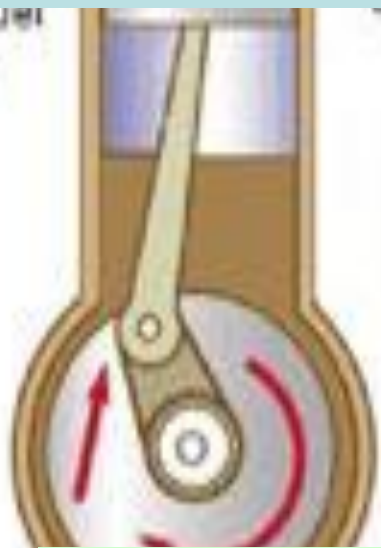


Introduction to the Josef Papp Noble Gas Engine



No exhaust
gases are
expelled



Thomas Valone, PhD

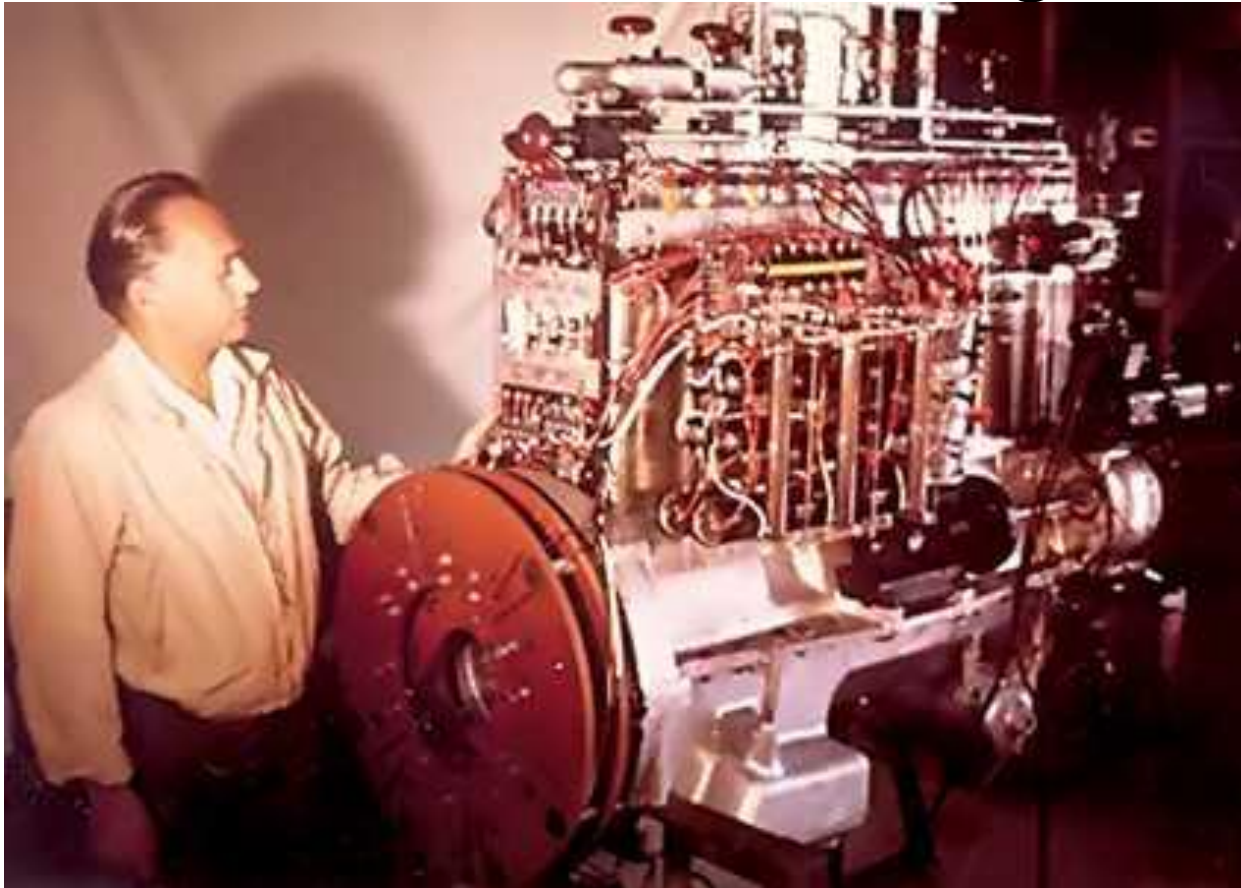
Credit to Russ Gries and Bob Rohner

RWGResearch.com

