

## **Introduction of Hydrogen Oxygen mixture at different pressure of Diesel engine**

**Seeking parties interested in licensing and commercializing of technology.**

### **Applications:**

- Diesel engine

### **Technology Description:**

The invention is a novel system for introduction of hydrogen -oxygen mixture to a diesel engine. The invention comprises of an electrolysis cell for supplying hydrogen; a rotometer to measure the flow rate of hydrogen; a flame trap to arrest the flames and a fuel injector with added shims. Hydrogen is passed to the engine and suction process starts, where in the dual system is used i.e., hydrogen oxygen mixture and increase of injection pressure. The fuel injector uses shims to increase injection pressure. The hydrogen oxygen mixture is supplied at a constant rate of 500ml /min.

### **Advantages of the Technology:**

- High injection pressure, decreases O<sub>2</sub>, SO<sub>2</sub> and CO<sub>2</sub>, emissions to minimum.
- Lower NO<sub>x</sub>, emissions and smoke levels are very low.
- The injection pressure increases efficiency, decreasing exhaust emissions.

### **Development Status:**

<b>Application Number:</b>	2688/CHE/2014
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### **Technology Transfer from the institute:**

For more details

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