What is claimed is:

1. A hydrogen generator capable of selectively adjusting gas flow direction, comprising:

an electrolytic module configured to electrolyze water to generate gas comprising hydrogen;

a hydrogen water cup configured for containing liquid and injecting the gas comprising hydrogen into the liquid to form hydrogen liquid;

an integrated passageway device stacked above the electrolytic module, comprising a gas inlet passageway, a gas outlet passageway and a gas communication passageway, wherein the gas inlet passageway is configured to receive the gas comprising hydrogen, and the gas outlet passageway is configured to output the gas comprising hydrogen; and

an automatic diversion device configured to selectively connect the gas inlet passageway, the hydrogen water cup and the gas outlet passageway for injecting the gas comprising hydrogen into the hydrogen water cup and then outputting the gas comprising hydrogen through the gas outlet passageway, or configured to selectively connect the gas inlet passageway, the gas communication passageway, and the gas outlet passageway for outputting the gas comprising hydrogen through the gas communication passageway and the gas outlet passageway.

2. The hydrogen generator of claim 1, further comprising a nebulizer coupled to the gas outlet passageway to receive the gas comprising hydrogen, wherein the nebulizer is capable of selectively generating an atomized gas and mix the atomized gas with the gas comprising hydrogen to form a healthy gas.

3. The hydrogen generator of claim 2, wherein when the gas comprising hydrogen is injected into the hydrogen water cup and then outputted through the gas outlet passageway, the nebulizer generates the atomized gas; when the gas comprising hydrogen is outputted through the gas communication passageway and the gas outlet passageway, the nebulizer stops generating the atomized gas.

~~4. The hydrogen generator of claim 1, further comprising:~~

~~a pressure sensor coupled to at least one of the gas inlet passageway and the gas outlet passageway for correspondingly sensing a gas pressure in at least one of the gas inlet passageway and the gas outlet passageway, and generating a pressure sensing signal; and~~

~~a monitor coupled to the pressure sensor, configured to selectively shut down the electrolytic module based on the pressure sensing signal.~~

~~5. The hydrogen generator of claim 1, further comprising a frame configured for embedding the hydrogen water cup therein to couple the hydrogen water cup with the integrated passageway device by the frame, wherein when the hydrogen water cup is detached from the frame and not coupled with the integrated passageway device, the electrolytic module stops the operation.~~

~~6~~4. The hydrogen generator of claim 1, further comprising a condensate filter coupled to the integrated passageway device for condensing and filtering the gas comprising hydrogen; wherein the integrated passageway device comprises a lower cover, and the lower cover has a space for accommodating the condensate filter; the lower cover has a flip structure for the condensate filter to be moveably embedded into the integrated passageway device; wherein the gas comprising hydrogen is transferred among the hydrogen water cup, the automatic diversion

device, and the condensate filter by the integrated passageway device; the lower cover is an integral formed structure, and the automatic diversion device and the condensate filter are directly coupled to the lower cover.

~~7~~5. The hydrogen generator of claim ~~6~~4, further comprising:

a water tank stacked below the integrated passageway device and coupled to the electrolytic module, configured for accommodating the water and receiving the gas comprising hydrogen from the electrolytic module;

a humidification cup stacked above the water tank and having a humidification room and a filter room, wherein the humidification room is configured to accommodate supplementary water; and

a filter rod accommodated in the filter room for filtering the gas comprising hydrogen flowing through the filter room;

wherein the gas comprising hydrogen is transferred among the hydrogen water cup, the automatic diversion device, the condensate filter, the humidification cup, and the filter rod by the integrated passageway device, and the automatic diversion device, the condensate filter, and the humidification cup are directly coupled to the lower cover.

~~8. The hydrogen generator of claim 7, wherein the lower cover has a humidification channel for fluidly coupling the condensate filter with the humidification room; the lower cover has a filter channel for fluidly coupling the humidification room with the filter room.~~

~~9. The hydrogen generator of claim 7, wherein the filter room has a filter room inlet and a filter room outlet; the filter rod comprises a gas barrier ring on the outside of the filter rod configured to divide the filter room~~

into a pre-filter space and a filtered space; the filter rod further has a filter inlet and a filter outlet; the pre-filter space is coupled to the filter room inlet and the filter inlet, and the filtered space is coupled to the filter room outlet and the filter outlet.

10. The hydrogen generator of claim 7, wherein the condensate filter comprises a condensate passageway, the lower cover has a condensate channel coupled to the condensate passageway, and the humidification cup comprises a communicating room for coupling the water tank with the condensate filter; wherein the humidification room, the communicating room and the filter room are isolated from each other.

11. The hydrogen generator of claim 10, further comprising an electrolyte filter module configured in the communicating room of the humidification cup, wherein the electrolyte filter module has a continuous upward sloping channel to receive and filter the gas comprising hydrogen from the water tank.

