

Title (en)
SYSTEM FOR GENERATING AN ESTIMATION OF THE GROUND SPEED OF A VEHICLE FROM MEASURES OF THE ROTATION SPEED OF AT LEAST ONE WHEEL

Title (de)
SYSTEM ZUR SCHÄTZUNG EINER FAHRZEUGGESCHWINDIGKEIT ÜBER GRUND AUSGEHEND VON DREHZAHLMESSUNGEN VON MINDESTENS EINEM RAD

Title (fr)
SYSTEME POUR PRODUIRE UNE ESTIMATION DE LA VITESSE AU SOL D'UN VEHICULE A PARTIR DE MESURES DE LA VITESSE DE ROTATION D'AU MOINS UNE ROUE

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Application
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Priority
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Abstract (en)
[origin: WO2009060092A1] The invention relates to a system for generating an estimation of the global speed of a vehicle relative to the ground, that comprises developing a measure of the instantaneous adhesion coefficient (μ_r) of at least one wheel (1) of an electric traction vehicle in which an electric rotary machine (2) is coupled to said wheel for individually driving the same upon traction or braking. The system includes an indicator of the torque applied at each moment to said wheel on the basis of the measure of the current (I_c) in the electric machine, an indicator of the instantaneous dynamic load on said wheel, and a stage for calculating the instantaneous adhesion coefficient of said wheel (1) relative to the ground, from the torque indicator and the dynamic load indicator in order to determine the ratio between the tangential force applied on the ground by the wheel under the action of said torque and the normal force applied on the ground by the wheel under the action of the dynamic load. One or more tests of the adhesion coefficient value thus calculated are carried out in order to determine the capability of a measure of the circumferential speed of a corresponding wheel to provide a sufficient estimation of the vehicle movement speed at the location of said wheel.

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Citation (search report)
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