

ABSTRACT

TRACKLESS DARK RIDE VEHICLE, SYSTEM, AND METHOD

A motion assembly that produces pitch and roll motions includes lower and upper plates. A pivotable coupling having upper and lower shafts extending from its center is coupled between the upper and lower plates. At least two linear actuators are coupled between the plates. Extension and retraction of the actuators pivots the upper plate about the pivotable coupling relative to the lower plate. A vehicle includes two steerable propulsion wheels coupled to a chassis. A lower plate of a pitch and roll assembly, similar to that just described, couples to the chassis via a slew bearing. Seating is coupled to the upper plate. The seating rotates with respect to the chassis via controlled rotation of the slew bearing with reference to the chassis. The seating can be rotated to point in any direction with respect to the chassis regardless of the direction the steerable propulsion wheels move the chassis.

[Figure 3]