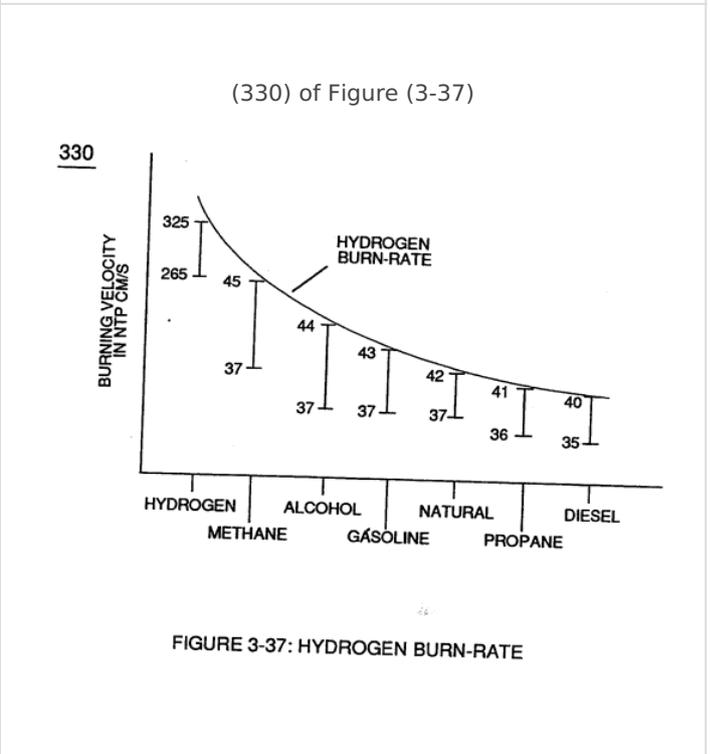
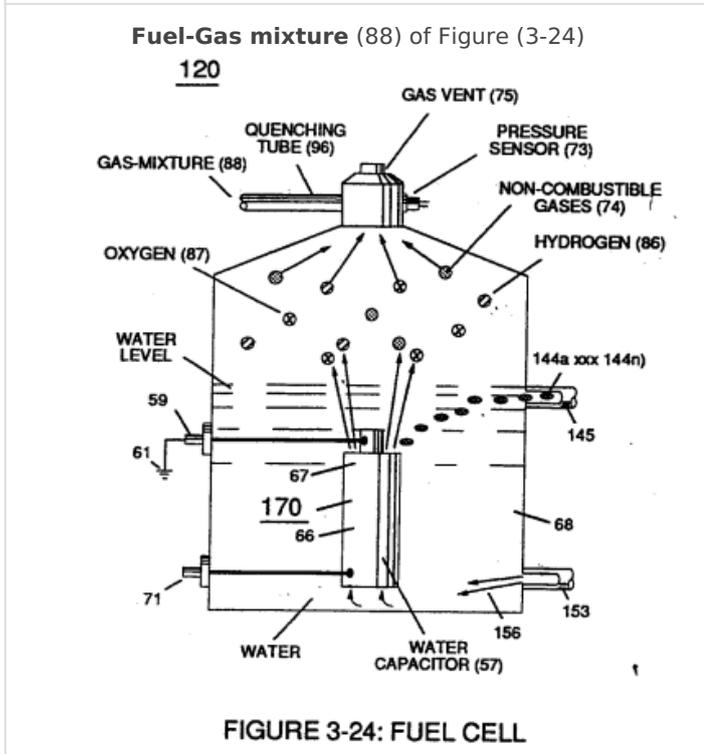
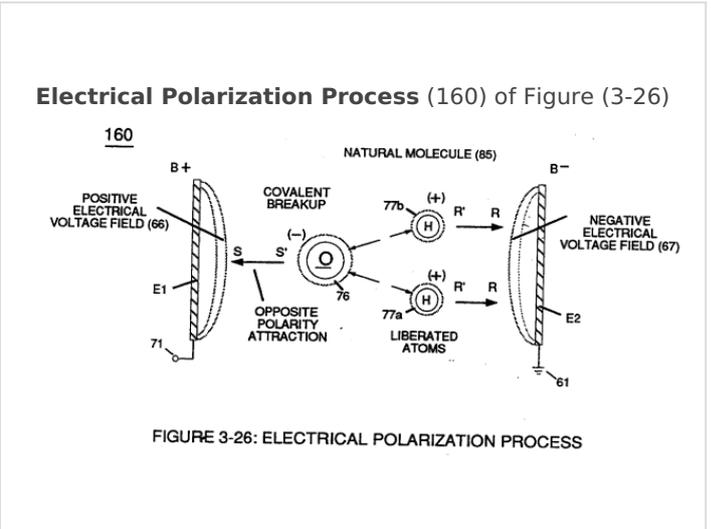
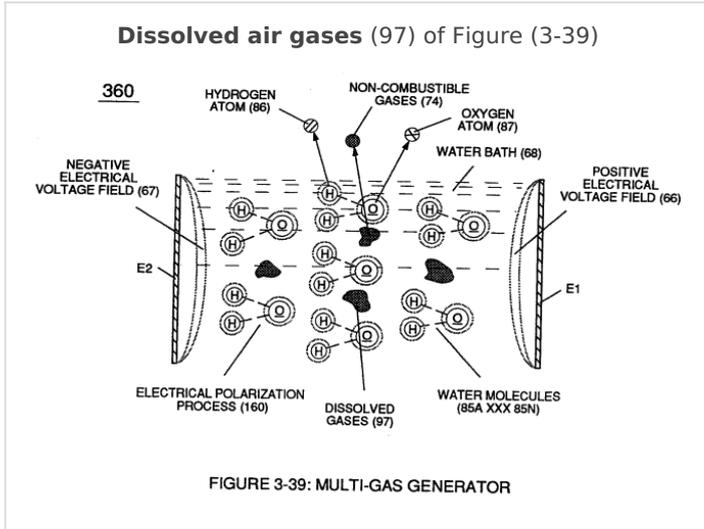


