



(51) International Patent Classification:

G01Q 70/06 (2010.01) B82Y 35/00 (2011.01)
G01Q 60/22 (2010.01)

(21) International Application Number:

PCT/US2014/049379

(22) International Filing Date:

1 August 2014 (01.08.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/861,306 1 August 2013 (01.08.2013) US

(71) Applicant: HYSITRON, INC. [US/US]; 9625 West 76th St., Eden Prairie, Minnesota 55344 (US).

(72) Inventors: DAMA, Rajiv; 93 Olympic Circle, Chanhassen, Minnesota 55317 (US). ZIGELMAN, Svetlana; 9625 West 76th St., Eden Prairie, Minnesota 55344 (US).

(74) Agents: SCHEER, Bradley et al.; Schwegman, Lundberg & Woessner, P.A., P.O. Box 2938, Minneapolis, Minnesota 55402 (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:

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

(88) Date of publication of the international search report:

15 October 2015

(54) Title: INSTRUMENT CHANGING ASSEMBLY AND METHODS

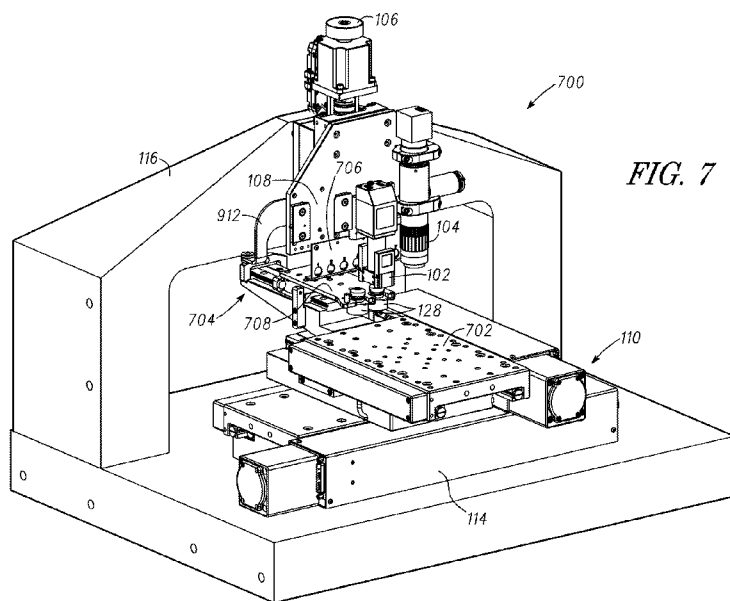


FIG. 7

(57) Abstract: An instrument changing assembly includes a magazine having one or more probe assembly stations. The assembly further includes at least one probe change tool including a receptacle socket. One or more probe assemblies are retained within the one or more probe assembly stations. The one or more probe assemblies each include a probe receptacle including a probe retention recess and a common socket fitting configured for complementary fitting with a common receptacle socket. The probe change tool is configured to install or extract the respective probes from a mechanical testing instrument according to the complementary fit between the common socket fitting and the common receptacle socket of the probe assemblies. Alternatively, the instrument changing assembly includes an instrument array housing including a plurality of instruments. Each of the one or more instruments (probe and transducer combination) are deployed relative to the instrument array housing with an instrument deployment actuator.