

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
13 November 2008 (13.11.2008)

PCT

(10) International Publication Number
WO 2008/137260 A1

(51) International Patent Classification:
G01N 21/27 (2006.01) *G01N 21/80* (2006.01)

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(21) International Application Number:
PCT/US2008/060321

(22) International Filing Date: 15 April 2008 (15.04.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/800,746 7 May 2007 (07.05.2007) US

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(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, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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: METHOD AND APPARATUS FOR MEASURING PH OF LOW ALKALINITY SOLUTIONS

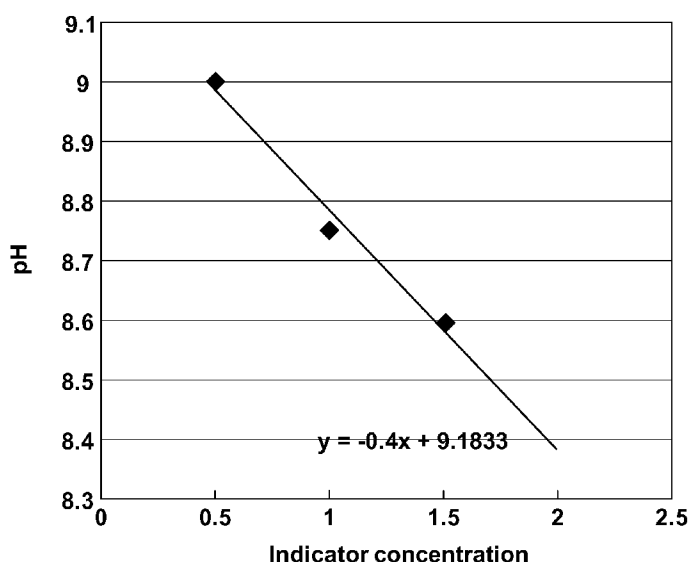


FIG. 5

(57) Abstract: Systems and methods are described for measuring pH of low alkalinity samples. The present invention provides a sensor array comprising a plurality of pH indicators, each indicator having a different indicator concentration. A calibration function is generated by applying the sensor array to a sample solution having a known pH such that pH responses from each indicator are simultaneously recorded versus indicator concentration for each indicator. Once calibrated, the sensor array is applied to low alkalinity samples having unknown pH. Results from each pH indicator are then compared to the calibration function, and fitting functions are extrapolated to obtain the actual pH of the low alkalinity sample.

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