

Re: H2 burner

Source: <http://sci.tech-archive.net/Archive/sci.energy.hydrogen/2008-06/msg00047.html>

- *From:* Williamknowsbest <William.Mook@xxxxxxxxxx>
 - *Date:* Fri, 13 Jun 2008 19:31:34 -0700 (PDT)
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On Jun 12, 8:59 am, Monkey Clumps <spacebrai...@xxxxxxxxxx> wrote:

On Jun 11, 9:55 am, Williamknowsbest <William.M...@xxxxxxxxxx> wrote:

On Jun 11, 12:02 am, "Spaceman"
<space...@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>
wrote:

"Williamknowsbest" <William.M...@xxxxxxxxxx> wrote in
message

news:ebe75388-e9d6-466f-a157-e0c8a403b07e@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Anyone who visits my web site and fills out
the contact information
may request information including such
photos.
<http://www.usoal.com>

Nice business.
Must be raking in money.
:)

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Re: H2 burner

James M Driscoll Jr
Spaceman

Its highly leveraged at present – so, like Churchill I find I must rely on allies I don't particularly trust or like! lol. But we will prevail, that's for sure.

Hey William, have you seen this paper?

<http://www.hionsolar.com/n-hion96.htm>

Please check out a more reliable source

http://gcep.stanford.edu/pdfs/hydrogen_workshop/Schultz.pdf

They describe a direct-thermal solar to hydrogen process where they achieved 1 to 2% efficiency.

Interesting. Thermal cycles using nuclear or solar sources have demonstrated over 60% efficiency. I have a hybrid cycle using sulfide/sulfate – that is 55% efficient.

The interesting part was the section near the end talking about efficiencies of various methods.

The Stanford paper is a more reliable source of information.

Apparently, the solar-to-hydrogen efficiency obtained using silicon photovoltaic cells and an alkaline electrolyzer is about 6%.

That efficiency has been achieved certainly. Is it the highest efficiency possible? No. As I said, I have a hybrid system that is 55% efficient, which is less than the peak of 60% – however, my system is the lowest cost per watt.

The conversion efficiency for a solar dish Stirling generator combined

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with an alkaline electrolyzer is 19%.

Stanford and General Atomics report 60% efficiency – my system is only 55% efficient, but has the lowest cost per watt of any other system.

The long term solar-to-hydrogen efficiency goal established by the National Renewable Energy Laboratory is 25%.

This was true 20 years ago. That value has been exceeded recently by more than double.

Now you come along and say you can achieve 55% thermodynamic efficiency

Yes. Its a hybrid cycle – involving BOTH eletrolytic process and heat with a sulfide/sulfate process.

with a device that is relatively inexpensive to boot.

Yes. The MEMs PV/Electrolysis 'dot' unit is 0.775 cents per square millimeter (\$547 per 300 mm wafer) and operates at 2500x solar intensity –which means a square meter of collector contains 400 sq mm and adds \$3.10 per square meter to panel system cost.

The lenses consist of 2 sheets of 100 micron thick PET hot press molded into lens shapes – and bonded together in a water bath to encase water – which is the lens medium. The focal point is inside the lens medium. The water also reacts at the dot when illuminated.

A square meter of two PET films each 100 microns thick contains 200 cc of PET massing 350 grams costing 0.15 cents per gram totalling \$0.53 per square meter. Water cost is nil. Total cost is \$3.63 per square meter. At 1,000 watts per square meter solar influx, and 55% efficiency, this generates 550 watts for \$3.63 – which 0.726 cents per peak watt.

This is just the cost of the solar panel. The entire system – runs on average \$0.07 per peak watt – which is expected to drop to \$0.02 per peak watt as volume increases.

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Your
efficiency is more than double the long term goal.

Long term goal 20 years ago has been doubled recently – you are absolutely right. I would suggest you read a more current, and more reliable source of information – such as Stanford and General Atomics and current DOE literature.

This seems like a
huge breakthrough.

It builds on a number of improvements.

As long as you have your designs protected by patents, why don't you publish some results in a peer-reviewed journal?

They already have been published as you can see in my reference.

You say you don't like the allies you have to rely on.

They're the best ones I have – hell, sometimes, I don't even like my kids – that doesn't mean I don't love them and cherish them.

If
this breakthrough is real

Fuck you.

you should be sharing the news of it with
the world.

I have – the world has uniformly ignored it in the West. Not so in Asia.

People and politicians are hungry for this sort of
technical breakthrough.

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Yes. But not the major energy companies – which fund most of the research and direct most of the capital in the world.

If you want allies you need to let people know and convince them that this is real.

What would you suggest? I have done as you suggest.

A usenet newsgroup is probably not the most efficient forum to spread the word.– Hide quoted text –

I am not here to spread the word – I am here for other reasons. One for example is to gauge the level of ignorance among people who THINK they are up to date – people like yourself – before learning this is money meetings.

– Show quoted text –