

Water Fuel Cell

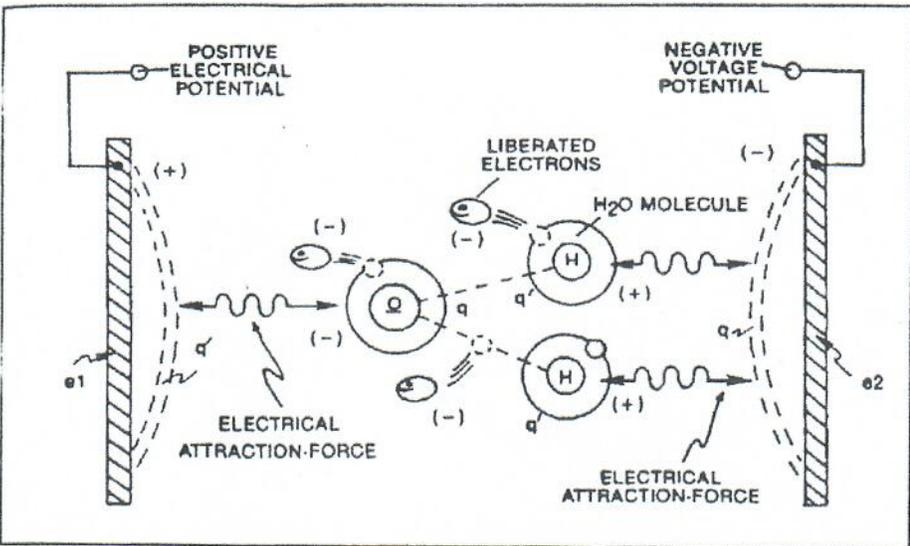


Figure 1-5. Electrical Polarization Process

(pulsing electrical voltage fields of opposite polarity) through the Electrical Polarization Process...imparting or superimposing a second physical-force (particle-impact) unto the electrically charged water bath. Oscillation (back and forth movement) of an electrically charged particle by way of voltage deflection is hereinafter called "Resonant Action," as illustrated in Figure 12.

Attenuating and adjusting the "pulse-voltage-amplitude" with respect to the "pulse voltage frequency," now, produces hydrogen gas on demand while restricting amp flow.

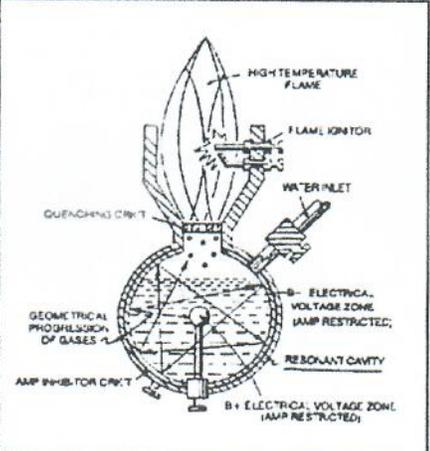


Figure 12: Electrical Voltage Zones (B-/B+) Forming A Resonant-Cavity

LASER INTERACTION

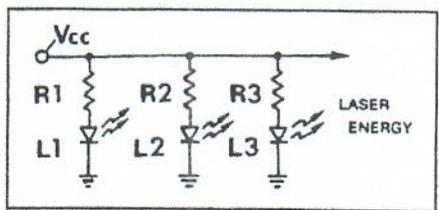


Figure 1-6. Led Cluster-Array

Light-emitting diodes arranged in a Cluster-Array provides and emits a narrow band of visible light energy into the voltage stimulated water bath, as illustrated in Figure 19 as to Figure 18. The absorbed **Laser Energy** (Electromagnetic Energy) causes many atoms to lose electrons while highly energizing the liberated combustible gas ions prior to and during thermal gas-ignition. Laser or light intensity is linear with respect to the forward current through the **LEDs**, and, is determined by

$$R_s = \frac{V_m - V_{led}}{I_{led}}$$

Where

I_{led} is the specified forward current (typically 20ma. per diode); V_{led} is the LED voltage drop (typically 1.7 volts for red emitters).

Ohm's Law for LED circuit in parallel array, and, is given by

$$P_{watts} = V_{cc} I_f$$

Where

I_f is the forward current through LED cluster-Array; V_{cc} is volts applied (typically 5 volts).

Whereby

Laser or light intensity is variable as to duty cycle on/off pulse-frequency from 1Hz to 65 Hz and above is given by

$$L_e = \sqrt{\frac{(ION)2 \times T_1}{T_1 + T_2}}$$

L_e is light intensity in watts; T_1 is current on-time; T_2 is current off-time; and (ION) = RMS value of load current during on-period.

Injecting Laser Energy into the Electrical Polarization Process and controlling the intensity of the light-energy causes the Combustible Gases to reach a higher energy-state (electromagnetically priming the combustible gas ions) which, in turn, accelerates gas production while raising gas-flame temperatures beyond "normal" gas-burning levels.

Injecting "Electromagnetically Primed" and "Electrically Charged" combustible gas ions (from water) into other light-activated Resonant Cavities further promotes gas-yield beyond voltage/laser stimulation, as illustrated in Figure 20D as to Figure 20.

ELECTRON EXTRACTION PROCESS

Exposing the displaced and moving combustible gas atoms (exiting waterbath and passing through **Gas Resonant Cavity (T)**, Figure 20JX as to Figure (20H) to another or separate pulsating laser energy-source (V) at higher voltage levels (E3/E4) causes more electrons to be "pulled away" or "dislodged" from the gas atoms, as illustrated in Figure 1-8 as to Figure 20F. The absorbed Laser Energy "forces" or "deflects" the electrons away from the gas atom nucleus during voltage-pulse Off-Time. The recurring positive voltage-pulse (k) attracts (qq') the liberated negative elec-