12. The hydrogen generator of claim 7, further comprising a valve assembly, and the valve assembly comprising:

an output passageway coupled to the condensate filter and the humidification cup to transfer the gas comprising hydrogen;

a supply passageway coupled to the condensate filter and the humidification cup to transfer the supplementary water;

a first valve coupled to the output passageway and the supply passageway, configured to selectively deblock the output passageway or the supply passageway; and

a pump configured to drive the supplementary water contained in the humidification cup to the water tank through the condensate filter;

~~wherein the gas comprising hydrogen is transferred among the hydrogen water cup, the automatic diversion device, the condensate filter, the humidification cup, the filter rod and the valve assembly by the integrated passageway device, and the automatic diversion device, the condensate filter, the humidification cup and the valve assembly are directly coupled to the lower cover.~~

~~13. The hydrogen generator of claim 12, wherein when the first valve deblocks the output passageway, the gas comprising hydrogen is transferred to the humidification cup through the condensate filter; when the first valve deblocks the supply passageway, the supplementary water driven by the pump is transferred to the water tank through the condensate filter.~~

~~14. The hydrogen generator of claim 13, wherein the valve assembly further comprising an output channel and a second valve, wherein when the first vale deblocks the supply passageway, the second valve deblocks the output channel to make the humidification room to be connected to the water tank.~~

~~15~~6. The hydrogen generator of claim 2, further comprising a filter device pluggably coupled to the nebulizer for filtering germs in the gas comprising hydrogen.

~~16~~7. A hydrogen generator capable of selectively adjusting gas flow direction, comprising:

an electrolytic module configured to electrolyze water to generate gas comprising hydrogen;

a water tank configured to accommodate the water and the electrolytic module for receiving the gas comprising hydrogen from the

electrolytic module;

a condensate filter stacked above the water tank for receiving and filtering the gas comprising hydrogen;

a humidification cup stacked above the water tank, configured to accommodate a supplementary water and humidify the gas comprising hydrogen;

an integrated passageway device stacked above the water tank, comprising a plurality of channels, a gas inlet passageway, and a gas outlet passageway, wherein the gas inlet passageway is configured to receive the gas comprising hydrogen, and the gas outlet passageway is configured to output the gas comprising hydrogen;

a hydrogen water cup configured for containing liquid, wherein the hydrogen water cup is capable of receiving the gas comprising hydrogen and mixing the gas comprising hydrogen with the liquid to form hydrogen liquid;

~~a nebulizer configured to selectively generate an atomized gas and mix the atomized gas with the gas comprising hydrogen to form a healthy gas; and~~

a valve assembly configured to selectively make the gas comprising hydrogen from the water tank to flow into the condensate filter and the humidification cup, and also to selectively make the supplementary water to flow into the condensate filter and the water tank;

wherein the integrated passageway device comprises a lower cover, and the lower cover has a space for accommodating the condensate filter; the condensate filter~~,~~ and the humidification cup ~~and the nebulizer~~ are directly coupled to the integrated passageway device.

~~17~~8. The hydrogen generator of claim ~~16~~7, wherein the integrated

passageway device has a flip structure configured for the condensate filter to be moveably embedded into the integrated passageway device.

~~18~~9. The hydrogen generator of claim ~~16~~7, further comprising an automatic diversion device and a nebulizer configured to selectively generate an atomized gas and mix the atomized gas with the gas comprising hydrogen to form a healthy gas, and the integrated passageway device comprising a gas communication passageway, wherein the automatic diversion device is configured to selectively connect the gas inlet passageway, the hydrogen water cup and the gas outlet passageway for injecting the gas comprising hydrogen into the hydrogen water cup and then outputting the gas comprising hydrogen through the gas outlet passageway, or configured to selectively connect the gas inlet passageway, the gas communication passageway and the gas outlet passageway for outputting the gas comprising hydrogen through the gas communication passageway and the gas outlet passageway; wherein the gas comprising hydrogen is transferred among the condensate filter, the humidification cup, the hydrogen water cup, the nebulizer, the valve assembly and the automatic diversion device by the integrated passageway device, and the condensate filter, the humidification cup, the nebulizer and the automatic diversion device are directly coupled to the integrated passageway device.

~~19~~10. The hydrogen generator of claim ~~18~~9, wherein when the automatic diversion device connects the gas inlet passageway, the gas communication passageway and the gas outlet passageway for outputting the gas comprising hydrogen through the gas communication passageway and the gas outlet passageway, the nebulizer stops the operation.

