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(54) **CONTROL OF A TRANSPORTER BASED ON ATTITUDE**

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(51) **Int. Cl.**

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(52) **U.S. Cl.**

USPC **180/7.1**; 180/21; 180/218; 180/282; 280/5.502; 280/5.513

(58) **Field of Classification Search**

USPC 180/7.1, 21, 218, 271, 282; 280/5.502, 280/5.513

See application file for complete search history.

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(57) **ABSTRACT**

A transporter for transporting a load over a surface. The transporter includes a support platform for supporting the load. The support platform is characterized by a fore-aft axis, a lateral axis, and an orientation with respect to the surface, the orientation referred to as an attitude. At least one ground-contacting element is flexibly coupled to the support platform in such a manner that the attitude of the support platform is capable of variation. One or more ground-contacting elements are driven by a motorized drive arrangement. A sensor module generates a signal characterizing the attitude of the support platform. Based on the attitude, a controller commands the motorized drive arrangement.

15 Claims, 4 Drawing Sheets