

SIMPLE CONTROL SYSTEM FOR SERIES-HYBRID I. C. ENGINE

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ABSTRACT

The new breed of electric cars has a small and simple Internal Combustion Engine, that is commonly called “range extender” by General Motors. Although these vehicles are series-hybrids, General Motors and other manufacturers call them Electric Vehicles (with range extender) as the power to the wheels is purely electric. In fact, there is no direct mechanical link between the I C engine and the wheels, as in other more “usual” (parallel) hybrids, such as the Honda Insight or Toyota Prius. The I C engine of these cars in a common engine which runs at different loads and at different speeds. However, for a series-hybrid, the engine is in the car with the sole purpose of charging the batteries. Therefore the engine is developed to run at only one condition, the point of maximum efficiency, which is at a nominal speed and at full load.

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