NPA-COFE6, U of Md, July 11, 2013

Josef Papp

Pulsed Plasma Discharge Engine



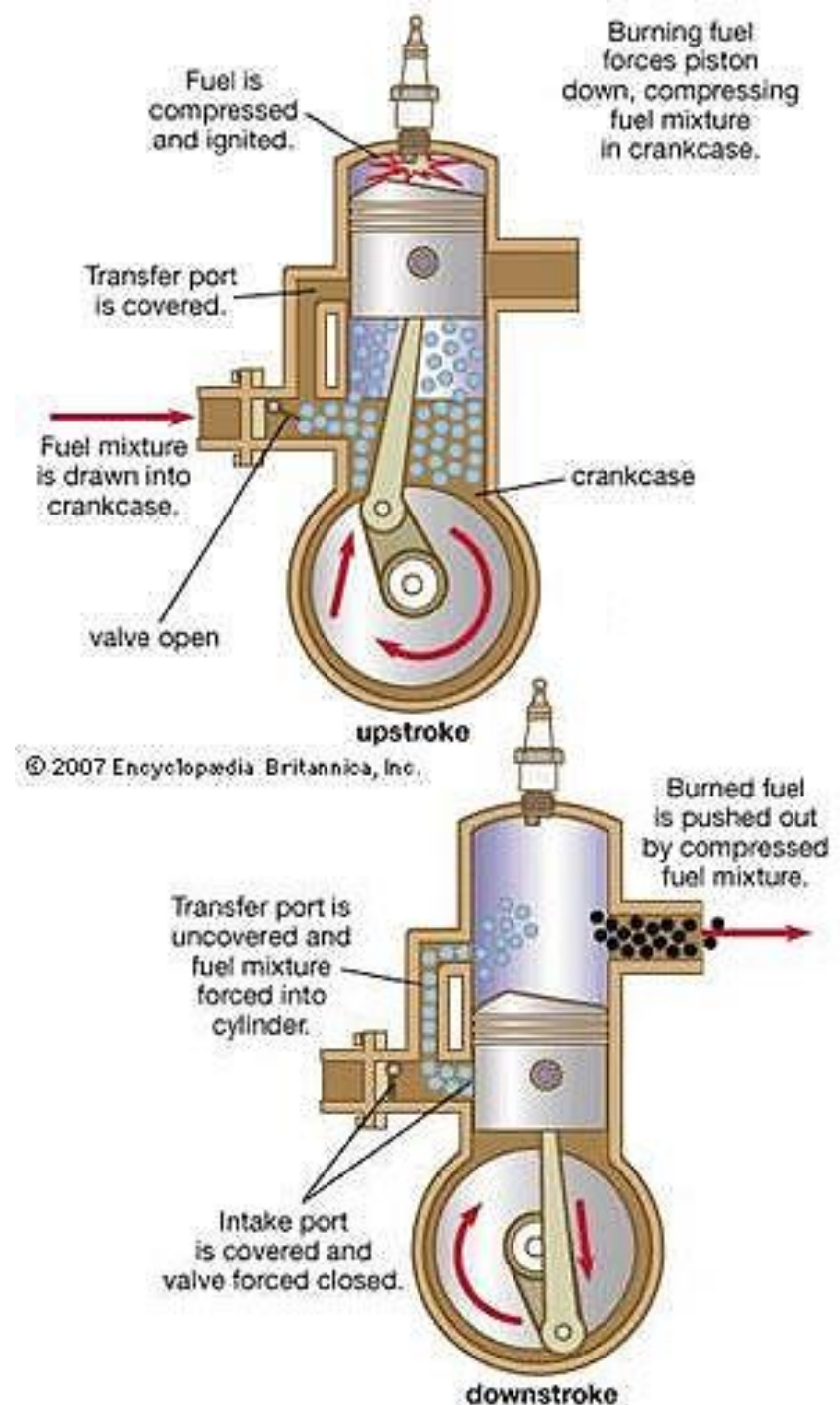
Hungarian immigrant worked on “Fastest Submarine” in 1960s for Canadian government. Built this 100 hp engine fueled with noble gases.

