High Efficiency Active Secondary Fuel-Air Mixer

TECHNOLOGY DESCRIPTION

This technology is a smart $CNG-H_2$ air mixer and control systems for multi fuel vehicle.

TECHNOLOGY FEATURES

This technology develops a precision valve movement mechanism by using bevel gear and shaft. It provides suitable provision for possible electronic control of the vehicle. Besides, this technology able to determine optimum CNG channel angle to obtain efficient mixing. This technology also develops mixing criteria for efficiency evaluation. This technology is able to reduce diesel consumption, reduce smoke and particulate matter in diesel emission of the vehicle.

ADVANTAGES

- Efficient mixing secondary gaseous fuel in a dual fuel vehicle
- Reduces diesel consumption
- Reduces smoke emission
- Cleans engine

INDUSTRY OVERVIEW

Prospect Industry: Automotive industry

Overall, the global automotive industry is in better shape than it was five years ago, especially in the US, where profits and sales have recovered following the recent economic crisis, and in China, where growth remains strong. Global sales of vehicles were 90 million in 2016 with growth of 1.8% and expected to achieve 92 million for 2017. This progress will likely continue. By 2020, global profits for automotive OEMs are expected to rise by almost 50 percent. The new profits will come mainly from growth in emerging markets and, to a lesser extent, the US. Europe, Japan, and South Korea will be stagnant in terms of profit growth. In 2010, total vehicle production in South East Asia is lead by Thailand with total vehicle production of 1,644,513 followed by Indonesia (704,715) and Malaysia (567,715).





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