

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
16 February 2023 (16.02.2023)



(10) International Publication Number
WO 2023/018749 A1

(51) International Patent Classification:

G01N 21/88 (2006.01) G01N 21/956 (2006.01)
G01N 21/95 (2006.01) H01L 21/66 (2006.01)

(21) International Application Number:

PCT/US2022/039886

(22) International Filing Date:

09 August 2022 (09.08.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/231,267 10 August 2021 (10.08.2021) US
17/816,103 29 July 2022 (29.07.2022) US

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(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, 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, 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, GH, GM, KE, LR, LS, MW, MZ, NA, RW, 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, 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))

(54) Title: SPRING MECHANISM FOR SELF-LOCK AND CENTERING DURING LOADING

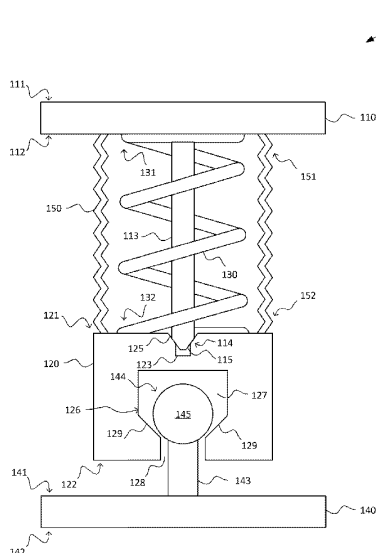


FIG. 1A

(57) Abstract: An apparatus includes an upper member, a lower member disposed beneath the upper member, and a spring disposed between the upper member and the lower member. The upper member has a pin extending downward therefrom. The lower member has a seat configured to receive a free end of the pin. The spring surrounds the pin, and has a free length that is less than the length of the pin. In an unloaded state, the free end of the pin contacts the seat and the spring applies a compressive force to prevent relative lateral movement between the upper member and the lower member. When the lower member carries a load in a loaded state, the load applies a tensile force to the spring that forms a gap between the free end of the pin and the seat, which allows relative lateral movement between the upper member and the lower member.

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