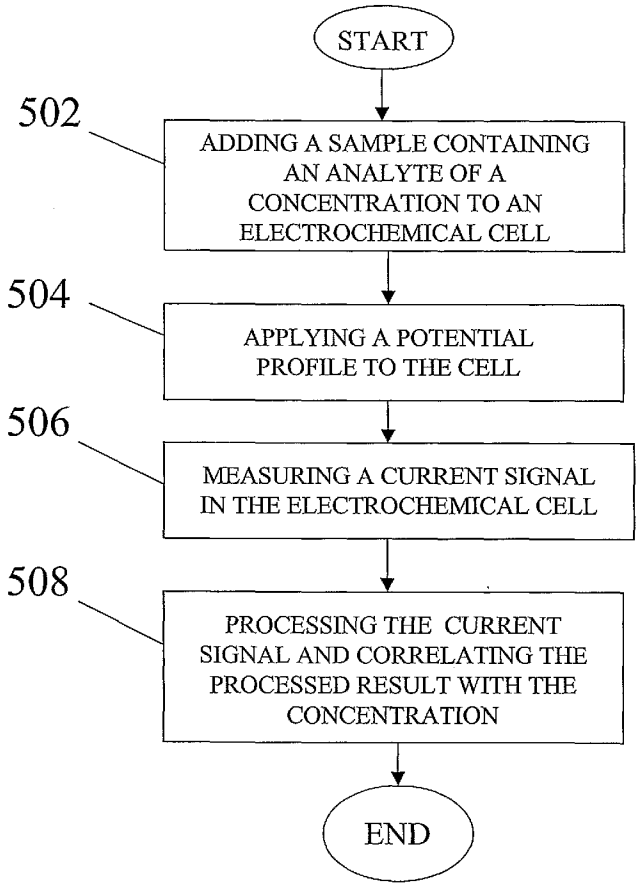
(74) Agent: **SCHWARZE, William**; Akin Gump Strauss Hauer & Feld LLP, One Commerce Square, 2005 Market Street, Suite 2200, Philadelphia, PA 19103-7013 (US).

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

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR ELECTROCHEMICAL DETECTION



(57) Abstract: An apparatus for quantitatively determining an analyte in a sample fluid includes a holder for holding an electrochemical cell that includes a catalyst, a waveform generator for generating a potential profile having a voltage bias and an alternating part, a detector for detecting a current signal for a period of measuring time through the electrochemical cell, a memory for storing the current signal, and a processor for correlating the current signals with the concentration of the analyte.

WO 2006/022807 A1

FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, 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*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.