Remarks on the *Vulnerable World Hypothesis Nick Bostrom*

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ABSTRACT

In the past few decades, there is trend of increasing number of new inventions and technologies being introduced to the world. While conventionally, all new technologies are considered as an indicator of human progress, but as Nick Bostrom argues, actually we may think of new inventions as picking balls from an urn. We can find: white balls (good inventions to benefit of mankind), grey balls (inventions which bring some good but also some harms to mankind), and black balls (inventions which may bring the world population into extinction). In this short review, while we agree with Bostrom's arguments, we don't agree on his recipe to create a global surveillance. We discuss a few examples other than what Bostrom points out.

KEYWORDS: *Vulnerable World Hypothesis, Nick Bostrom, Inventions, World's Future*

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INTRODUCTION

In the past few decades, there is trend of increasing number of new inventions and technologies being introduced to the world. While conventionally, all new technologies are considered as an indicator of human progress, but as Nick Bostrom argues, technology policy should not unquestioningly assume that all technological progress is beneficial, or that complete scientific openness is always best, or that the world has the capacity to manage any potential downside of a technology after it is invented. Instead, actually we may think of new inventions as picking balls from an urn. (Nick, 2019) [1].

He introduces the concept of a vulnerable world: roughly, one in which there is some level of technological development at which civilization almost certainly gets devastated by default, i.e. unless it has exited the 'semi-anarchic default condition'. Several counterfactual historical and speculative future vulnerabilities are analyzed and arranged into a typology. A general ability to *stabilize a vulnerable world* would require greatly amplified capacities for preventive policing and global governance.

Definition of vulnerable world hypothesis
One way of looking at human creativity is as a process of pulling balls out of a giant urn. The balls represent possible ideas, discoveries, technological inventions. Over the course of history, we have extracted a great many balls – mostly white (beneficial) but also various shades of gray (moderately harmful ones and mixed blessings). The cumulative effect on the human condition has so far been overwhelmingly positive, and may be much better still in the future (Bostrom, 2008).

According to Bostrom:
"Let us introduce the hypothesis that the urn of creativity contains at least one black ball. We can

refer to this as the vulnerable world hypothesis (VWH). Intuitively, the hypothesis is that there is some level of technology at which civilization almost certainly gets destroyed unless quite extraordinary and historically unprecedented degrees of preventive policing and/or global governance are implemented.

More precisely:
VWH: If technological development continues then a set of capabilities will at some point be attained that make the devastation of civilization extremely likely, unless civilization sufficiently exits the semianarchic default condition." (Nick, 2019) [1].

Our suggestion: an open public dialogue of tech choices that mankind have. In essence, this paper argues as follows, while we agree with Bostrom on possible pulling out black balls from a giant urn, but *we don't agree* with his suggestion of global surveillance or global governance:

"The vulnerable world hypothesis thus offers a new perspective from which to evaluate the risk-benefit balance of developments towards ubiquitous surveillance or a unipolar world order." (Nick, 2019) [1].

Because we consider that a global surveillance ala Orwell's *1984*, is just another type of black ball, which makes humanity falls into global tyrants. Such an option is unacceptable, because the flourishing of freedom and democracy is a conditio sine qua non for better state of humanity.

Nonetheless, to support our argument, allow us to consider three examples on how progress of mankind in the name of technology advancement should be discussed more openly, not just for the sake of the few global elite's interests.