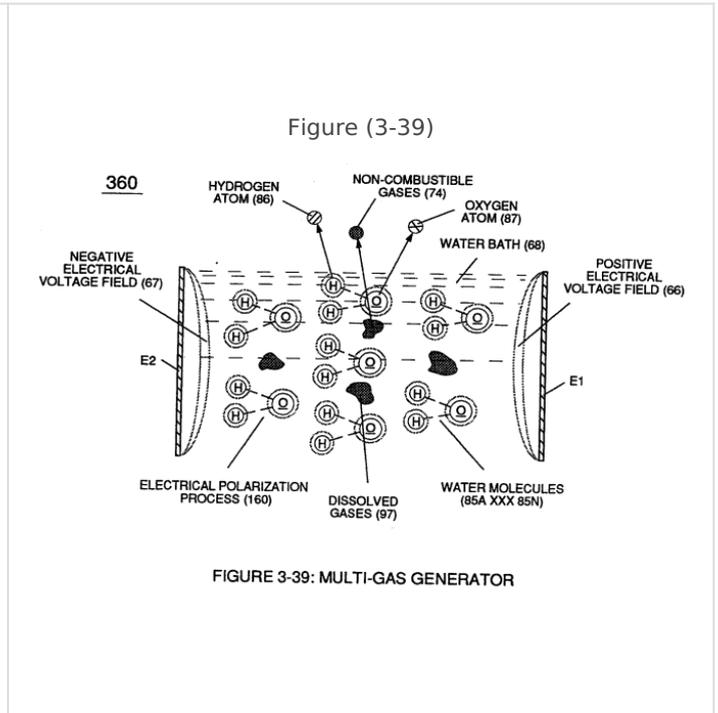
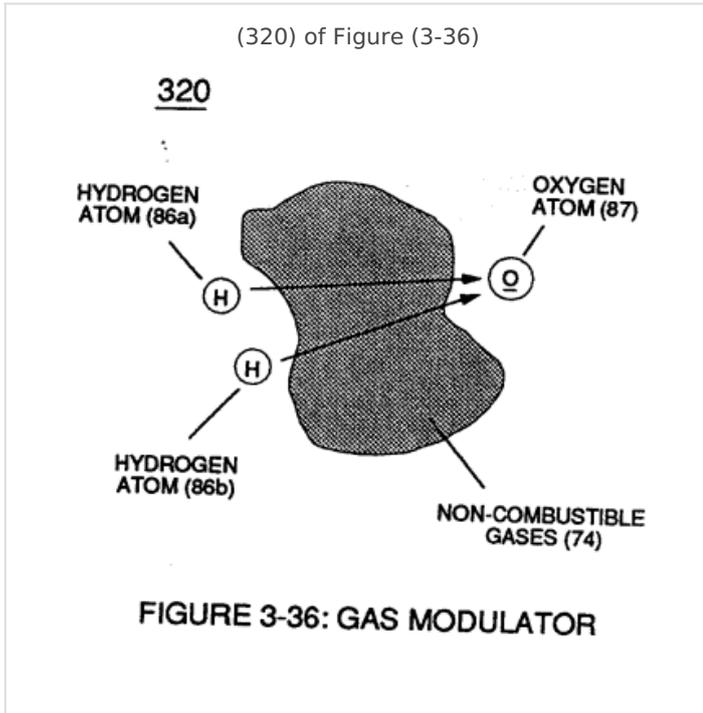
# Gas Modulator Process

