

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 August 2003 (14.08.2003)

PCT

(10) International Publication Number
WO 03/066967 A2

- (51) International Patent Classification⁷: **E01F**
- (21) International Application Number: PCT/US03/03586
- (22) International Filing Date: 6 February 2003 (06.02.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/421,144 7 February 2002 (07.02.2002) US
10/359,666 6 February 2003 (06.02.2003) US
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: ENERGY ABSORBING SYSTEM

(57) Abstract: A heavy duty ground retractable automobile barrier for a railroad crossing. Concrete bunkers are placed at each side of a roadway. An upstanding concrete-fill steel pipe fixed in each bunker has a sleeve for rotational and axial movement. Shock absorbers are mounted on each sleeve. A net extends across the road and is attached to the opposite ends of the shock absorbers. Collision of an automobile with the net creates tensile forces in the net. The shock absorbers expand while rotating about the pipe's axis in response to tensile forces from the net that meet or exceed a minimum threshold. Forces from the net pass through the axis of the steel pipe. The net is stored in a pit transverse the roadway parallel to the railroad tracks and is raised and lowered as appropriate. The net includes a cable that extends across the road in a wave pattern, having peaks, valleys and midpoints, wherein tangents to the wave midpoints are at least 90 degrees from tangents of the peaks and valleys.



WO 03/066967 A2