

BIKE WORKING ON WATE

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ABSTRACT

H₂O otherwise known as hydroxy or Browns Gas is the gas produced from splitting water into hydrogen and oxygen from electrolysis and allowing the gas to stay in a premixed state for use on-demand without the need for storage. In 1918 Charles Frazer, a North American inventor, patented the first water electrolysis machine act as a hydrogen booster for internal combustion engines. Yull Brown, a Bulgarian born Australian inventor patented and attempted to popularize Browns Gas as a cutting gas and fuel additive during the 1970's and 80's. During the 2000's there was a huge influx in Browns Gas devices coming to the mark, with many sensational claims of bringing dramatic reductions in fuel consumption and exhaust emissions in internal combustion engines.

Keywords: Electrolysis, Hydrogen booster, Internal Combustion Engin

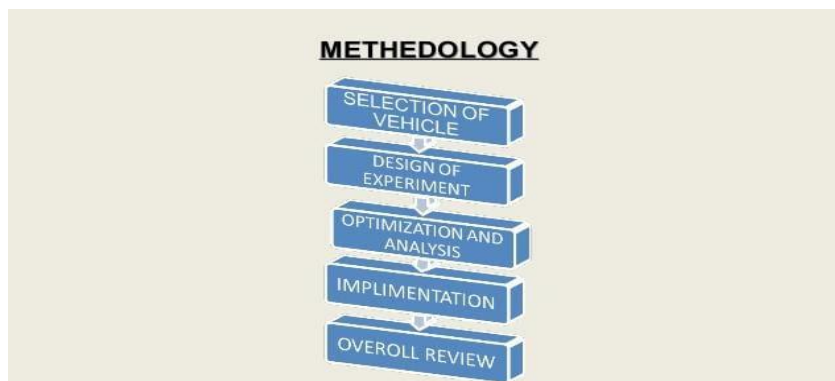
INTRODUCTION

Fossil fuels which fulfill most of the world's energy demand are being depleted rapidly. There combustion products are causing global problems. The cost of the fuel is increasing day by day. Hydrogen begin a very efficient and clean fuel doesn't produce global problems. In 1973 scientists are produce hydrogen fuel economically by splitting water using sunlight as the primary energy source. Hydrogen is 30 % to 50 % more efficient than gasoline. The attraction of using hydrogen as an energy currency is that, if hydrogen is prepared without using fossil fuel inputs, vehicle propulsion would not contribute to carbon dioxide emissions. The drawbacks of hydrogen use are low energy content per unit volume, high tank age weights, the storage, transportation and filling of gaseous or liquid hydrogen in vehicles, the large investment in infrastructure that would be required to fuel vehicles and the inefficiency of production processes. Buses, trains, PHB bicycles, canal boats, cargo bikes, golf carts, motorcycles, wheelchairs, ships, airplanes, submarines, and rockets can already run on hydrogen, in various forms. NASA uses hydrogen to launch Space Shuttles into space. There is even a working toy model car that runs on solar power, using a regenerative fuel cell to store energy in the form of hydrogen and oxygen gas. It can then convert the fuel back into water to release the solar energy. The current land speed record for a hydrogenpowered vehicle is 286.476 mph (461.038 km/h) set by Ohio State University's Buckeye Bullet 2, which achieved a "flying-mile" speed of 280.007 mph (450.628 km/h) at the Bonneville Salt Flats in August 2008. For production-style vehicles, the current record for a hydrogen-powered vehicle is 333.38 km/h (207.2 mph) set by a prototype Ford Fusion Hydrogen 999 Fuel Cell Race Car at Bonneville Salt Flats in Wend over, Utah in August 2007. It was accompanied by a large compressed oxygen tank to increase power. Honda has also created a concept called the FC Sport, which may be able to beat that record if put into production.

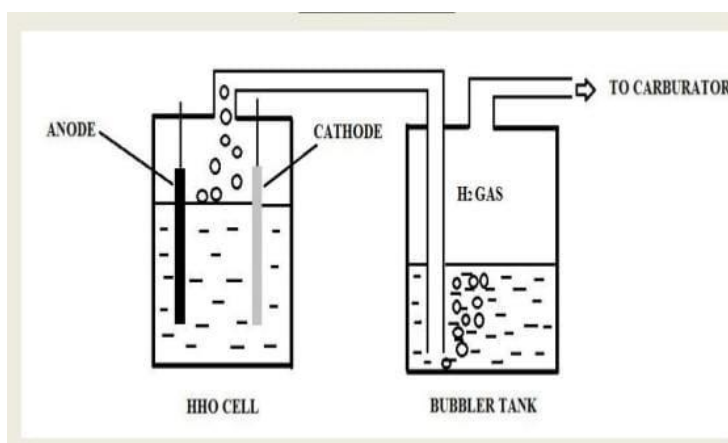
OBJECTIVES

1. To design and manufacture cost effective bike working on water .
2. To design and manufacture bike working on water with hydrogen gas.
3. To design and manufacture bike working on water with electrolysis.
4. To design and manufacture bike working on water with less pollution .
5. To design and manufacture bike working on water with low cost fuel consumption.

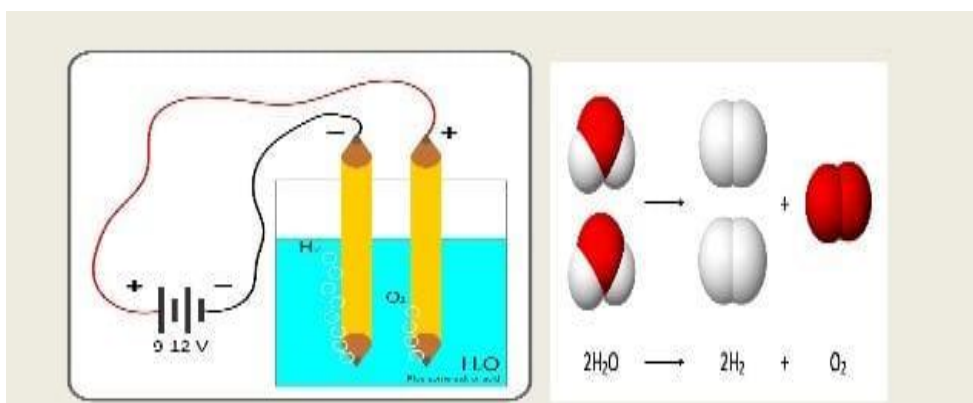
METHODOLOGY



DESIGN CONSIDERATIONS



WORKING PRINCIPLE



Electrolysis of water is the decomposition of water into oxygen and hydrogen gas due to an electric current being passed through the water. Reaction :- $2\text{H}_2\text{O} (l) \rightarrow 2\text{H}_2 (g) + \text{O}_2 (g)$

In this project we can use hydrogen and fuel instead of petrol and diesel we can join the tube direct to the petrol inlet valve after removal of petrol (high current = high energy)IV CONCLUSION

1. Much like hydrogen fuel cell vehicles, hydrogen ICE vehicles present a considerable promise: the chance to improve energy security and reduce carbon dioxide emissions by weaning the light duty vehicle sector off of gasoline. If the policy goal is a longterm shift to hydrogen and the hydrogen infrastructure could be brought online quickly enough, hydrogen ICE vehicles may provide sufficient early term fuel savings and carbon dioxide emission reductions that they may be worth promoting as a transition strategy

REFERENCES

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