

[54] **VEHICLE CONDITION MONITORING SYSTEM**

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**Related U.S. Application Data**

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[51] **Int. Cl.<sup>2</sup>**..... **B60Q 1/26**

[58] **Field of Search**..... **340/81 R, 52 R, 84, 340/85, 80, 248 E, 248 P, 248 D, 248 F, 251, 252 R, 52 F, 181, 205, 207 R, 213.1; 315/77, 82, 83; 331/64, 60, 61, 65, 66; 180/103, 82 R; 73/116**

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[57] **ABSTRACT**

A display panel or console is mounted in the driving compartment of the vehicle in a position to be observed by the driver and provides status information regarding, for example, the operability of the headlights or taillights, and position information concerned primarily with the position of the trailer relative to the cab and whether there is a "jackknife" condition. The system may also check the status of truck tire pressure and brake drum temperature to determine if the pressure is too low or the temperature too high. The lights, for example, are checked by monitoring the continuity to the filament. The existing lines to the lamp are pulsed with a filtered square wave signal and a resistance sensor determines continuity; a lack of continuity causing illumination of the associated status lamp of the display panel. In another arrangement a memory circuit is associated with each indicator circuit so that a fault condition is stored and remains stored even if corrected. A diagnostic unit can then be later used to detect the condition of each memory circuit.

**23 Claims, 12 Drawing Figures**