Operating Principles—Papp Engine

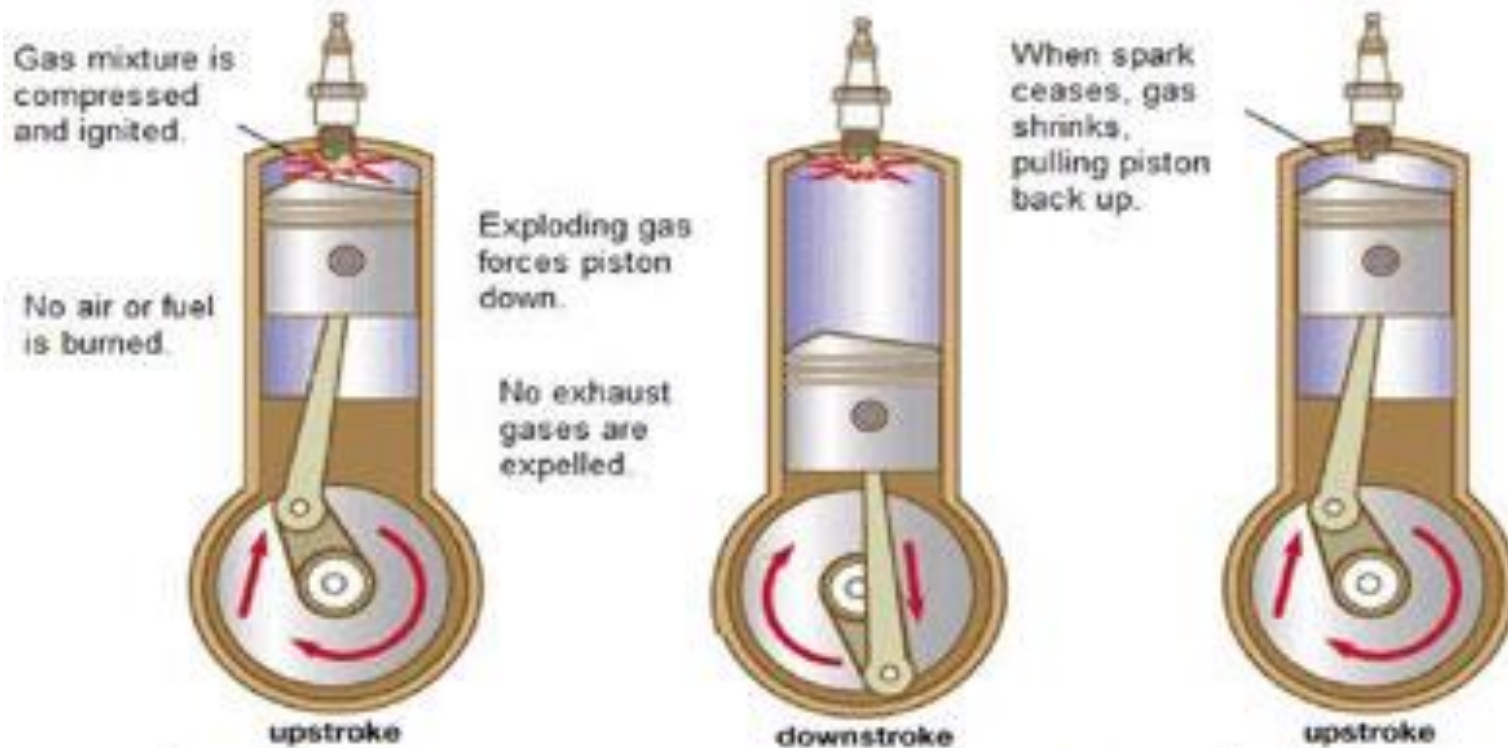
- 1. The Papp Engine operates like a standard internal combustion engine, *except that "NO" fuel is consumed.*
- 2. The cylinders are *sealed*, require no fuel or air, and *produce no exhaust.*
- 3. The cylinders are charged with a mixture of inert gases. These gases, when activated by a proprietary process, and then “ignited” with an electrical spark, explode, driving the piston downward, as in a conventional engine.
- 4. Once the spark is stopped, the gases contract again, and the piston is drawn back up in the cylinder.
- 5. *The gases can be used 1000 hours* before a recharge is needed.

