

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
25 May 2023 (25.05.2023)



(10) International Publication Number
WO 2023/091453 A2

- (51) International Patent Classification:
B65G 15/20 (2006.01)
- (21) International Application Number:
PCT/US2022/050054
- (22) International Filing Date:
16 November 2022 (16.11.2022)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
63/279,914 16 November 2021 (16.11.2021) US
- (71) Applicant: **SPAN TECH LLC** [US/US]; 1115 Cleveland Avenue, Glasgow, KY 42141 (US).
- (72) Inventors: **FYE, Stephen, C.**; 120 Sheila Drive, Glasgow, KY 42141 (US). **COTTON, Aaron**; 203 Lincoln Road, Glasgow, KY 42141 (US). **LAYNE, James, L.**; 241 Fisher Lane, Bowling Green, KY 42103 (US).
- (74) Agent: **DORISIO, Andrew, D.**; Dickinson Wright PLLc, 300 West Vine Street, Suite 1700, Lexington, KY 40507 (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, 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.

(54) Title: ACTUATOR FOR ADJUSTABLE CONVEYOR GUIDERAIL

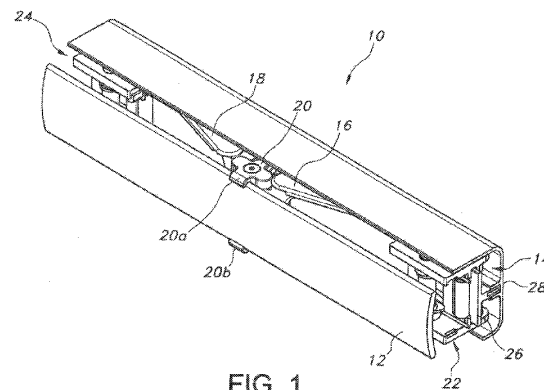


FIG. 1

(57) Abstract: A system includes a conveyor and a cable adapted to travel along an endless path to extend or retract a first adjustable guiderail for guiding one or more articles when being conveyed along the conveyor. A cable actuator adapted to move the cable along an endless path. The cable actuator may include a capstan adapted to receive at least a portion of the cable and rotate to cause the cable to move along the endless path, a tensioner adapted to tension the cable, or both the capstan and the tensioner. First and second adjustable guiderails may also be provided, along with a controller for controlling associated cable actuators. The controller may include a plurality of preset conditions, each corresponding to a width of an article to be conveyed or to a width of the conveying path between the first adjustable guiderail and the second adjustable guiderail.

[Continued on next page]

(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, 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, 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))*