**Dissolved air gases** (97) of Figure (3-39) being uniformly released from **water bath** (85) via the **Electrical Polarization Process** (160) of Figure (3-26) is automatically intermixed with released **hydrogen** (86) and **oxygen** (87) gas atoms (*also derived from water bath 85*) to form **Fuel-Gas mixture** (88) of Figure (3-24) having a hydrogen gas burn-rate of approximately 47 centimeters per seconds (cm/sec) in ambient air, as illustrated in (330) of Figure (3-37).

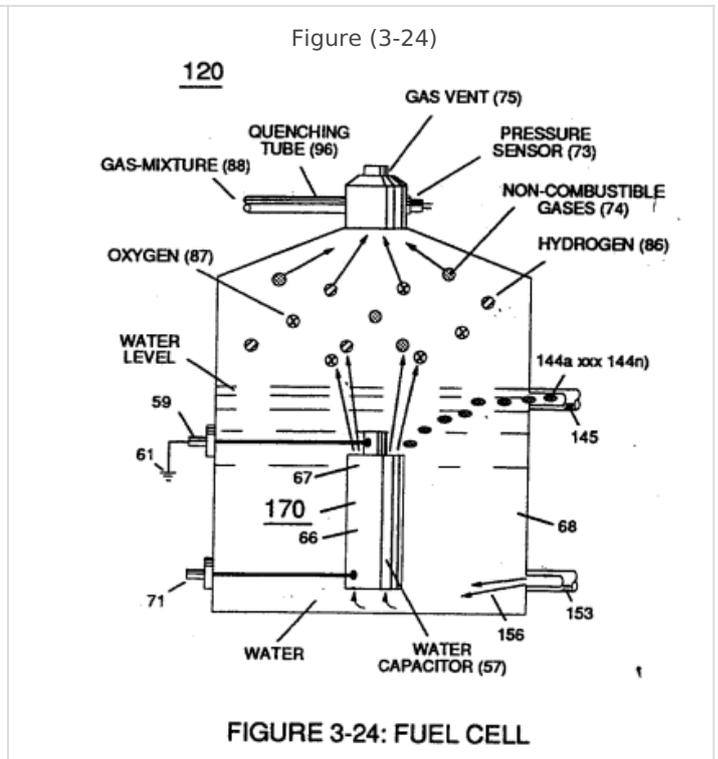
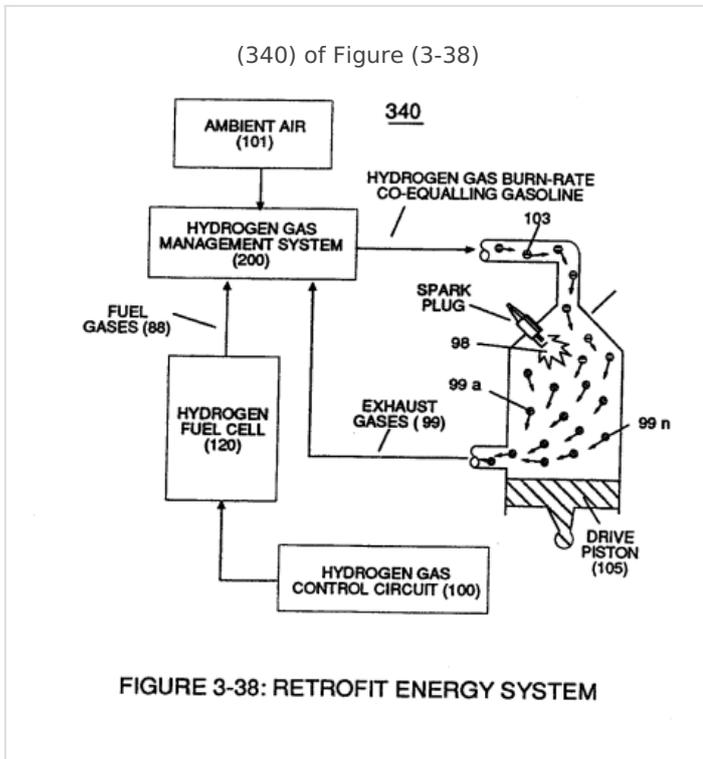