• Credit: Global Genius Trust www.ggtrust.com

Compare to a Typical Two- Stroke Engine



Typical Two-Stroke Internal Combustion Engine



Papp Engine Cycle is much simpler.

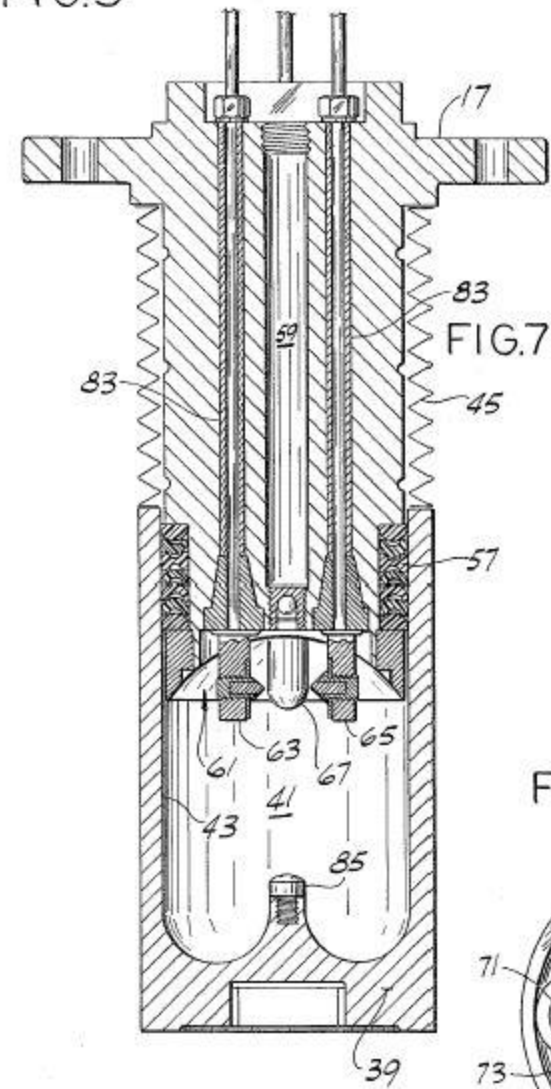
Papp Engine Patent 4,428,193

Patented in 1984, Papp specifies a Teflon coated cylinder seals and two electrodes (63, 65) for ignition and two electrodes (67, 69) for cathode and anode in a quadrant star within each of two cylinders.

An interesting point is the addition of four grams of thorium-232 (alpha emitter) to the cathode container, while the anode container has two grams of rubidium-37 and three grams of phosphorus-15 in mineral oil for ionizing or exciting the gases.

Papp 3,680,431 explains his desire for electron or alpha emitters to trigger the reactions with “argon, krypton, neon, xenon and their isotopes.”

