



- (51) **International Patent Classification:**
G05B 19/02 (2006.01) *G08B 21/18* (2006.01)
- (21) **International Application Number:**
PCT/US2013/068954
- (22) **International Filing Date:**
7 November 2013 (07.11.2013)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
13/673,523 9 November 2012 (09.11.2012) US
- (71) **Applicant:** VELTEK ASSOCIATES, INC. [US/US]; 15 Lee Boulevard, Malvern, PA 19355 (US).
- (72) **Inventors:** CHURCHVARA, Jeffrey; 29 Twin Pines, Downingtown, PA 19335 (US). PHILLIPS, Mark; 336 W. Valley Forge Road, King of Prussia, PA 19406 (US).
- (74) **Agent:** WEISSMAN, Peter, S.; Blank Rome LLP, 600 New Hampshire Avenue NW, Washington, DC 20037 (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:** PROGRAMMABLE LOGIC CONTROLLER-BASED CONTROL CENTER AND USER INTERFACE FOR AIR SAMPLING IN CONTROLLED ENVIRONMENTS

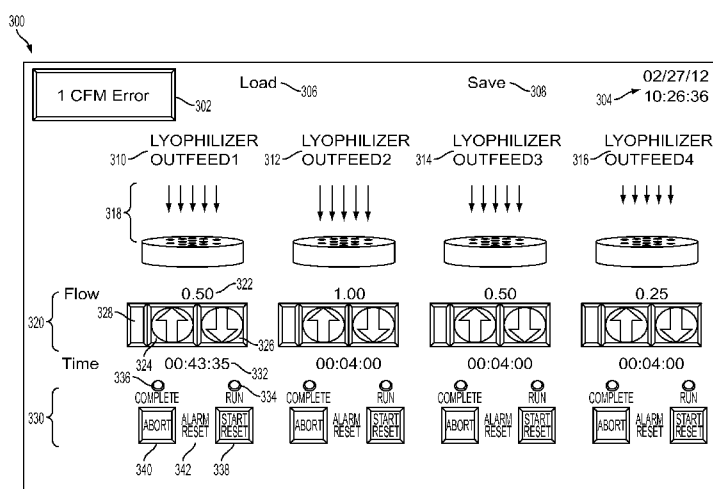


FIG. 3

- (57) **Abstract:** In accordance with an aspect of the present invention there is provided a system for sampling air at multiple locations in a controlled environment. The system includes one or more air sampling devices configured to monitor and test a volume of air within a controlled environment. A control center including a programmable logic controller (PLC) is configured to monitor and control the one or more air sampling devices. One or more touch panel displays are connected to the control center and provide a human-computer interface between the control center and users.