



(51) International Patent Classification:

G01N 35/02 (2006.01) G01N 30/72 (2006.01)
G01N 35/08 (2006.01) H01J 49/00 (2006.01)

(21) International Application Number:

PCT/US2011/058323

(22) International Filing Date:

28 October 2011 (28.10.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/408,180 29 October 2010 (29.10.2010) US

(71) Applicant (for all designated States except US): **THERMO FISHER SCIENTIFIC OY** [US/US]; Ratastie 2, P.O. Box 100, FI-01621 Vantaa (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DEWITTE, Robert** [CA/CA]; 287 Glen Afton Drive, Burlington, ON L7L 1G8 (CA). **SIIDOROV, Juhani** [FI/FI]; Norotie 8 C 37, FI-FL-01600 Vantaa (FI). **NUOTIO, Vesa** [FI/FI]; Haarssinkuja 6, FI-02970 Espoo (FI). **SAUKKONEN, Jukka** [FI/FI]; Riilahdentie 5 D 14, FI-FL-02360 Espoo (FI). **BRANN, John, Edward** [US/US]; 455 Grafton Street, Shrewsbury, MA 01545 (US). **OLNEY, Terry, N.** [CA/US]; 4702 Windy Cove Lane, Tracy, CA 95377 (US).

(74) Agents: **BRINKMAN, David, H.** et al.; Wood, Herron & Evans, LLP, 2700 Carew Tower, 441 Vine Street, Cincinnati, OH 45202-2917 (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, 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:

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

(54) Title: SYSTEM LAYOUT FOR AN AUTOMATED SYSTEM FOR SAMPLE PREPARATION AND ANALYSIS

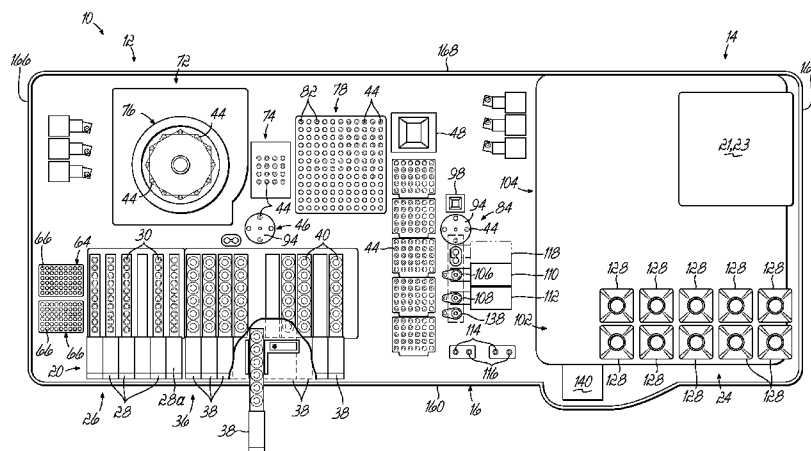


FIG. 2A

(57) Abstract: A sample preparation and analysis system (10). The system (10) includes a housing (16) with a sample preparation station (12) and a sample analysis station (14) positioned within the housing (16). The sample analysis station (14) is spaced away from the sample preparation station (12). A transport assembly (50) is configured to move at least one sample within the housing (16) and between the sample preparation station (12) and the sample analysis station (14).