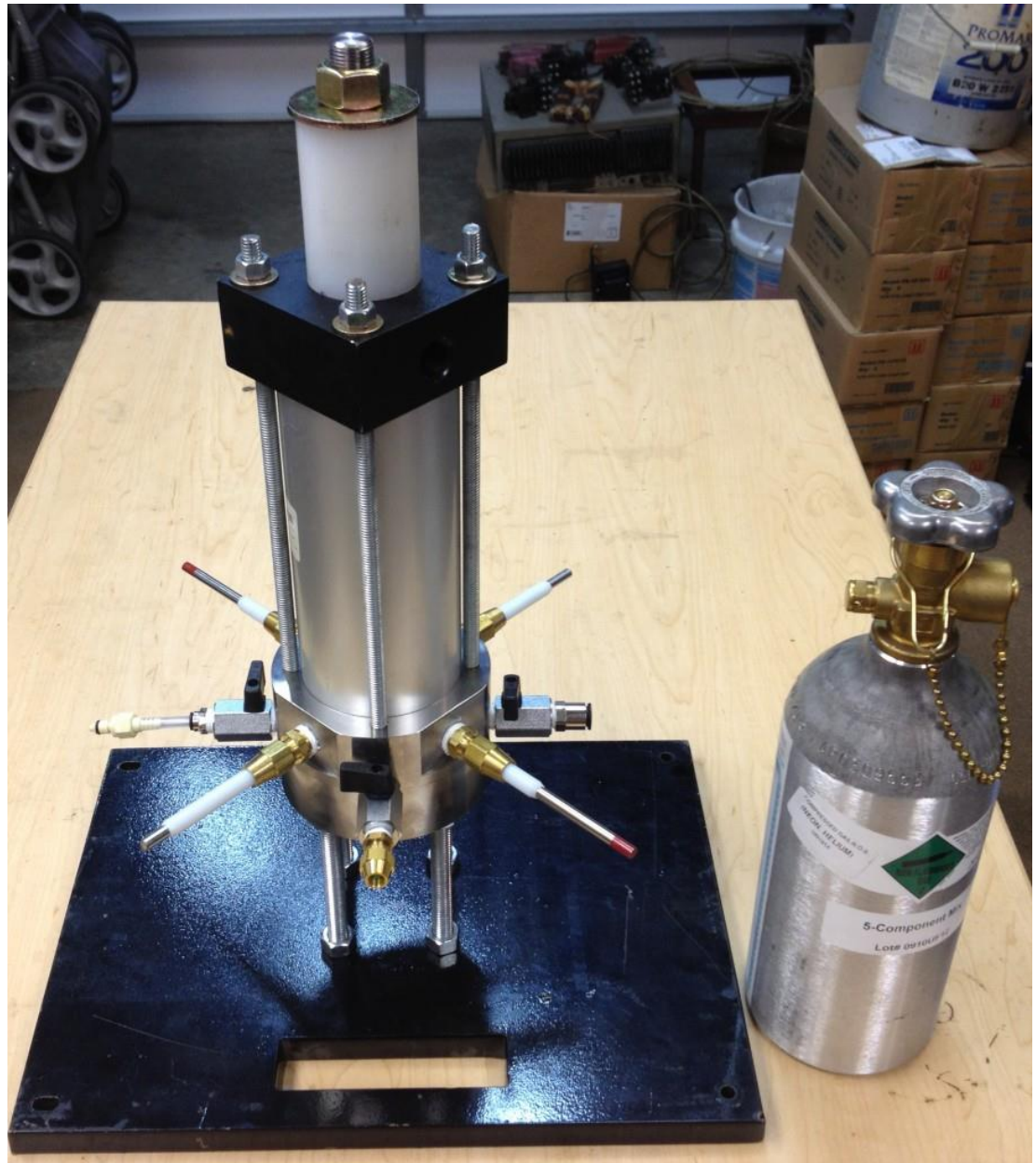
FIG.5



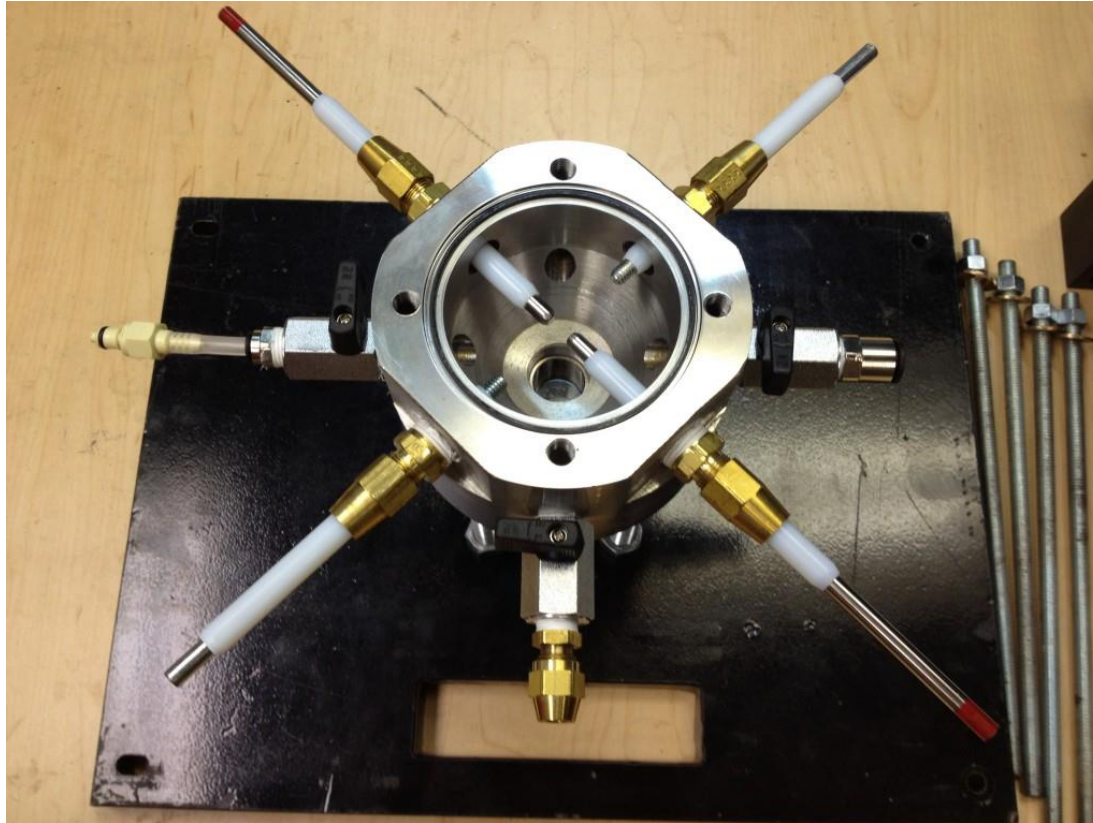
Papp Cylinder Built in 2012

Designed by RWG
to use a mix of five
noble gases with a
40 kV spark

Credit to Bob Rohner for
Advice and Online Videos



Heart of Papp Engine

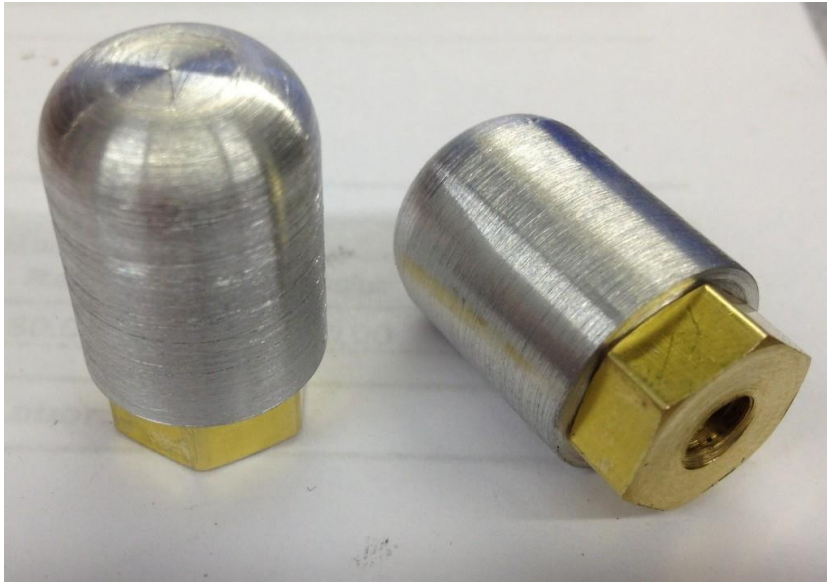


Four terminal spark gap by RWG with a “three-discharge sequence” using two $\frac{1}{4}$ ” titanium rods and two $\frac{1}{4}$ ” tungsten thoriated electrodes

Papp Circuit Operation

- Two cylinders act as “capacitors” to store and exchange high current and high voltage to the mated cylinder “in a crisscross mode with a switching circuit”.
- It appears to be a positive feedback circuit, each cylinder feeding the other’s explosive process, thus causing an excess charge accumulation cascade which has caused two explosions of one of the cylinders, such as when Dr. Richard Feynman insisted on pulling the electrical plug on an operating Papp engine, killing his own assistant in 1968.
- Therefore, the circuit has to be moderated using a “charge dissipation mediation circuit” that conditions and moderates the capacitive pulse according to RWG.