Three examples
1. Are human minds reducible to Turing machines?
Considering rapid development of technologies, especially computation power, AI, and robotics etc. (see picture), many people ask questions:

will all jobs be replaced by machines? Or in other words: is it true that robots, artificial intelligence and automated machines will replace all human work? In essence, this might be reduced to the question: "can the functioning of the human brain be reducible to a Turing machine?" Because in the language of mathematics, a computer is a Turing machine. Our tentative guess: If it can be shown that the human brain/creative function is not the same as a Turing machine, then it means that there are types of human work that exceeds the capacity of even the most sophisticated robots/computers. This means that it will not be replaced. Of course, this is as long as there are no non-Turing computer systems. That's an optimistic view. The alternative: The pessimistic view is that with many new discoveries, in the long term carbon-based humans will be replaced by silicon-based computers, unless they are mutated into transhumans. This is roughly the central thesis in Yuval Harari's book (*Homo Deus*). Then what if this is compared with the theory of creation that humans are in the image of God? Do humans have the ethical right to mutate into transhumans, in order to keep pace with the development of robotics and artificial intelligence? We will discuss these questions from various perspectives, including aspects of technology, computational philosophy as well as theology/ethics.

In our opinion, the argument of Prof. Roger Penrose has been discussed a lot. But what we want to point out is that Turing machines are not designed to be creative. See also ref. [2-5].

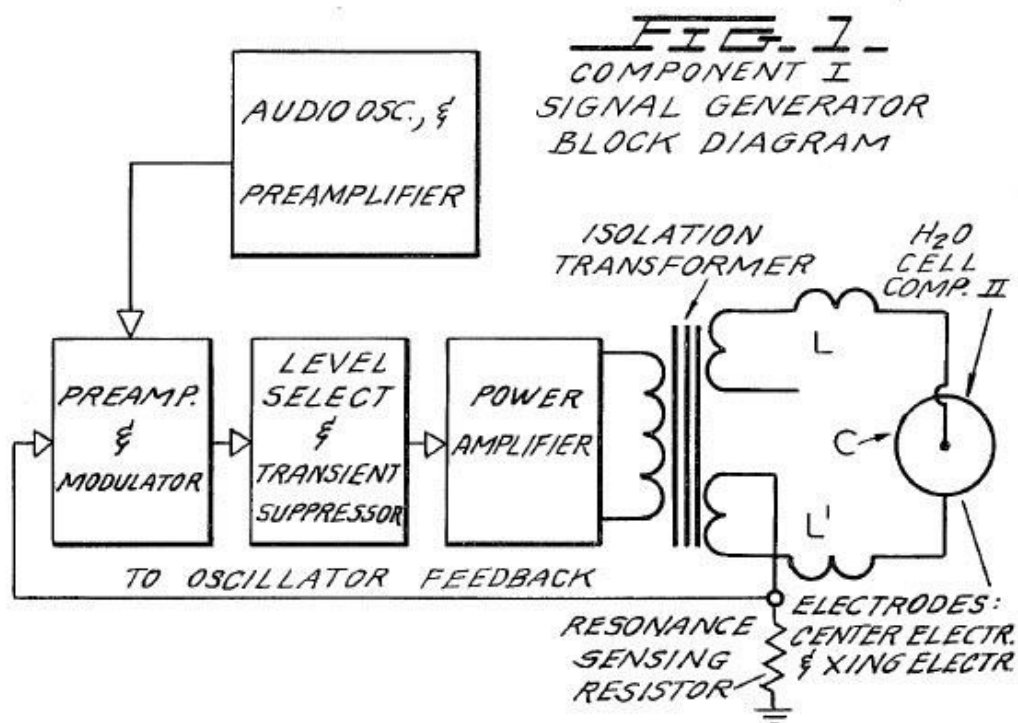#### 2. Potential uses and effectiveness of ecoenzyme to reduce the adverse effects of 5G radiation
As we know, there are several reports such as from Ronald Kostoff (2020) and others stating that 5G radiation on the order of the GHz frequency will have a negative impact on human health and the environment. The problem is, even though we are concerned, it seems difficult to stop the pace of 5G implementation. What might be done is: we can educate people to start using ecoenzymes in living rooms and rooms to reduce the bad effects of 5G. For instance, we planned a simple experiment by installing about 2 liters - 3 liters

of ecoenzyme (for instance) under the beds or in the middle of the room. Then we will measure for example: the radiation level on the first day, the second day until the seventh day. If it is proven that radiation level to decrease significantly, it means that it is because of the use of ecoenzymes. It is hoped that this will provide measurable clues to the effectiveness of the ecoenzyme in counteracting the adverse effects of 5G radiation.

