



(51) International Patent Classification:

A63B 69/40 (2006.01) A63B 71/04 (2006.01)
A63B 67/04 (2006.01)

(21) International Application Number:

PCT/US2010/054253

(22) International Filing Date:

27 October 2010 (27.10.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/255,757 28 October 2009 (28.10.2009) US
61/255,795 28 October 2009 (28.10.2009) US

(71) Applicant (for all designated States except US): **NEW-GY INDUSTRIES, INC.** [US/US]; 805 Teal Drive, Gal-
latin, TN 37066 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **THOMAN, Lawrence, Michael** [US/US]; 918 Lake Park Drive, Gal-

latin, TN 37066 (US). **CEVIK, Burak** [TR/US]; 11192
Snider Road, Cincinnati, OH 45249 (US).

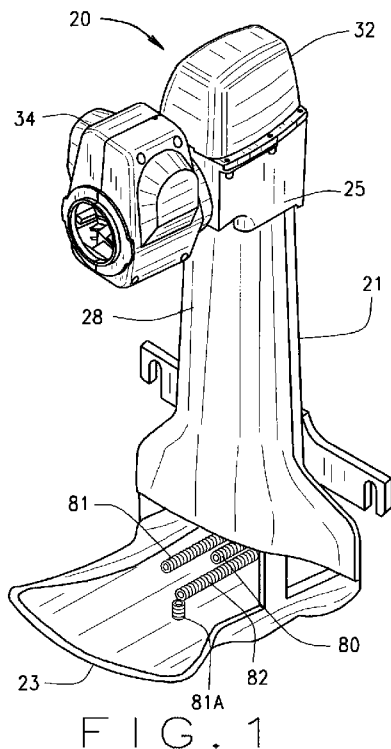
(74) Agent: **RANDLE, Ned, W.**; Polster, Lieder, Woodruff &
Lucchesi, LC, 12412 Powerscourt Drive, St. Louis, MO
63131 (US).

(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,
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,

[Continued on next page]

(54) Title: TABLE TENNIS ROBOT AND METHOD OF OPERATION



(57) Abstract: A robot server assembly (20) having a back panel (21), a ball feed collector plate (23) extending outwardly from the bottom of back panel with its horizontal plane positioned an angle relative to the longitudinal axis of the back panel (21), a rotatable ball pickup mechanism (24) positioned between a the ball collector mounting section (22) of the back panel and the ball feed collector plate and having a plurality of ball pickup structures (78, 80, 81, 82) extending into the collector plate; a ball guide (25) at the upper end of the back panel; a substantially transparent front cover (28) attached to the front surface of the back panel (21) and extending from the bottom of the ball guide (25) to ball pickup mechanism (24) to define an enclosed ball passageway (30); an oscillator (32) is mounted to the top of the back panel above the ball guide, with a serving head assembly (34) attached to the oscillator through a pivot guide (35). The robot server assembly (20) includes a digital controller (204) that operates multiple functions of the robot server assembly from a menu of functions and can be interfaced with a personal computer for the development of specialized drills.



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))*