Volatility of hydrogen fuel-mixture or **Fuel-Gas** (88) is reduced from 325 cm/sec. to approximately 47 cm/sec. since ambient air gases (97) (dissolved air gases in water) is primarily composed of non-combustible gases (74) (such as nitrogen, argon, and other non-burnable gases) of Figure (3-

39) which acts and performs as a "Gas Modulator" during thermal gas ignition (98), as illustrated in (320) of Figure (3-36).



The **non-combustible gases** (74) physically retards and slows down the speed by which **oxygen atom** (87) unites with (*covalent link up*) **hydrogen atoms** (86a / 86b) to bring on and support gas ignition process (gas combustion process) (98), as further illustrated in (340) of Figure (3-38).



**Water bath** (68) of Figure (3-39) as to Figure (3-24), now, becomes and functions as a "**Gas Mixing Regulator**" since the highest possible **thermal explosive energy yield** (gntnt)

obtainable from hydrogen during "normal" **gas ignition** (98) is the exact composition of water where **two hydrogen atoms** (86a / 86b) unite with **oxygen atom** (87).

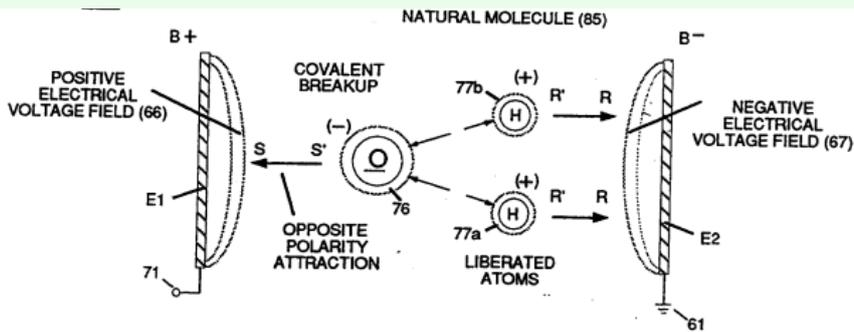


FIGURE 3-26: ELECTRICAL POLARIZATION PROCESS

Inherently, the utilization of the

**Electrical Polarization Process** (160) of Figure (3-26) in conjunction with the use of chemically inert stainless steel (T304 material) **voltage zones** (E1 / E2) submerged in **natural water** (68) sustains and maintains **gas mixing ratio** (88) by simply preventing the consumption of both the **hydrogen** (86) and **oxygen** (87) gases by way of not encouraging "electrical heat" or "chemical interaction" associated with amp consumption.

Remember, **Electrical Polarization Process** (160) is a physical process which uses **opposite electrical polarity attraction force** ( $qq'$ ) to perform work by disrupting and switching off the covalent bond between the unlike charged water molecule atoms.