3. Potential use of water as fuel for cars etc, as per inventions by Puharich, Stan Meyer etc.

While most of us may already hear of Stan Meyer's *water-car invention*, what goes unnoticed to general public is that Dr. A. Puharich already obtained patent for invention of water electrolysis just before Meyer went on with his experiments with water as fuel. Given that the method followed by Meyer is very close to Puharich's method, then chance is that Meyer read Puharich's patent file before he started.

The followings are some diagrams of Puharich's invention of water electrolysis method in comparison with Stan Meyer.
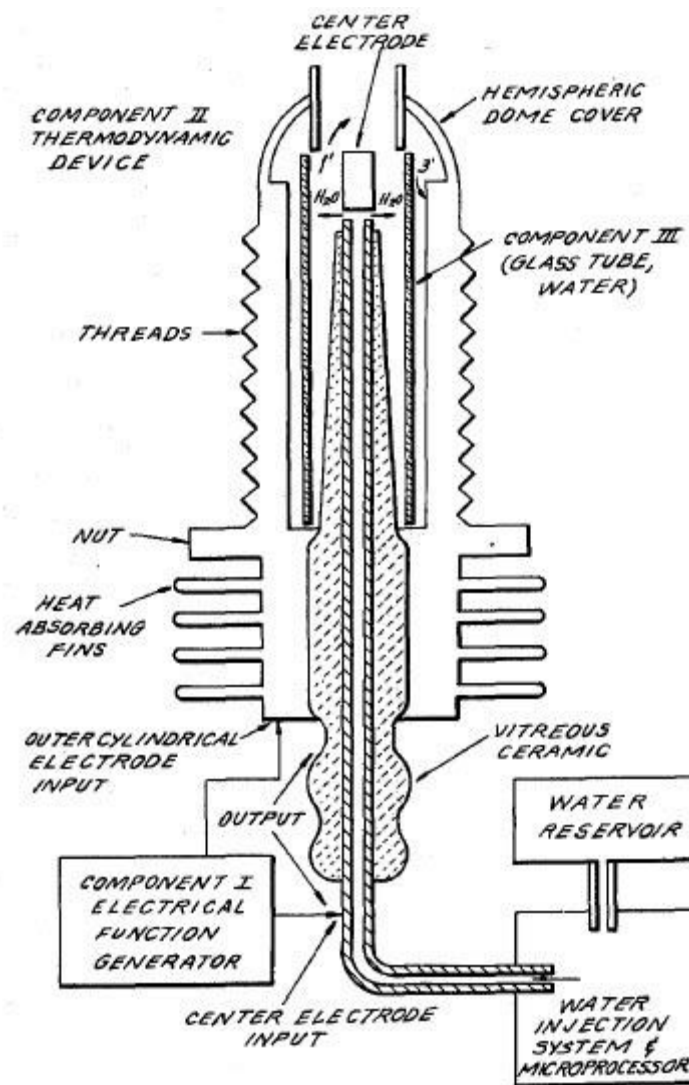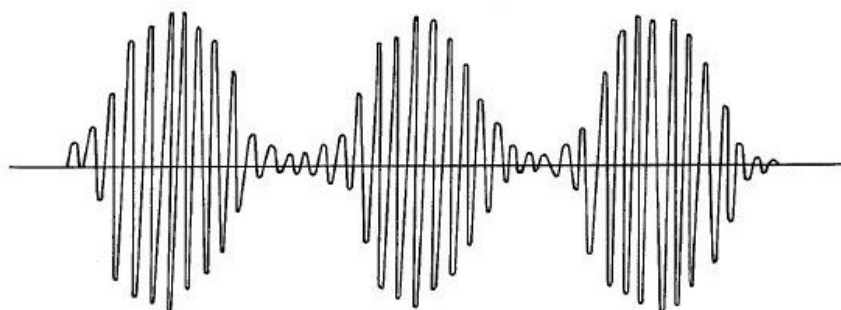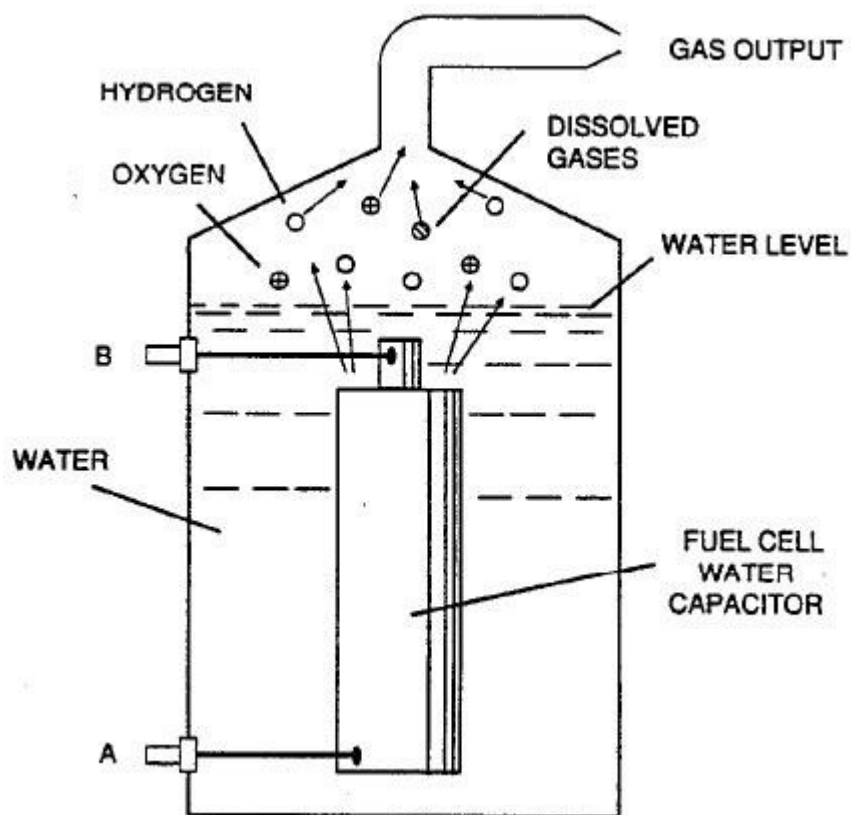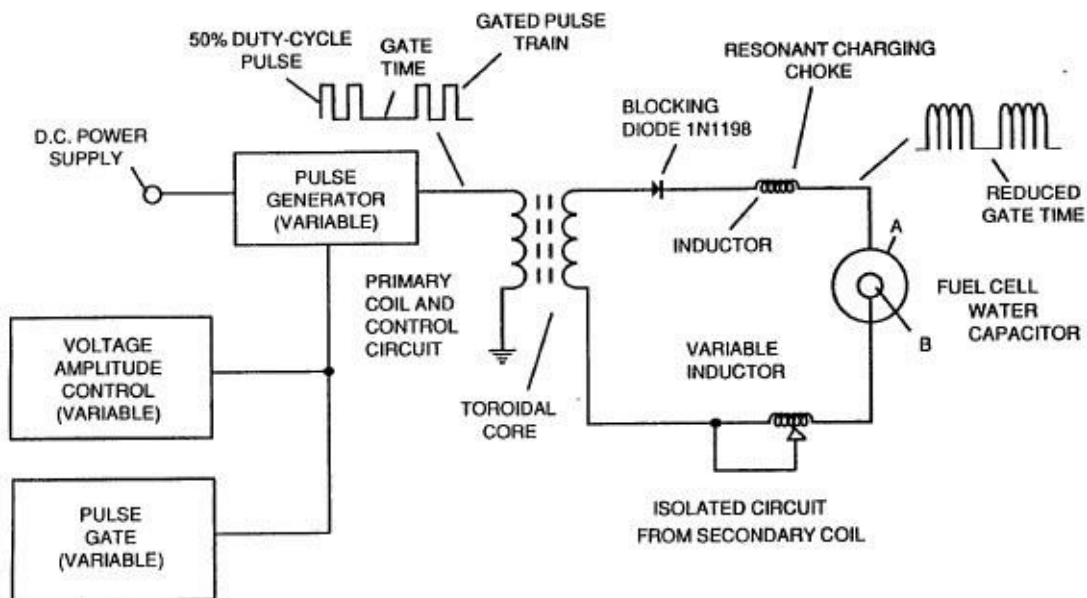
CENTER ELECTRODE

