



- (51) **International Patent Classification:**
A62B 1/10 (2006.01) *A62B 35/00* (2006.01)
A62B 1/14 (2006.01)
- (21) **International Application Number:**
PCT/US2015/048907
- (22) **International Filing Date:**
8 September 2015 (08.09.2015)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
62/049,629 12 September 2014 (12.09.2014) US
14/838,879 28 August 2015 (28.08.2015) US
- (71) **Applicant:** D B INDUSTRIES, LLC [US/US]; 3833 Sala Way, Red Wing, MN 55066 (US).
- (72) **Inventors:** BORAAS, Michael, A.; 19435 County 10 Blvd, Zumbrota, MN 55992 (US). THOMFORDE, Andrew, K.; 36333 County 2 Blvd, Goodhue, MN 55027

(US). KEHREN, Treyben, P.; 311 North 4th Street, Goodhue, MN 55027 (US).

- (74) **Agent:** MAU, Michael, L.; Iplm Group, P.A., 1300 Godward Street NE, Minneapolis, MN 55413-1799 (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, 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, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,

[Continued on next page]

- (54) **Title:** PERSONAL DESCENT SYSTEM

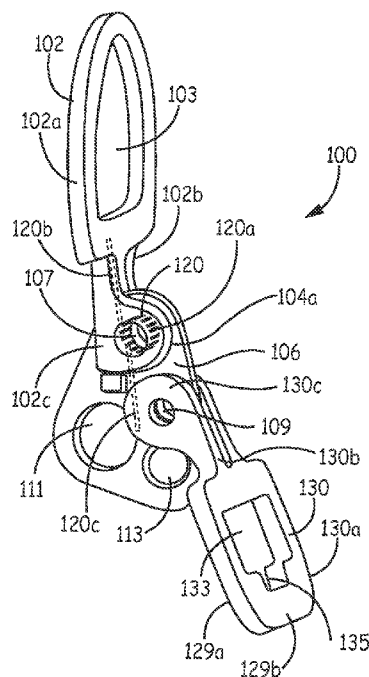


FIG. 1

(57) **Abstract:** A personal descent system is provided. The personal descent system includes a support structure coupling assembly and a control descent device. The support structure coupling assembly is configured and arranged to be coupled to a descent lifeline. The support structure coupling assembly includes an adaptor connection member. The adaptor connection member is configured and arranged to couple different types of lifelines and lanyards to the support structure coupling assembly. The control descent device is selectively coupled to the support structure coupling assembly. The control descent device is configured and arranged to be coupled to a safety harness donned by a user. The control descent device is further configured to detach from the support structure coupling assembly during a descent operation while controlling a payout of the descent lifeline.



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))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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

26 May 2016