

## CLAIMS

1. A headgear assembly for a respiratory interface, comprising:  
a first strap; and  
a second strap;

at least one of the first strap or second strap comprising

- a moulded plastic core; and  
an integrated textile casing that is integrally formed with the plastic core, the textile casing comprising a knitted, woven, or braided tube, wherein the textile casing is tubular and seamless, and wherein the textile casing surrounds an entire periphery of the core.

2. The headgear assembly of Claims 1, wherein the textile casing comprises one or more retainer holes configured to engage a retaining pin of a moulding tool.

3. The headgear assembly of Claim 1 or 2, further comprising at least one flexible joint that permits the headgear to bend and/or fold.

4. The headgear assembly of Claim 3, wherein the at least one flexible joint comprises a gap between portions of the plastic core and wherein the textile casing extends within the gap to connect the portions of the plastic core.

5. The headgear assembly of Claim 4, further comprising at least one bridge portion extending within the flexible joint between the portions of the plastic core.

6. The headgear assembly of any one of Claims 1 to 5, further comprising:  
a substantially inelastic rear portion comprising the second strap, or the first strap, or both the second strap and the first strap;  
a substantially inelastic front portion;  
a first elastic side portion on a first side of the headgear assembly;  
a second elastic side portion on a second side of the headgear assembly;  
at least one filament that extends through or along the first and second elastic side portions, the at least one filament coupled to one of the inelastic rear portion and the inelastic front portion;  
at least one restriction arrangement;

wherein the at least one filament passes through the at least one restriction arrangement, and wherein the at least one restriction arrangement is configured to selectively engage the at least one filament to resist movement of the at least one filament relative to the at least one restriction arrangement.

7. The headgear assembly of Claim 6, wherein the at least one restriction arrangement is configured to provide

a first resistance force to movement or attempted movement of the at least one filament in a direction that allows the inelastic rear portion and the inelastic front portion to move away from one another.

8. The headgear assembly of Claim 7, wherein the at least one restriction arrangement is configured to provide a second resistance force to movement or attempted movement of the at least one filament in a direction that allows the inelastic rear portion and the inelastic front portion to move toward one another, wherein the second resistance force is less than the first resistance force.

9. The headgear assembly of any one of Claims 6 to 8, wherein the inelastic front portion is rigid.

10. The headgear assembly of Claim 9, wherein the inelastic front portion is configured to be connected to a respiratory interface.

11. The headgear assembly of either one of Claims 9 or 10, wherein the inelastic front portion defines at least one collection passage that accommodates a portion of the at least one filament.

12. The headgear assembly of any one of Claims 1 to 11, wherein the lateral cross-section of the core of the first strap, the second strap, or both the first strap and the second strap comprises two thickened portions or flanges separated by a thin portion or web

13. The headgear assembly of any one of Claims 1 to 12, wherein the first strap, the second strap, or both the first strap and the second strap comprise voids, air gaps, or air pockets on each lateral edge.

14. The headgear assembly of any one of Claims 1 to 12, wherein the core of the first strap, the second strap, or both the first strap and the second strap comprises long sides

Deleted: , 11 or

Deleted: , 11 or

and short sides, and the textile casing is secured to the long sides of the core and spaced from the short sides of the core to create voids or air gaps on each lateral edge of the strap.

15. The headgear assembly of any one of Claims 1 to 11, wherein the lateral cross-section of the core of the first strap, the second strap, or both the first strap and the second strap comprises two spaced portions.

16. The headgear assembly of any one of Claims 1 to 15, wherein one more of a width, thickness, edge radii, and surface curvature vary along the length of the first strap, the second strap, or both the first strap and the second strap.

17. The headgear assembly of any one of Claims 1 to 16, wherein the first strap, the second strap, or both the first strap and the second strap comprise one or more embossed or overmoulded features.

18. The headgear assembly of Claim 17, wherein the first strap, the second strap, or both the first strap and the second strap comprise an inner surface and an outer surface and the one or more embossed or overmoulded features comprise textures or other indicia that permit tactile or visual differentiation of the inner surface and the outer surface.

19. The headgear assembly of any one of Claims 6 to 11, wherein each of the first and second elastic side portions comprises an end cap having an opening through which the at least one filament passes.

20. The headgear assembly of Claim 19, wherein the end cap is overmolded onto the respective one of the first and second elastic side portions.

21. The headgear assembly of either one of Claims 19 or 20, wherein the end cap is coupled to the inelastic front portion.

22. The headgear assembly of any one of Claims 6 to 21, wherein the inelastic second portion, the inelastic front portion, the first elastic side portion and the second elastic side portion define a closed loop perimeter.

23. The headgear assembly of any one of Claims 1 to 22, wherein the headgear assembly has no structure passing below the ear of the user that would inhibit removal of the headgear assembly in an upward direction.