



(51) International Patent Classification:
B60S 1/00 (2006.01) *B60S 1/62* (2006.01)

(21) International Application Number:
PCT/US2020/052105

(22) International Filing Date:
23 September 2020 (23.09.2020)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/907,429 27 September 2019 (27.09.2019) US

(71) Applicant: **AUSTIN ENGINEERING USA SERVICES, INC.** [US/US]; 415 First Street, Mills, WY 82644 (US).

(72) Inventors: **REYNOLDS, Frederick, J.**; 415 First Street, Mills, WY 82644 (US). **REYNOLDS, Seth, Joseph, Earl**; 415 First Street, Mills, WY 82644 (US).

(74) Agent: **COLTER, J., Harrison**; Colter Jennings, 333 South 520 West, Lindon, UT 84042 (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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, 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.

(54) Title: ADJUSTABLE ROCK KNOCKER BRACKET

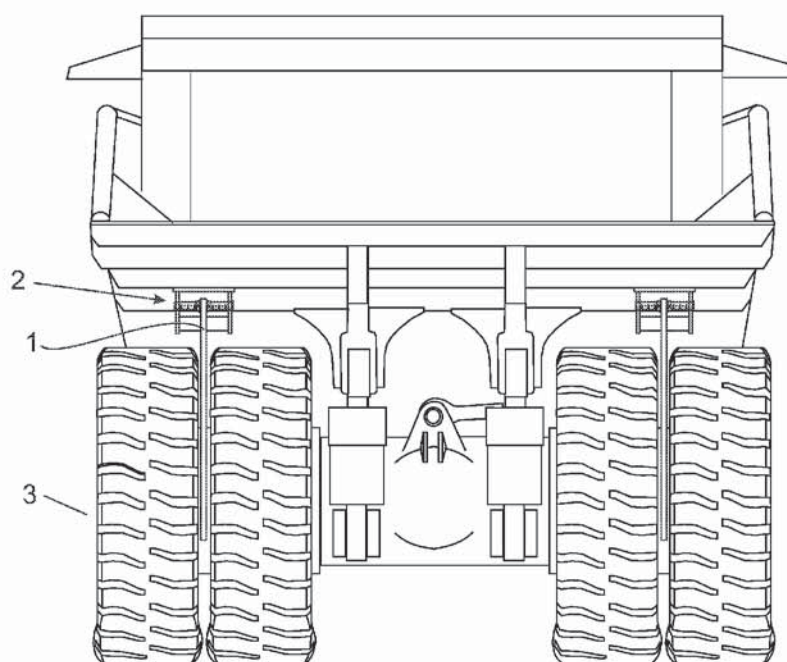


FIG. 1

(57) Abstract: A rock knocker bracket holds a rock ejector such as a chain or bar that is used to clear debris from the gap between two tires of a mining vehicle. The rock ejector is pivotally mounted on a horizontal, lateral pin that is held at both ends by side plates of the bracket. The pin has a series of holes formed along its length. Bar retainers and washers mounted on the pin allow the rock ejector to be moved laterally along the pin and thereby provide for different laterally spacing configurations of the tires. Fasteners pass through holes in the bar retainers and the holes in the pin to hold the rock ejector at a predetermined lateral location along the pin. Alternative designs for the pin and the bracket include other systems for laterally moving the rock ejector and mounting it in the predetermined lateral position.



(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).

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))*
- *of inventorship (Rule 4.17(iv))*

Published:

- *with international search report (Art. 21(3))*