To further reduce **hydrogen burn-rate** (330) of Figure (3-37) to other fossil-fuel burning levels, additional **non-combustible gases** (99a xxx 99n) (*supplied via ambient air 101*) is added to **gas-mixture** (88) by way of **gas ignition process** (98) occurring inside **internal combustion engine** (55) **piston cylinder** (102), as illustrated in (340) of Figure (3-38).

hydrogen burn-rate (330) of Figure (3-37)

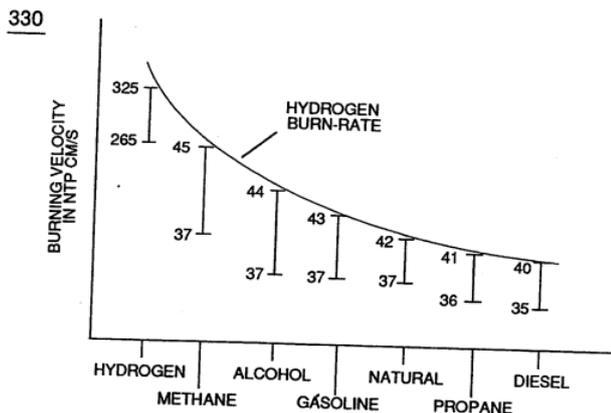


FIGURE 3-37: HYDROGEN BURN-RATE

(340) of Figure (3-38)

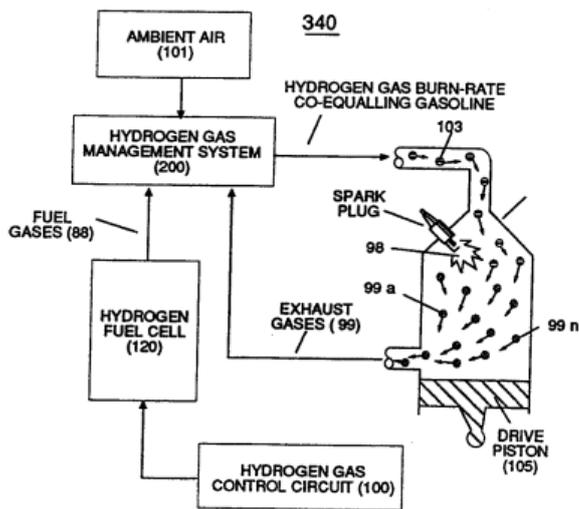


FIGURE 3-38: RETROFIT ENERGY SYSTEM

As **fuel-gas** (88) enters into **engine cylinder** (102) and is exposed to **thermal gas ignition process** (98), the incoming and moving **fuel-gases** (88) are converted into **non-combustible gases** (99) (*gases passing through the gas combustion process*) since both the **hydrogen** (86) and **oxygen** (87) gas atoms are being consumed during the formation of **superheated water mist** (103)

... releasing **thermal explosive energy** (gtnt) which, in turns, causes piston-action to expel the newly formed **non-combustible exhaust gases** (99) for recycling.

The liberated and cooled **exhaust gases** (99) is, now, directed to **hydrogen injector system** (200) which systematically meter-mixes and superimposes a predetermined amount of **non-burnable gases** (99) of Figure (3-38) onto incoming **ambient air gases** (101) which is being directed to **engine cylinder** (102) to sustain and maintain both the "**Gas Modulator Process**" (320) of Figure (3-36) and the "**Gas Ignition Process**" (98), simultaneously.

"Gas Modulator Process" (320) of Figure (3-36)

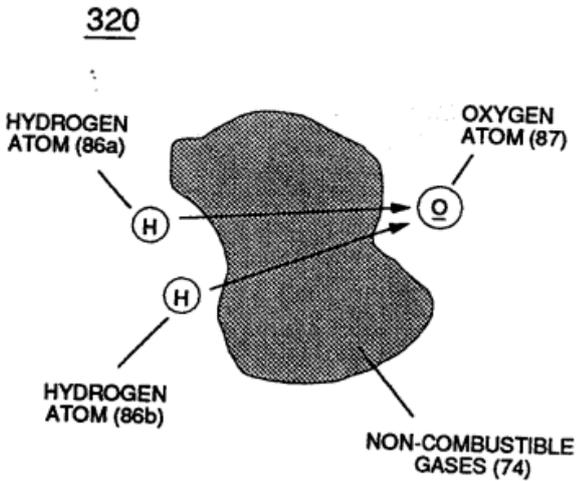


FIGURE 3-36: GAS MODULATOR

(340) of Figure (3-38)

