

**CLAIMS:**

1. A breathing assistance apparatus comprising a main body, a humidification compartment defined within the main body and adapted to receive a humidification chamber, a flow generator positioned within the main body, the flow generator and the humidification  
5 compartment being fluidly connected and a liquid containment compartment being interposed within the main body between the flow generator and the humidification compartment, the liquid containment compartment being fluidly connected to both the flow generator and the humidification compartment such that a gas flow path from the flow generator to the humidification compartment passes through the liquid containment  
10 compartment, and wherein the liquid containment compartment comprises:

a first opening that defines an outlet for gases flow out of the liquid containment compartment to the humidification compartment,

a second opening that defines an inlet for gases flow into the liquid containment compartment from the flow generator, the first opening and the second opening of the liquid  
15 containment compartment being offset from each other in at least two orthogonal spatial directions, the first opening being positioned vertically higher than the second opening, and

a lower surface, wherein the second opening is positioned generally vertically higher than the lower surface and the second opening is provided atop of a pedestal extending within the liquid containment compartment from the lower surface of the liquid containment  
20 compartment, the pedestal comprising a passage fluidly connected to the flow generator to form part of the gas flow path.

2. The breathing assistance apparatus according to claim 1 wherein the first opening and the second opening of the liquid containment compartment are offset horizontally.

25 3. The breathing assistance apparatus according to claim 1 wherein the first opening and the second opening of the liquid containment compartment are offset from each other in three orthogonal spatial directions.

30 4. The breathing assistance apparatus according to claim 3 wherein the first opening and the second opening of the liquid containment compartment are offset horizontally in two orthogonal directions.

5. The breathing assistance apparatus according to any one of the preceding claims wherein no portion of the first opening is vertically aligned with the second opening.

5        6. The breathing assistance apparatus according to any one of the preceding claims wherein no portion of the first opening is horizontally aligned with the second opening.

7. The breathing assistance apparatus according to any one of the preceding claims wherein the second opening spans a vertical distance and the lowermost portion of the second  
10 opening is vertically higher than the lower surface of the liquid containment compartment.

8. The breathing assistance apparatus according to any one of claims 1-6 wherein the lower surface of the liquid containment compartment spans a vertical distance and the second opening is vertically higher than any portion of the lower surface that is directly adjacent to  
15 the second opening.

9. The breathing assistance apparatus according to any one of the preceding claims wherein the second opening is canted toward the first opening.

20        10. The breathing assistance apparatus according to any one of the preceding claims wherein a lowermost portion of the second opening is vertically higher than a lowermost portion of the lower surface of the liquid containment compartment.

11. The breathing assistance apparatus according to any one of the preceding claims  
25 wherein the second opening has a lip defined on a portion of the second opening that is on an opposite side of the second opening from the first opening.

12. The breathing assistance apparatus according to claim 11 wherein the lip overhangs the passage defined within the pedestal leading to the second opening.

30        13. The breathing assistance apparatus according to any one of the preceding claims wherein the second opening has a narrowing region defined on a portion of the second opening that is disposed closest to the first opening.

14. The breathing assistance apparatus according to any one of the preceding claims wherein the second opening is fluidly connected to the flow generator by one or more passages within the main body that form part of the gas flow path.

5           15. The breathing assistance apparatus according to any one of the preceding claims wherein the main body comprises an upper housing and a lower housing that are configured to be secured together, and wherein the liquid containment compartment comprises a lower surface that is part of the lower housing of the main body and a vertical wall defining the sides of the liquid containment compartment that is part of the upper housing of the main  
10   body.

16. The breathing assistance apparatus according to claim 15 wherein a portion of the vertical wall of the liquid containment compartment corresponds to a portion of a vertical wall that defines the humidification compartment.

15           17. The breathing assistance apparatus according to claim 16 wherein the first opening extends through the portion of the vertical wall of the liquid containment compartment that corresponds to the vertical wall of the humidification compartment.

20           18. The breathing assistance apparatus according to any one of claims 15-17 wherein a portion of the vertical wall of the liquid containment compartment corresponds to a portion of an outer wall of the main body provided by the upper housing.

25           19. The breathing assistance apparatus according to any one of claims 15-18 wherein the liquid containment compartment comprises a ridge that defines the periphery of the lower surface of the liquid containment compartment and which extends from the lower housing of the main body, the ridge matching the configuration of the vertical wall of the liquid containment compartment provided in the upper housing such that the ridge of the lower housing and vertical wall of the upper housing abut each other to form the liquid containment  
30   compartment when the main body is assembled.

20. The breathing assistance apparatus according to claim 19 wherein the ridge of the liquid containment compartment defines and encircles a reservoir of the liquid containment compartment.

21. The breathing assistance apparatus according to claim 19 or claim 20 wherein the ridge of the liquid containment compartment surrounds the second opening.

5           22. The breathing assistance apparatus according to any one of claims 19-21 wherein a seal is provided between ridge of the lower housing and the vertical wall of the upper housing that form the liquid containment compartment.

10           23. The breathing assistance apparatus according to claim 22 wherein the ridge comprises a groove and the seal is provided within the groove.

24. The breathing assistance apparatus according to any one of claims 15-23 wherein the flow generator is mounted to or within the lower housing of the main body.