~~20. The hydrogen generator of claim 16, wherein the humidification cup comprises a humidification room, a communicating room, and a filter room, the humidification room is configured to accommodate the~~

~~supplementary water and receive the gas comprising hydrogen, the communicating room is configured to fluidly couple to the water tank and the condensate filter, and the filter room is configured to accommodate a filter rod; wherein the humidification room, the communicating room and the filter room are isolated from each other.~~

~~21. The hydrogen generator of claim 20, further comprising an electrolyte filter module configured in the communicating room of the humidification cup, wherein the electrolyte filter module has a continuous upward sloping channel to receive and filter the gas comprising hydrogen from the water tank.~~

~~22. The hydrogen generator of claim 20, wherein the filter room has a filter room inlet and a filter room outlet; the filter rod comprises a gas barrier ring on the outside of the filter rod configured to divide the filter room into a pre-filter space and a filtered space; the filter rod further has a filter inlet and a filter outlet; wherein the pre filter space is coupled to the filter room inlet and the filter inlet, and the filtered space is coupled to the filter room outlet and the filter outlet.~~

~~23~~11. The hydrogen generator of claim ~~16~~7, wherein the hydrogen water cup is directly coupled to the integrated passageway device.

~~24. The hydrogen generator of claim 16, wherein the hydrogen water cup further comprises:~~

~~a cup body having an accommodating space for containing the liquid;~~

~~an injection component accommodated in the accommodating space for injecting the gas comprising hydrogen into the liquid to form the hydrogen liquid; and~~

~~a cup cover coupled to the cup body and having a gas inlet for~~

receiving the gas comprising hydrogen, a gas outlet for outputting the gas comprising hydrogen, and an input/output port for outputting the hydrogen liquid; wherein the input/output port is capable of injecting the liquid.

25. The hydrogen generator of claim 24, wherein the injection component comprises:

a gas injection column coupled to the gas inlet, wherein the gas injection column has a first gas injection channel; and

a gas injection base immersed in the liquid, comprising:

a gas injection body coupled to the gas injection column, wherein the gas injection body has a second gas injection channel and a plurality of gas injection pores, the second gas injection channel is fluidly coupled to the first gas injection channel, and the gas injection pores are fluidly coupled to the second gas injection channel;

a gas injection housing coupled to the gas injection body and having a plurality of micro outlet channels corresponding to the plurality of gas injection pores; and

a plurality of micro filters located between the gas injection body and the gas injection housing, wherein the plurality of micro filters are coupled to the micro outlet channels.

26. The hydrogen generator of claim 25, wherein each of the micro outlet channels is a hollow conical frustum structure, the hollow conical frustum structure has an upper hole and a lower hole, an area of the upper hole is greater than an area of the lower hole, the lower hole is located between the second gas injection channel and the micro outlet channel, and the upper hole is located between the micro outlet channel and the accommodating space.

~~27. The hydrogen generator of claim 25, wherein the sectional area of the second gas injection channel is non-uniform.~~

~~28~~12. The hydrogen generator of claim ~~16~~7, further comprising a fining device configured in the humidification cup, wherein the fining device comprises a communicating column and a fining base plate, and the fining base plate comprises a fining channel and a plurality of fining pores; wherein the sectional area of the fining channel is non-uniform.

~~29~~13. A hydrogen generator capable of selectively adjusting gas flow direction, comprising:

an electrolytic module configured to electrolyze water to generate gas comprising hydrogen;

a water tank configured to accommodate the water and the electrolytic module for receiving the gas comprising hydrogen from the electrolytic module;

a condensate filter stacked above the water tank for receiving and filtering the gas comprising hydrogen;

a humidification cup stacked above the water tank, configured to accommodate supplementary water and humidify the gas comprising hydrogen; and

an integrated passageway device stacked above the water tank and directly coupled to the condensate filter and the humidification cup;

wherein the gas comprising hydrogen is transferred between the condensate filter and the humidification cup by the integrated passageway device.

~~30~~14. The hydrogen generator of claim ~~29~~13, further comprising:

a nebulizer configured to selectively generate an atomized gas and mix the atomized gas with the gas comprising hydrogen to form a healthy gas; wherein the nebulizer is directly coupled to the integrated passageway device, and the gas comprising hydrogen is transferred among the condensate filter, the humidification cup and the nebulizer by the integrated passageway device.

~~31~~15. The hydrogen generator of claim ~~30~~14, further comprising:

a hydrogen water cup configured for containing liquid, wherein the hydrogen water cup is capable to receive the gas comprising hydrogen and mix the gas comprising hydrogen with the liquid to form hydrogen liquid; the hydrogen water cup is directly coupled to the integrated passageway device, and the gas comprising hydrogen is transferred among the condensate filter, the humidification cup, the hydrogen water cup and the nebulizer by the integrated passageway device.

~~32. The hydrogen generator of claim 30, wherein the humidification cup comprises a filter room for accommodating a filter rod, and the filter rod is configured to filter the gas comprising hydrogen flowing through the filter room; wherein the hydrogen water cup is directly coupled to the integrated passageway device, and the gas comprising hydrogen is transferred among the condensate filter, the humidification cup, the filter rod, the hydrogen water cup and the nebulizer by the integrated passageway device.~~