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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 November 2011 (10.11.2011)

PCT

(10) International Publication Number
WO 2011/140345 A1

(51) International Patent Classification:
C12M 1/36 (2006.01) *G01N 21/84* (2006.01)
G01N 35/10 (2006.01)

(21) International Application Number:
PCT/US2011/035366

(22) International Filing Date:
5 May 2011 (05.05.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/332,478 7 May 2010 (07.05.2010) US

(71) Applicant *(for all designated States except US)*: **ALLTECH ASSOCIATES, INC.** [US/US]; 7500 Grace Drive, Columbia, Maryland 21044 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **SAARI-NORDHAUS, Raaidah** [MY/US]; 709 Birch Hollow Drive, Antioch, Illinois 60002 (US). **GAITA, Romulus** [US/US]; 1636 Ashland Avenue #602, Des Plaines, Illinois 60016 (US). **MENDOZA, Washington** [US/US]; 3 Sonoma Court, Lake in the Hills, Illinois 60156 (US). **ANDERSON, James** [US/US]; 2526 E. Hunter Drvie, Arlington Heights, Illinois 60004 (US). **ANDERSON, Scott** [US/US]; 580 Madison Lane, Lindenhurst, Illinois 60046 (US).

(74) Agent: **BUNCH, William**; 7500 Grace Drive, Columbia, Maryland 21044 (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, RO, RS, RU, SC, SD,

[Continued on next page]

(54) Title: METHODS AND APPARATUS FOR ANALYZING SAMPLES AND COLLECTING SAMPLE FRACTIONS

(57) Abstract: Methods and apparatus for analyzing a sample using at least one detector in a liquid chromatography system and collecting a new sample fraction in a fraction collector in response to a change in the signal are disclosed.

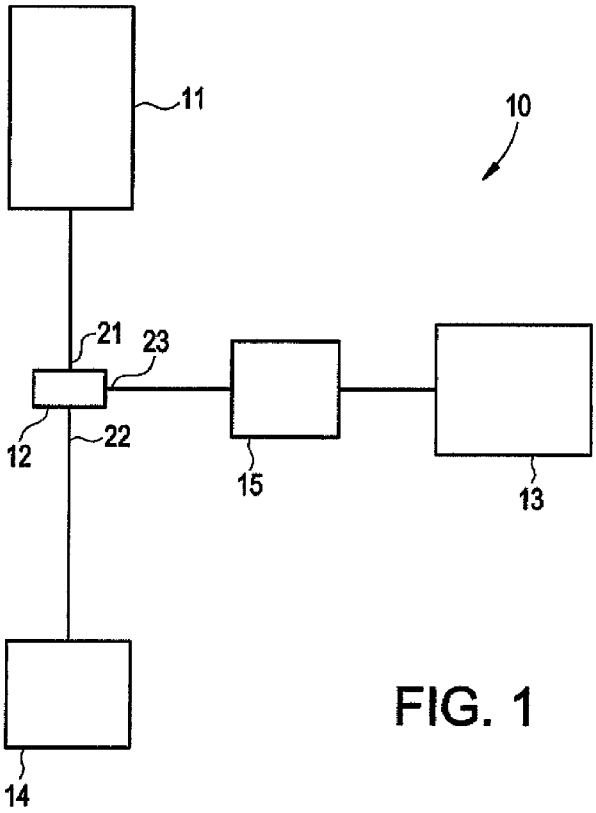


FIG. 1

WO 2011/140345 A1

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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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).

Published:

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

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*