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Angela E. Card Department of Electrical and Computer Engineering and Center for Advanced Vehicular Systems The present invention provides a system and method for controlling the speed of a vehicle engine utilizing total system integration and an on-board power system for electrical power generation and distribution, which ensures that control of multiple components can be maintained, critical operational parameters can be modified by generating calibration values, and that an electrical load can be met in both stationary and mobile vehicle applications.

An Engine Speed Controller with Total System Integration for On-board Vehicle Power Applications

Advantages

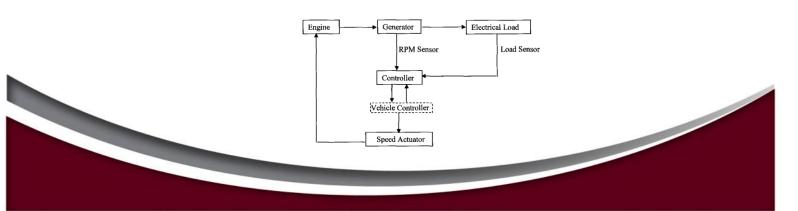
- Designed specifically for vehicles
- Easily adaptable to different vehicles
- Software allows for ease of customization and adaptability

Technology and Software

The technology has the capability to incorporate total system integration, which includes the speed control task, the supervisory control of attached power electronics, and vehicle and personnel safety features. This model based software was developed as an integral part of an on-board vehicle power system. The speed control concept is based upon the relationship between a generator's speed and the amount of electrical power to be supplied by said generator. The software allows the microprocessor based controller to select the desired speed of a generator based upon the electrical load attached to the system using the generators' speed versus load curve. The software also allows for ease of customization and adaptability to different vehicles, meaning the controller can be calibrated for different vehicles, electrical systems, etc.

IP Protection

Issued U.S. Patent: 8,140,240; Engine Speed Controller with Total System Integration for On-board Vehicle Power Applications, and **Copyright**: Software for an Engine Speed Controller with Total System Integration for On-Board Vehicle Power Applications



For more information

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