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**Aker et al.**

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(54) **SYSTEM AND METHOD FOR DETERMINING PATROL SPEED**

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(58) **Field of Classification Search** ..... 342/104  
See application file for complete search history.

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(57) **ABSTRACT**

A system for processing vehicle speed data for a vehicle is provided. The system includes a front antenna assembly of the vehicle generating a front digital signal, and a rear antenna assembly of the vehicle generating a rear digital signal. A fast Fourier transform system converts the front digital signal into front frequency shift data and the rear digital signal into rear frequency shift data. A patrol speed system matches the front frequency shift data and the rear frequency shift data and generates a vehicle speed for the vehicle.

**20 Claims, 8 Drawing Sheets**