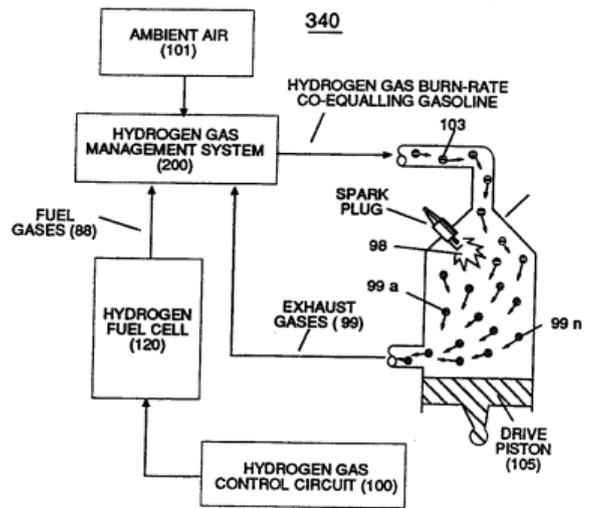


FIGURE 3-38: RETROFIT ENERGY SYSTEM

In essence, then, **ambient air gases** (101) becomes an endless supply of **non-combustible gases** (99A xxx 99n) during the gas ignition process.

The resultant and on-going **Gas Modulator Process** (320) of Figure (3-36), now, allows **hydrogen fuel cell** (120) of Figure (3-24) to be retrofitted to any conventional **internal combustion engine** (55) of Figure (3-1) without engine change by simply metering the proper amount of **exhaust gases** (99a xxx 99n) to comply with and co-equaling any type or different fossil-fuel burning levels, as further illustrated in (330) of Figure (3-37).

Fuel-Gas mixture (88) of Figure (3-24)

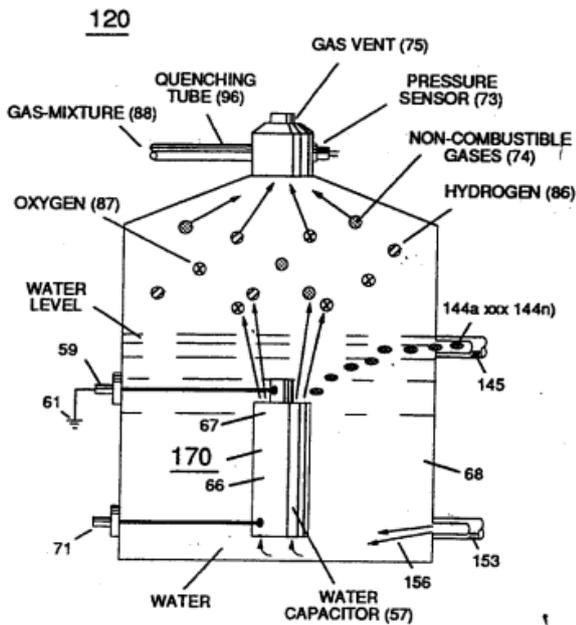


FIGURE 3-24: FUEL CELL

(330) of Figure (3-37)

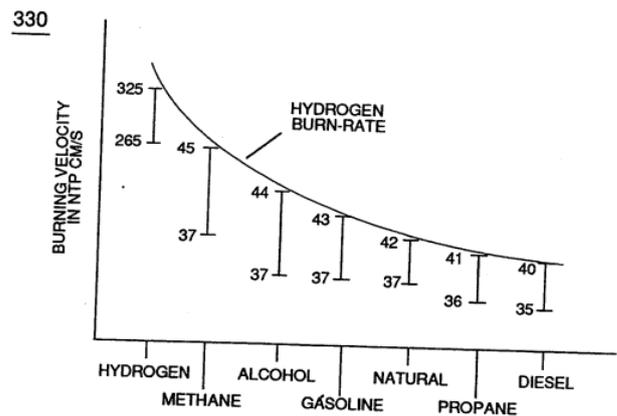


FIGURE 3-37: HYDROGEN BURN-RATE

In terms of operability and performance, **gas modulator process** (320) continues to allow a conventional **internal combustion engine** (55) to run on ambient air gases; while, **fuel-gas** (88) not only cuts back and reduces oxygen extraction from ambient air (101) but produces an environmentally safe exhaust gas since **non-combustible gases** (99/74) from both **ambient air gases** (101) and **Fuel-Gas** (88) are thermally inert to **gas ignition process** (98).

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