

CLAIMS

- ~~1. A breathing assistance apparatus comprising:
a housing with a recess; and
a guard mounted to the housing, the guard comprising a base and a barrier, at least part of the base being flexible, the barrier being movable between a covering position in which the barrier partly covers the recess and an access position in which the recess is less covered or is uncovered by the barrier, and wherein said at least part of the base is configured to flex as the barrier is moved between the covering position and the access position.~~
- ~~2. A breathing assistance apparatus according to claim 1, wherein the base of the guard is mounted to a base of the housing.~~
- ~~3. A breathing assistance apparatus according to claim 2, wherein the base of the guard is mounted to the base of the housing by one or more fasteners.~~
- ~~4. A breathing assistance apparatus according to any one of claims 1 to 3, wherein the guard is fastened to the exterior of the housing and is replaceable without disassembling the housing.~~
- ~~5. A breathing assistance apparatus according to claim 4, wherein the barrier is configured to act as a bumper.~~
- ~~6. A breathing assistance apparatus as claimed in any one of claims 1 to 4, wherein the base of the guard is configured so that the barrier can substantially only move in two opposed directions by flexing the base of the guard, and so that the barrier cannot substantially move in other directions by flexing the base of the guard, even if a single region of the barrier is pushed by a user.~~
- ~~7. A breathing assistance apparatus according to claim 6, wherein the guard is configured so that it cannot twist about an axis that extends in a forward-rearward direction along the base and through the barrier of the guard.~~

- ~~8. A breathing assistance apparatus according to any one of claims 1 to 7, comprising a heater plate in the recess, wherein the recess is configured to removably receive a liquid chamber, and wherein the guard shields a base of the liquid chamber from contact by a user when the barrier is in the covering position and the liquid chamber is in the recess.~~
- ~~9. A breathing assistance apparatus according to claim 8, wherein the base of the liquid chamber comprises a base flange, and wherein the guard shields the base flange from contact by a user when the barrier is in the covering position and the liquid chamber is in the recess.~~
- ~~10. A breathing assistance apparatus according to any one of claims 1 to 9, wherein the recess is configured to removably receive a liquid chamber, and wherein the barrier blocks insertion or removal of a liquid chamber into or from the recess, in the absence of flexing of the base of the guard.~~
- ~~11. A breathing assistance apparatus according to any one of claims 1 to 10, wherein the base of the guard can be flexed by pushing on the barrier.~~
- ~~12. A breathing assistance apparatus according to claim 10 or claim 11 when dependent on claim 10, wherein the base of the guard can be flexed by moving the liquid chamber in a removal direction from the recess.~~
- ~~13. A breathing assistance apparatus according to claim 12, wherein the barrier is configured such that contact between the liquid chamber and a contact surface of the barrier as the liquid chamber is moved in the removal direction, moves the barrier from the covering position to the access position.~~
- ~~14. A breathing assistance apparatus according to claim 13, wherein the contact surface of the barrier is at a non-perpendicular angle of more than 90 degrees and less than 180 degrees relative to the removal direction, optionally between 100 degrees and 170 degrees relative to the removal direction, optionally between 110 degrees and 135 degrees relative to the removal direction, optionally between 120 degrees and 130 degrees relative to the removal direction, and optionally 125 degrees relative to the removal direction.~~

- ~~15. A breathing assistance apparatus according to claim 10 or claim 11 when dependent on claim 10, wherein the barrier is configured so that the base of the guard cannot be flexed by moving the liquid chamber in a removal direction from the recess.~~
- ~~16. A breathing assistance apparatus according to claim 15, wherein the barrier is configured such that contact between the liquid chamber and a contact surface of the barrier in a removal direction of the liquid chamber, will not cause the barrier to move away from the covering position.~~
- ~~17. A breathing assistance apparatus according to claim 16, wherein the contact surface is at an angle of about 90 degrees or less relative to the removal direction of the liquid chamber.~~
- ~~18. A breathing assistance apparatus according to any one of claims 1 to 17, wherein the barrier is biased to the covering position.~~
- ~~19. A breathing assistance apparatus according to claim 18, wherein one or more biasing devices act between the housing and the guard to bias the barrier to the covering position.~~
- ~~20. A breathing assistance apparatus according to claim 19, wherein the one or more biasing devices act between the housing and the barrier.~~
- ~~21. A breathing assistance apparatus according to any one of claims 18 to 20, wherein said at least part of the base of the guard is resiliently flexible, to bias the barrier to the covering position.~~
- ~~22. A breathing assistance apparatus according to any one of claims 1 to 21, wherein the base of the guard comprises one or more drainage ports or drainage spaces to allow liquid to drain through or around the base of the guard.~~
- ~~23. A breathing assistance apparatus according to any one of claims 1 to 22, wherein the housing comprises a projection and the base of the guard~~

~~comprises a complementary aperture to receive the projection to resist horizontal movement of the base of the guard.~~

~~24. A breathing assistance apparatus according to any one of claims 1 to 23, wherein the guard is integrally formed with the housing or is fastened to the housing.~~

25.1. A breathing assistance apparatus comprising:

a housing with a recess configured to removably receive a liquid chamber; and

a guard comprising a barrier, the barrier being movable between a covering position in which the barrier partly covers the recess and overlaps part of the liquid chamber when the liquid chamber is in the recess, and an access position in which the recess is less covered or is uncovered by the barrier and the barrier exposes the part of the liquid chamber, wherein the barrier is biased to the covering position, and wherein the barrier is configured to move from the covering position to the access position by moving the liquid chamber in a removal direction from the recess.

