



- (51) International Patent Classification:
B62D 21/00 (2006.01) *B62D 21/15* (2006.01)
- (21) International Application Number:
PCT/US2014/054050
- (22) International Filing Date:
4 September 2014 (04.09.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/876,523 11 September 2013 (11.09.2013) US
- (71) Applicant: **ENERGY ABSORPTION SYSTEMS, INC.**
[US/US]; 2525 N. Stemmons Freeway, Dallas, TX 75207 (US).
- (72) Inventors: **BUEHLER, Michael J.**; Energy Absorption Systems, Inc., 2525 N. Stemmons Freeway, Dallas, TX 75207 (US). **THOMPSON, Sean**; Energy Absorption Systems, Inc., 2525 N. Stemmons Freeway, Dallas, TX 75207 (US). **LEONHARDT, Patrick A.**; Energy Absorption Systems, Inc., 2525 N. Stemmons Freeway, Dallas, TX 75207 (US).
- (74) Agent: **STOVER, Andrew D.**; Brinks Gilson & Lione, P.O. Box 10087, Chicago, IL 60610 (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.

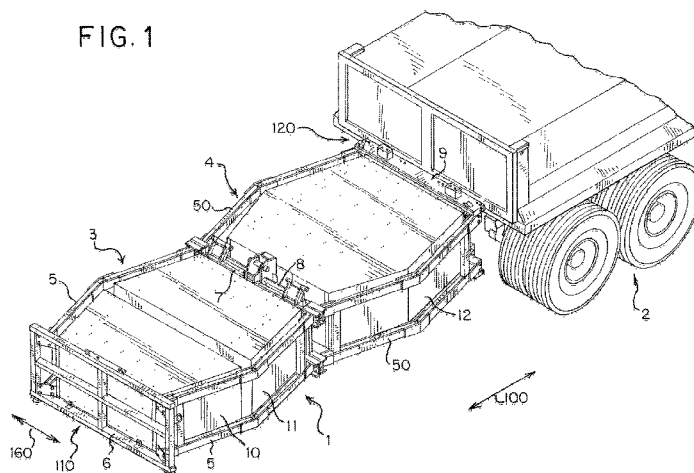
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, 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: CRASH ATTENUATOR

FIG. 1



(57) Abstract: A crash attenuator includes a frame having a first frame member and a second frame member rigidly connected with a hinge assembly in a pre-impact configuration. The first and second frames are hingedly connected with the hinge assembly in an impact configuration, wherein the hinge assembly comprises a living hinge when the hinge assembly is in the impact configuration. A method of using the crash attenuator is also provided.