

What is claimed is:

1. A wearable breathing tube system, comprising:
 - a gas receiving tube configured to receive a breathing gas;
 - a first connecting tube coupled to the gas receiving tube;
 - a catchment canister coupled to the gas receiving tube and the first connecting tube;
 - an output tube coupled to the first connecting tube, the output tube being configured for a user to wear and to output the breathing gas to the user, wherein the gas receiving tube, the catchment canister, the first connecting tube and the output tube form a supply pipeline; and
 - a flame arrester configured in the supply pipeline.
2. The system of claim 1, wherein the catchment canister is configured for collecting a liquid in the supply pipeline, wherein the diameters of the gas receiving tube and the first connecting tube are smaller than the maximum inner diameter of the catchment canister.
3. The system of claim 1, further comprising a first switch coupled to the first connecting tube, the catchment canister being separably coupled to the gas receiving tube and the first switch.
4. The system of claim 1, wherein the catchment canister has a first canister body and a second canister body which can be separated from each other, and a catchment canister sealing ring is configured between the first canister body and the second canister body to couple to the first canister body and the second canister body.
5. The system of claim 1, wherein the flame arrester is configured between the catchment canister and the first connecting tube.
6. The system of claim 5, further comprising a first switch coupled to the first connecting tube and the catchment canister, the flame arrester being contained in

the first switch and coupled to the catchment canister by the first switch.

7. The system of claim 6, wherein the output tube has two gas outlets to output the breathing gas to the user, the first connecting tube comprises a pair of sub-connecting tubes respectively coupled to a side opening of the output tube.
8. A breathing equipment, comprising:
 - a wearable breathing tube system, comprising:
 - a gas receiving tube configured to receive a breathing gas;
 - a first connecting tube coupled to the gas receiving tube;
 - an output tube coupled to the first connecting tube, the output tube being configured for a user to wear and to output the breathing gas to the user, wherein the gas receiving tube, the first connecting tube and the output tube form a supply pipeline; and
 - a catchment canister coupled to the supply pipeline and forming a part of the supply pipeline for collecting a liquid in the supply pipeline;
 - wherein, the diameter of the supply pipeline is smaller than the maximum inner diameter of the catchment canister.
9. The equipment of claim 8, wherein the breathing tube system further comprises a first switch configured to couple to the first connecting tube and the catchment canister.
10. The equipment of claim 9, wherein the first connecting tube comprises a pair of sub-connecting tubes, the sub-connecting tubes are coupled to the catchment canister by the first switch.
11. The equipment of claim 8, wherein the catchment canister is configured between the gas receiving tube and the first connecting tube, the breathing tube system further comprises a flame arrester configured between the catchment canister and the first

connecting tube.

12. The equipment of the claim 8, further comprising an electrolytic module configured to electrolyze the liquid and generate the breathing gas.
13. The equipment of claim 8, further comprising an atomizer configured to generate an atomizing gas from the liquid and to mix the atomizing gas with a source gas to form the breathing gas.