26.2. A breathing assistance apparatus according to claim 25.1, wherein the barrier is configured such that contact between the liquid chamber and a contact surface of the barrier as the liquid chamber is moved in the removal direction, moves the barrier from the covering position to the access position.

27.3. A breathing assistance apparatus according to claim 26.2, wherein the contact surface of the barrier is at a non-perpendicular angle of more than 90 degrees and less than 180 degrees relative to the removal direction, optionally between 100 degrees and 170 degrees relative to the removal direction, optionally between 110 degrees and 135 degrees relative to the removal direction, optionally between 120 degrees and 130 degrees relative to the removal direction, and optionally 125 degrees relative to the removal direction.

28.4. A breathing assistance apparatus according to claim 26.2 or 27.3, wherein said part of the liquid chamber comprises a front edge of a base flange of the liquid chamber, and wherein the contact surface is configured

to contact substantially the entire front edge of the base flange as the liquid chamber is moved in the removal direction.

~~29.5.~~ A breathing assistance apparatus according to claim [284](#), wherein the recess comprises a liquid chamber retention guide rail, and wherein the liquid chamber retention guide rail is forwardly open to enable the liquid chamber to be inserted into the recess with a back and sides of the base flange under the guide rail and with the front edge of the base flange exposed from the guide rail.

~~30.6.~~ A breathing assistance apparatus according to any one of claims [26-2](#) to [295](#), wherein the contact surface has a constant angle throughout a contact area between the liquid chamber and the barrier, when viewed in side projection.

~~31.7.~~ A breathing assistance apparatus according to any one of claims [25-1](#) to [306](#), wherein one or more biasing devices act between the housing and the guard to bias the barrier to the covering position.

~~32.8.~~ A breathing assistance apparatus according to claim [317](#), wherein the one or more biasing devices act between the housing and the barrier.

~~33.9.~~ A breathing assistance apparatus according to claim [317](#) or [328](#), wherein the barrier is linearly movable between the covering position and the access position.

~~34.10.~~ A breathing assistance apparatus according to any one of claims [25-1](#) to [339](#), wherein part of the guard is resiliently flexible, to bias the barrier to the covering position.

~~35.11.~~ A breathing assistance apparatus according to any one of claims [25-1](#) to [3410](#), wherein the guard is integrally formed with the housing or is fastened to the housing.

~~36. A breathing assistance apparatus comprising:
a housing with a recess; and~~

~~a guard mounted to the housing, the guard comprising a barrier that is movable between a covering position in which the barrier partly covers the recess and an access position in which the recess is less covered or is uncovered by the barrier, wherein the guard is fastened to an exterior of the housing and is replaceable without disassembling the housing.~~

~~37. A breathing assistance apparatus according to claim 36, wherein the barrier is configured to act as a bumper.~~

~~38. A breathing assistance apparatus according to claim 36 or 37, wherein the guard covers a front exterior part of the recess.~~

~~39. A breathing assistance apparatus according to any one of claims 38 to 38, wherein the guard is fastened to a base of the housing.~~

~~40. A breathing assistance apparatus according to claim any one of claims 36 to 39, wherein the guard can be removed from the housing by removing fastener(s).~~

~~41. A breathing assistance apparatus according to claim any one of claims 36 to 40, wherein the guard has a colour that is representative of the intended function of the breathing assistance apparatus.~~

~~A breathing assistance apparatus according to any one of claims 36 to 41, wherein the recess is configured to removably receive a liquid chamber.~~

12. A breathing assistance apparatus according to any one of claims 1 to 11, wherein the barrier of the guard extends from a base of the guard at a location that is distal to a mounting of the base of the guard to the housing.

13. A breathing assistance apparatus according to claim 12, wherein the barrier of the guard extends upwardly from a position at or adjacent a forward end of the base of the guard so as to be located at the front of the base.

14. A breathing assistance apparatus according to claim 12 or 13, wherein the housing comprises a projection and the base of the guard comprises a

complementary aperture to receive the projection to resist horizontal movement of the base of the guard.

- ~~42.~~ 15. A breathing assistance apparatus according to claim 14, configured such that when the liquid chamber is removed from the recess, contact between the liquid chamber and the barrier applies force to the guard in a horizontal direction, and wherein the horizontal movement is prevented by the projection contacting a peripheral wall of the aperture.