

# Inventions & Innovation Emerging Technology

## An Indirect Sensing Technique for Closed-Loop Diesel Fuel Quantity Control

A low-cost retrofit system has been developed for diesel vehicles which eliminates visible particulate emissions and improves fuel economy, without compromising power. The system is most effective on mechanically-governed diesel engines such as those found in Class 6-8 (large) trucks, off-road equipment (farm and construction), and previously unregulated (pre-1990) diesel passenger vehicles and light trucks. The Electronic Diesel Smoke Reduction System (EDSRS) involves advanced sensing with a microprocessor-based adaptive (learning-type) controller, and a specialized actuator in a rugged package. The after-market kit can be easily installed by a skilled mechanic and requires no periodic maintenance.



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