Papp Unique Components



“Buckets” supposed to hold radioactive elements but RF 27.1 MHz is a substitute for their ionizing effect. RWG only has 2% thoriated electrodes.



Specially designed
3.25” OD piston

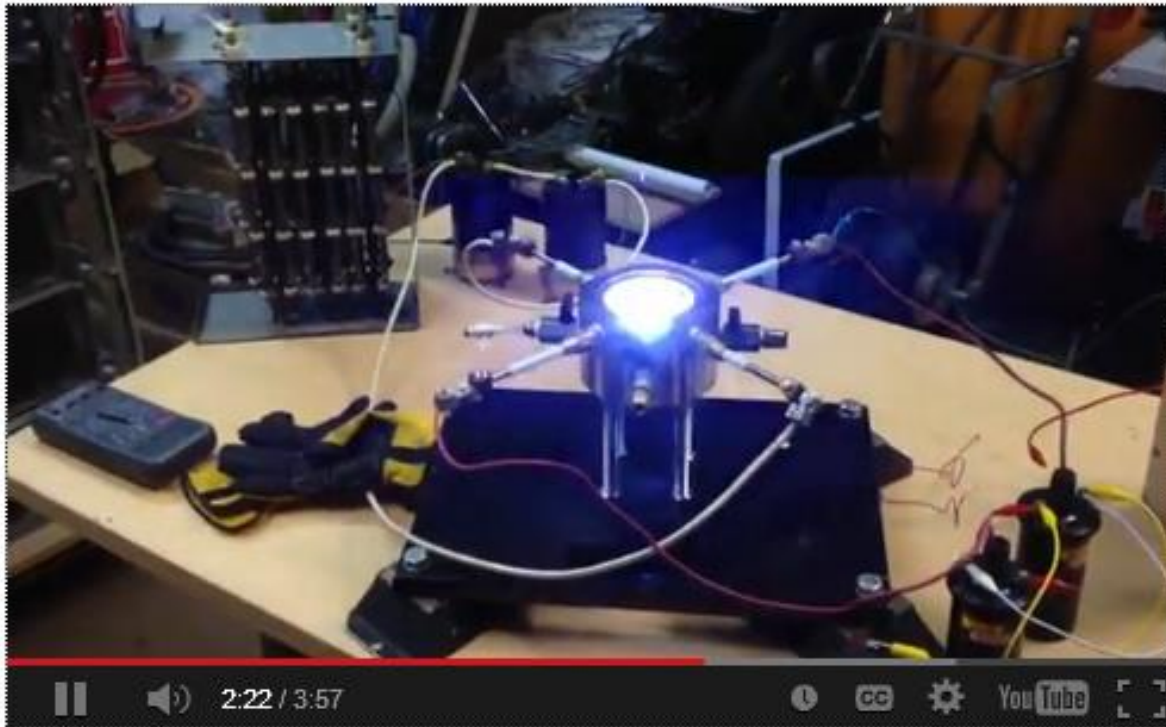
Critical Mixture of Noble Gases

One fuel mixture known in the art is a combination by volume of
35.6% helium,
26.2% neon,
16.9% argon,
12.7% krypton
8.5% xenon.

Disclosed online by RWG

<u>Component</u>	<u>Nominal</u>	<u>Actual</u>	<u>Accuracy</u>	<u>Method</u>
Xenon	8.50%	8.50%	+/- 2% rel	Gravimetric
Neon	26.3%	26.3%	+/- 2% rel	Gravimetric
Krypton	12.5%	12.5%	+/- 2% rel	Gravimetric
Argon	16.9%	16.9%	+/- 2% rel	Gravimetric
Helium	Balance	Balance		

Video of RWG Ignition Circuit



<http://preview.tinyurl.com/RWGresearch>

Four minute video shows a superior ignition performance

Rohner-Roberts Video

(Bob Rohner worked for Papp)



Flash can be seen at bottom



Original Papp engine

http://www.youtube.com/watch?feature=player_embedded&v=_zWJNyoFgJM

Or use → <http://preview.tinyurl.com/Rohner-Roberts>

Since it will not webcast through Adobe Connect, please open the video yourself