

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
05 October 2023 (05.10.2023)



(10) International Publication Number
WO 2023/192266 A1

(51) International Patent Classification:

A63G 9/16 (2006.01) A63G 9/00 (2006.01)
F03G 1/08 (2006.01) F03G 1/00 (2006.01)
A47D 13/10 (2006.01)

(21) International Application Number:

PCT/US2023/016549

(22) International Filing Date:

28 March 2023 (28.03.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/324,825	29 March 2022 (29.03.2022)	US
63/409,439	23 September 2022 (23.09.2022)	US
63/485,756	17 February 2023 (17.02.2023)	US

(71) Applicant: **WONDERLAND SWITZERLAND AG**
[CH/CH]; Beim Bahnhof 5, 6312 Steinhausen (CH).

(72) Inventors; and

(71) Applicants: **TUCKEY, Peter, R.** [US/US]; 8 Apricot Avenue, Leola, PA 17540 (US). **HARTENSTINE, Zachary, C.** [US/US]; 20 Osprey Lane, Birdsboro, PA 19508 (US). **SAINT, Nathanael** [US/US]; 264 Mountz Rd., Morgan-

town, PA 19543 (US). **MOUNTZ, Jonathan, K.** [US/US]; 36 Springfield Drive, Elverson, PA 19520 (US).

(74) Agent: **O'DONNELL, Ryan, W.**; 30 S. 17th Street, 18th Floor, Philadelphia, PA 19103 (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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, 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, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE,

(54) Title: WIND UP SWING ASSEMBLY AND METHOD OF USE

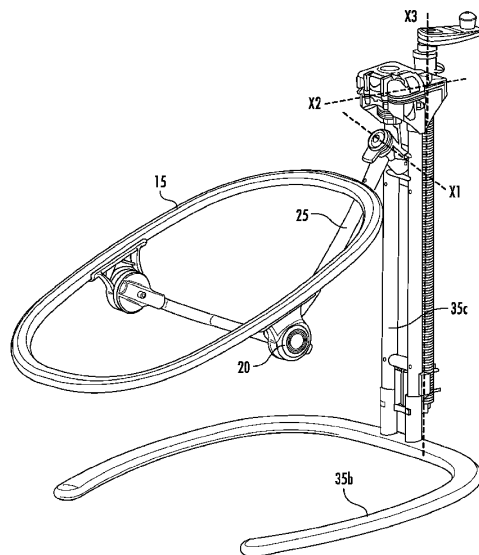


FIG. 2

(57) Abstract: The present disclosure is directed to a windup swing assembly. The windup swing assembly comprises a swing arm assembly, a drive spring, and an escapement assembly. Each of the axes of the swing arm assembly, the drive spring, and the escapement assembly can be angled relative to each other. The axis of the drive spring can be angled in a non-vertical direction relative to a vertical plane. The axis of the swing arm assembly can be angled in a non-horizontal direction relative to a horizontal plane or support surface.

WO 2023/192266 A1

[Continued on next page]

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))*