COMPONENT II THERMODYNAMIC DEVICE

HEMISPHERIC DOME COVER

COMPONENT III (GLASS TUBE, WATER)

THREADS

NUT

HEAT ABSORBING FINS

OUTER CYLINDRICAL ELECTRODE INPUT

VITREOUS CERAMIC

OUTPUT

WATER RESERVOIR

COMPONENT I ELECTRICAL FUNCTION GENERATOR

CENTER ELECTRODE INPUT
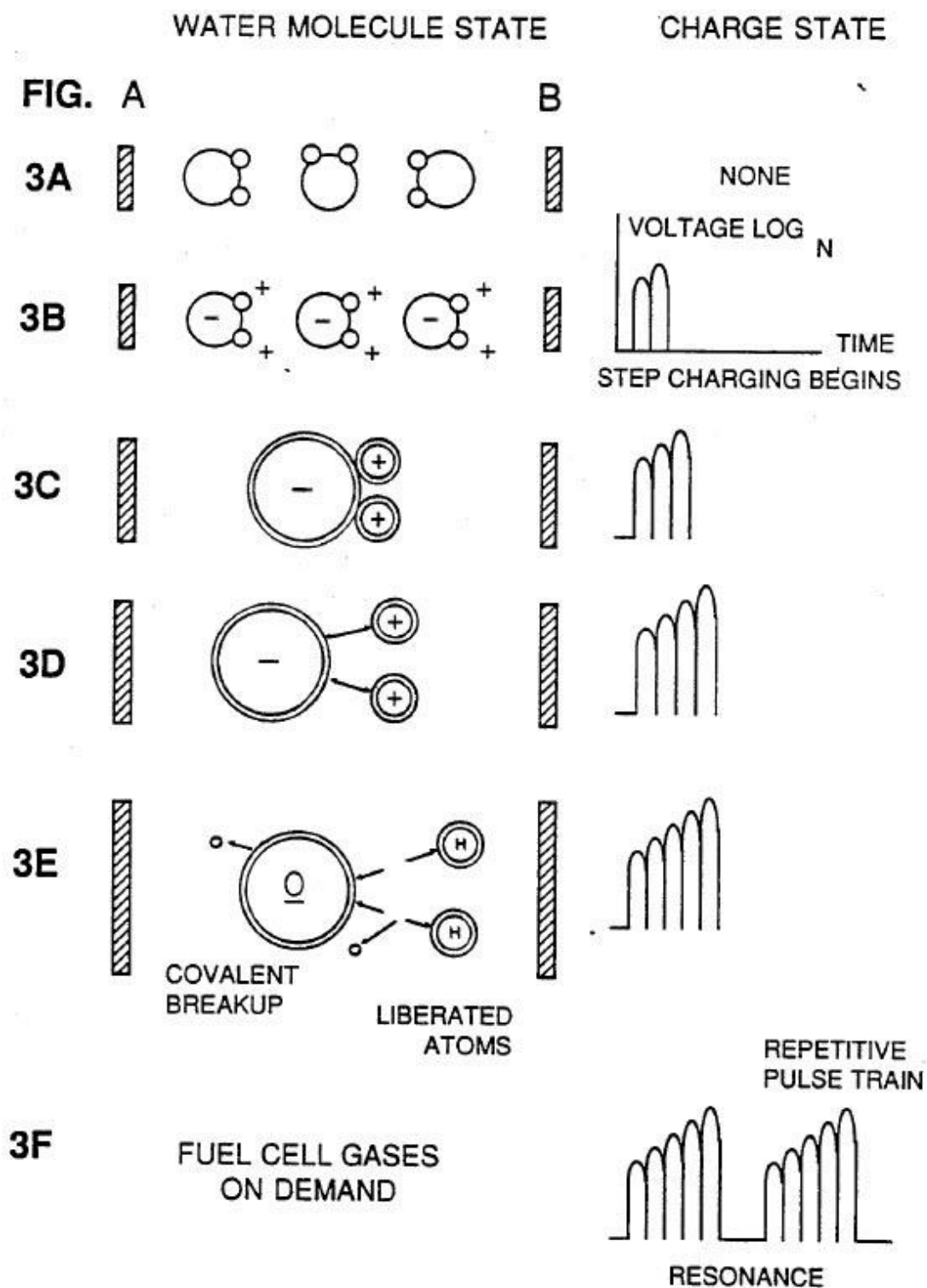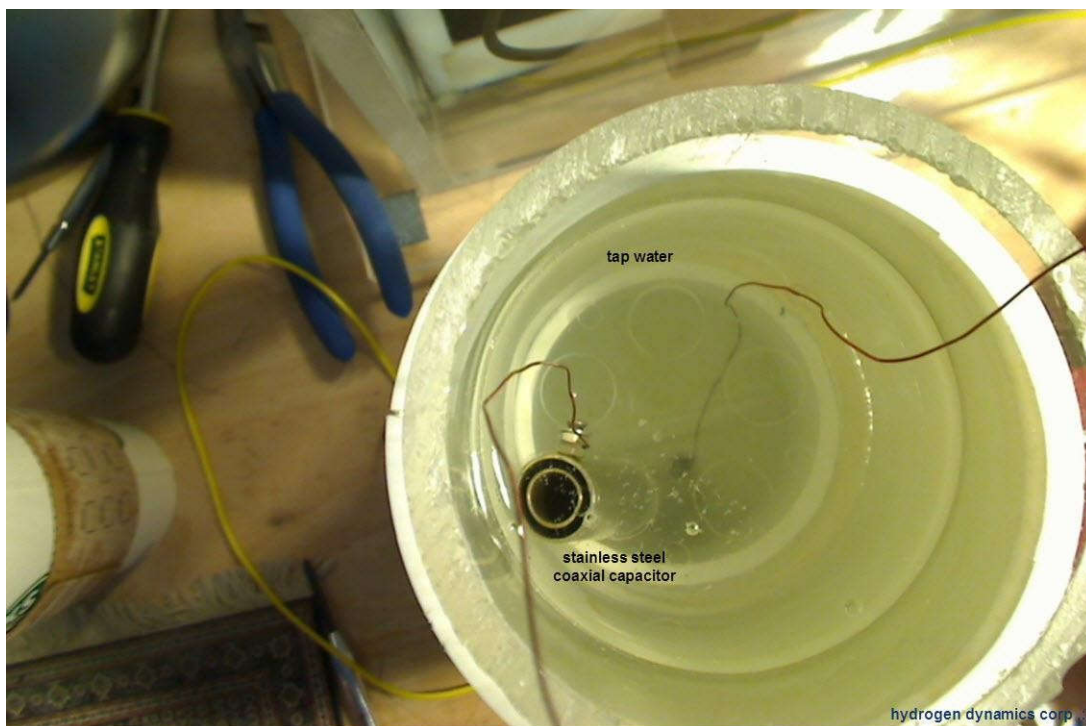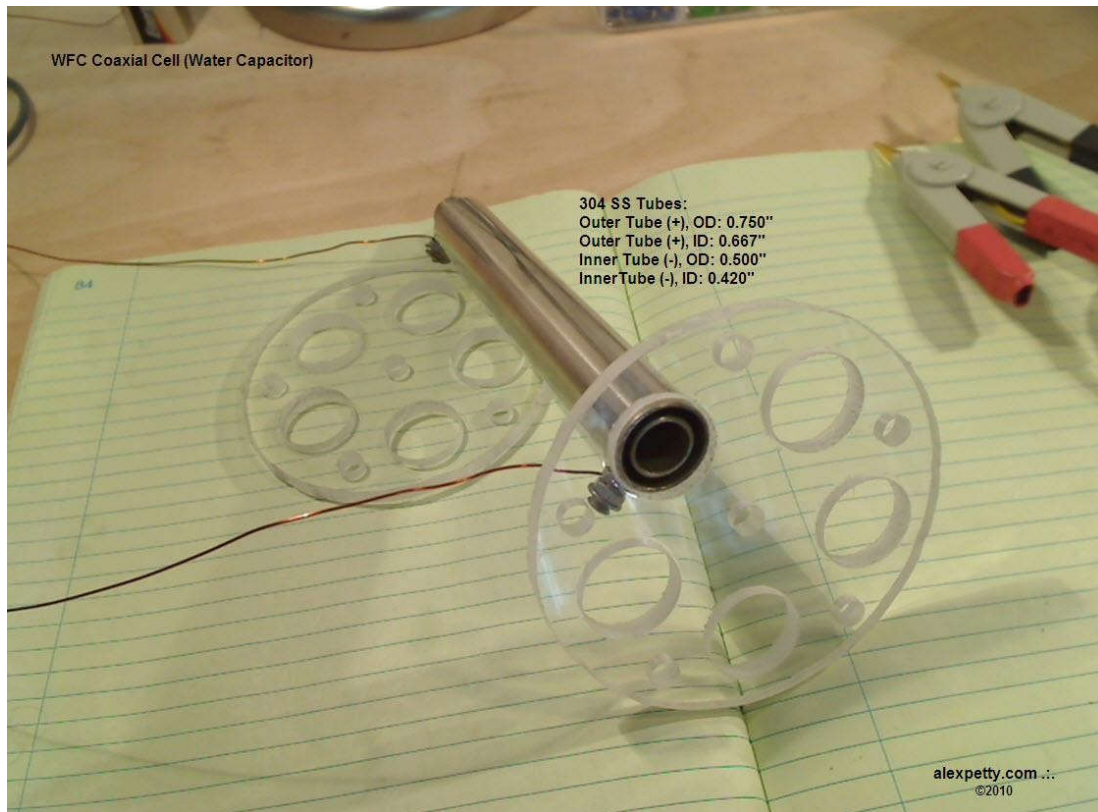
WATER INJECTION SYSTEM & MICROPROCESSOR

FIG.5.

AMPLITUDE MODULATED 90° CARRIER SINE WAVE

Illustrations 1-3: Puharich's cell and wave-form

Illustrations 4-6: Meyer's cells.

Illustrations 7-9: Experimental apparatus (source: www.alexpetty.com)

DISCUSSION AND CONCLUDING REMARKS

The above three examples hopefully give us clear cases when new technologies are not always coming with a good prospect for humanity's better future.

Especially when we consider the possibility of tactical robots, or harmful radiation of 5G network (which have begun to be implemented in several countries). But it is unlikely that we can stop them to progressing, so what we can do is to start open/public dialogue among scientists and general public, on whether we will pursue further with that black ball, or humanity should divert away from such technologies.

In the third example, we see that a clearly reliable invention which can lead to break away to fossil fuel-dependency has in the past been blocked (possibly) by people in the elite circle. Again, an open/public dialogue shall begin to consider which path to future energy is better for humanity.

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