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Avitan

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- [54] MATERIAL HANDLING VEHICLE STEERING SYSTEM
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[57] ABSTRACT

A unique steer/drive control system is featured for steering a material handling vehicle by the use of directly coupled traction and steering motors. The steering motor is fabricated as a hollow shaft dc motor, whose inner ring represents the rotor, and whose outer ring represents the stator. The stator is connected to a frame of the vehicle carrying the steering and drive wheel. The rotor is integrally connected to the traction motor that drives the steering and drive wheel. A hand operated steering mechanism rotationally guides the vehicle. A steering angle sensor determines the difference between actual and desired heading of the steering and drive wheel. The steer/drive system utilizes the sensed difference, and generates a signal for controlling the heading of the steering and drive wheel.

24 Claims, 3 Drawing Sheets

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