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**Seki**

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(54) **VEHICLE SPEED DETERMINATION SYSTEM, STABILITY CONTROL SYSTEM, AND SADDLED VEHICLE HAVING THE SAME**

(58) **Field of Classification Search**  
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See application file for complete search history.

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(30) **Foreign Application Priority Data**

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(51) **Int. Cl.**  
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(57) **ABSTRACT**

A vehicle speed while curving through steering maneuver is determined. A vehicle speed determination system is applicable to a vehicle having a front wheel and a rear wheel. The system includes: a wheel speed sensor configured to detect a wheel speed  $V_f$  of the front wheel; and an arithmetic circuit configured to determine a vehicle speed  $V(r)$  at a rear-wheel tangential point, based on a difference in vehicle speed between the front-wheel tangential point and the rear-wheel tangential point which occurs due to a difference between a locus of travel of the front wheel and a locus of travel of the rear wheel, and on the wheel speed  $V_f$  of the front wheel.

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