

What is claimed is:

1. A gas generator comprising:

an electrolysis device electrolyzing electrolyzed water to generate a gas comprising hydrogen; and

5 a condense filter coupled to the electrolysis device and for filtering and condensing impurities of the gas comprising hydrogen;

wherein the condense filter has a gas inlet via and a gas outlet via, the gas inlet via is coupled to the electrolysis device for receiving the gas comprising hydrogen, and the gas outlet via is configured to output the gas comprising

10 hydrogen.
2. The gas generator of claim 1, wherein the condense filter comprises a plurality of condense plates, each condense plate has a channel, and the channel of the condense plate is coupled with the adjacent channel of the condense plate to form a circulating channel for the gas comprising hydrogen to flow through,
- 15 wherein the circulating channel is coupled between the gas inlet via and the gas outlet via.
3. The gas generator of claim 2, wherein an active carbon fiber is disposed in the channel for filtering the impurities of the gas comprising hydrogen.
4. The gas generator of claim 3, wherein a filter material is further disposed in
- 20 the channel and selected from a group consisting of ceramics, quartz, kieselguhr, meerschaum, and the combination thereof.
5. The gas generator of claim 1, wherein the outlet via of the condense filter receives a supplementary water to flush the impurities back to the electrolysis device through the gas inlet via.
- 25 6. The gas generator of claim 1, further comprising:

a cooling device coupled to the electrolysis device for cooling down the

electrolyzed water; and

a water pump adapted to circulate the electrolyzed water between the electrolysis device and the cooling device.

7. A gas generator, comprising:

5 a water tank having a first hollow portion for containing electrolyzed water;

an electrolysis device, disposed inside the first hollow portion and containing electrolyzed water, for electrolyzing the electrolyzed water to generate a gas comprising hydrogen;

10 a condense filter, coupled to the electrolysis device for filtering and condensing impurities of the gas comprising hydrogen;

a humidification device, coupled to the condense filter, for containing a supplemental water; and

15 wherein the condense filter is capable to receive the supplemental water from the humidification device to flush the impurities back to the electrolysis device.

20 8. The gas generator of claim 7, wherein the humidification device comprises a container with a hollow space, a second pipe, and a outputting pipe, wherein the container contains the supplemental water, the second pipe is coupled to the container for receiving the filtered gas comprising hydrogen, the outputting pipe is coupled to the second pipe, the surface of the outputting pipe has a plurality of vias for outputting the filtered gas comprising hydrogen into the supplemental water.

25 9. The gas generator of claim 7, wherein the condense filter comprises a plurality of condense plates, each condense plate has a channel, and the channel of the condense plate is coupled with the adjacent channel of the condense plate to form a circulating channel for the gas comprising hydrogen to flow through.

10. The gas generator of claim 7, wherein the level of water of the electrolyzed water in the first hollow portion of the water tank is higher than 90% of a full level of water of the water tank.
- 5 11. The gas generator of claim 10, wherein the electrolyzed water is filled into the first hollow portion of the water tank to the level of water thereof to be between 90% and 99.99% of the full level of the water tank.
12. The gas generator of claim 10, wherein the water tank further comprises a pipe for outputting the gas comprising hydrogen and refilling the electrolyzed water into the first hollow portion of the water tank.
- 10 13. The gas generator of claim 7, further comprising:
- a cooling device, coupled to the electrolysis device, for cooling down the electrolyzed water; and
- a water pump, adapted to circulate the electrolyzed water between the electrolysis device and the cooling device.
- 15 14. The gas generator of claim 13, wherein the water pump comprises an inlet pipe and an outlet pipe, the water tank comprises an outlet opening and an inlet opening, the outlet pipe of the water pump is coupled with the inlet opening of the water tank, and the inlet pipe of the water pump is coupled with the outlet opening of the water tank.
- 20 15. The gas generator of claim 7, further comprising a nebulized gas mixing tank, wherein the nebulized gas mixing tank receives the gas comprising hydrogen, and the nebulized gas mixing tank further generates a nebulized gas to be mixed with the gas comprising hydrogen to form a healthy gas for users to breathe, wherein the nebulized gas is selected from a group consisting of water
- 25 vapor, nebulized medicinal liquid, evaporated essential oil, and the combination thereof.

16. The gas generator of claim 13, wherein the water pump is coupled to the cooling device and the electrolysis device.

5 17. The gas generator of claim 16, further comprising a microcomputer controller, the microcomputer controller coupled to the water pump and used to detect the temperature of the electrolyzed water and control an inputting flow rate and an outputting flow rate of the water pump according to the detected temperature of the electrolyzed water.

18. The gas generator of claim 16, wherein the temperature of the electrolyzed water contained in the electrolysis device is between 55°C and 65°C.