SMD Electrolysis

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Switch mode drive electrolysis (SMD), is a system of electrolysis which captures and reuses electrons more than once. In doing so, the efficiency of the electrolysis is greater than 100% of Faraday and under test, efficiencies of 185% have been achieved by more than one replicant. Due to it's simplicity, there is no reason that this can't be used in a commercial installation for the production of synthetic fuels.

This system has first off been designed to produce cheap hydrogen from water, in so much that the final fuel can be used for power generation and loop back to power the total system, ultimatly giving an excess of energy. No laws have been broken, the excess energy comes from chemical change by using low energy systems for the production of the fuel in the first place.

Hydrogen and carbon are the main building blocks of synthetic fuels, albeit in a gaseous or liquid form. The stumbling block in the past has been to create a cheap form of hydrogen, of which nowadays is produced by reforming petrolium or methane, which leaves us rowing the same boat!

Solar and wind power have come a long way in the last decade, but the capital investment is high and returns are not seen for at least a decade more. Fuel cells are very much in the news, but require hydrogen and oxygen as their fuel to generate electric power, a type of reverse electrolysis where they combine to form water and electric power, here we are still paddeling that same boat as hydrogen is required.

SMD Electrolysis is at present a common duct electrolysis where with water, hydrogen and oxygen are produced in the same duct and commonly known as HHO or 2HO. Other gases can be produced using this method and all depends on the electrolyte content used and type of electrodes. As stated before, to produce a hydrocarbon fuel we need a carbon source, this could come from either of the following two not wanted bye products, carbon dioxide “CO2” or carbon monoxide “CO”.

Producing synthetic fuels by this method is green as the carbon footprint is neutral, whatever we emulate into the air “CO2”, we recover to make the fuel in the first place, what more could be carbon neutral? SMD electrolysis is only the first part of the complete system, the secound part is the use of electron beam technolegy in a reactor which I have designed, and is part of another paper.