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THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A combustion system comprising:
a hydrogen source;
a gas mixing chamber connected by suitable fluid flow passage means respectively to said hydrogen source and a further gas supply means via control valve means regulating the gas mixture ratio; and
means for mixing air with mixed gases from said mixing chamber and supplying the same to a gas burner wherein the gas/air mixture is ignited by suitable igniting means.
2. The combustion system of Claim 1 including valve means for controlling the amount of air mixed with said mixed gases.
3. The combustion system of Claim 1 wherein said means to ignite said gas/air mixture is a combustion chamber having an igniter.
4. The combustion system of Claim 3 further including a drive mechanism associated with said combustion chamber and wherein said drive mechanism is responsive to said air/gas burning in said combustion chamber.
5. The combustion system of Claim 3 wherein said combustion chamber further comprises outlet means for expelling the exhaust gases therefrom, and means for returning a portion of said exhaust gases to said mixing chamber.

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6. The combustion system of Claim 4 wherein said hydrogen source is a hydrogen generator.

7. The combustion system of Claims 3, 4 or 5 wherein said hydrogen source comprises a hydrogen/oxygen generator which includes:
 - a housing having a water reservoir for retaining natural water therein and a gas collection chamber for maintaining a preset volume of gas under pressure; and
 - a pair of similar non-oxidizing plates, positioned in said water reservoir, adapted to be connected to a direct current voltage source to disassociate the hydrogen atoms and oxygen atoms from said water molecules and thereby provide a gas.

8. The combustion system of Claim 1 wherein said hydrogen source is a hydrogen reservoir.

9. The combustion system of Claim 3, further including a pilot light ignition means and means for directing a portion of said gas/air mixture thereto.

10. The combustion system of Claim 3 wherein said means to ignite said mixed gases comprises an electrical ignition means and a source of electrical energy.

11. The combustion system of Claim 3 wherein said combustion chamber comprises a mixed gas/air dispersing chamber having a series of ports therein.

12. The combustion system of Claim 4 wherein said drive mechanism comprises an internal combustion engine.

13. The combustion system of Claim 4 further comprising a source of electrical energy connected to said igniter in a closed loop mechanical arrangement with said drive mechanism.

14. The combustion system of Claim 5 wherein said means for returning a portion of said exhaust gases to said mixing means further includes cooling means for cooling said exhaust gases.

15. The combustion system of Claim 5 wherein said means for returning a portion of said exhaust gases to said mixing means further includes a spark arrestor for preventing uncontrolled combustion.

16. The combustion system of Claim 6 wherein said hydrogen generator includes a source of electrical potential, and wherein said source of electrical potential is connected in a closed loop mechanical arrangement with said drive mechanism.

17. A fuel supply and control system for a vehicle having a combustion engine that includes a combustion chamber and means for igniting the combustible fuel therein comprising:

- (a) means for disassociating hydrogen atoms and oxygen atoms from water molecules to thereby provide a combustible gas;
- (b) a gas mixing chamber;
- (c) means directing a flow of said combustible gas and a portion of the products of combustion from said combustion chamber into said gas mixing chamber;
- (d) means regulating the mixture ratio of said products of combustion and combustible gas to provide a first gas mixture;
- (e) means for proportionately mixing said first gas mixture and air providing a second gas mixture; and
- (f) means for controllably directing said second gas mixture into said combustion chamber for ignition therein by suitable igniting means.

18. A fuel supply and control system as defined in Claim 17 wherein said means for disassociating said hydrogen and oxygen atoms comprises a water reservoir with pairs of similar spaced apart non-oxidizing plates therein selectively connected to a direct current voltage source and a gas collection chamber.

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19. A fuel supply and control system as defined in Claims 17 or 18 wherein said portion of exhaust gases pass through a cooler upstream of said gas mixing chamber.

20. A fuel supply and control system as defined in Claims 17 or 18 wherein said mixture regulating means comprises first and second control valves controlling respectively the flow of said combustible gas and said portion of the products of combustion to said gas mixing chamber.

21. A fuel supply and control system as defined in Claim 18 wherein water is controllably recirculated through said water reservoir.

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