

CLAIMS

1. A headgear for a patient interface, the headgear comprising a plurality of panels, each panel having two opposed major faces,
- 5 wherein the headgear has at least one lapped region in which at least two of the plurality of panels respectively overlap and underlap each other, and at least one non-lapped region in which one or more of the plurality of panels is not lapped by another of the plurality of panels, and
- wherein at the or each at least one lapped region the panels are bonded to
- 10 each other by an adhesive.
2. The headgear of claim 1, wherein a first panel of the plurality of panels comprises a different material to that of a second panel of the plurality of panels, and the different materials comprise one or more of a different texture, softness, stiffness or flexibility, stretch properties, density, thickness, colour,
- 15 frictional coefficient in relation to a reference material, breathability, or degree of transparency or sheer.
3. The headgear of claim 1 or 2, wherein the plurality of panels comprise at least one panel having a first extensibility and at least one panel having a second, relatively lesser, extensibility.
- 20 4. The headgear of any one of claims 1 to 3, wherein the plurality of panels define:
- a rear portion for location at the rear of the head of a patient,
- a crown strap, and
- at least two side straps for attachment to the patient interface.
- 25 5. The headgear of claim 4, wherein the rear portion transfers loads between the at least two side straps, and the rear portion comprises at least one panel of a first material which laps a portion of a side strap panel of each of the at least two side straps.
6. The headgear of claim 4 or 5, wherein an extent of the rear portion to be located lowest on the rear of the head of a patient comprises a lower panel of
- 30 a second material.
7. The headgear of claim 6, wherein the lower panel of the second material is of a relatively greater extensibility than the plurality of panels of the first material.
- 35 8. The headgear of claim 6 or 7, wherein a portion of the lower panel is in a non-lapped region of the headgear, and the portion of the lower panel is substantially crescent-shaped.

9. The headgear of any one of claims 4 to 8, wherein the crown strap comprises a pair of crown strap portions which are adjustably fixable to each other to provide a variable-length crown strap, each crown strap portion comprising an internal crown strap portion panel and an external crown strap portion panel which
5 are adhesively bonded to each other.

10. The headgear of any one of claims 4 to 9, wherein the at least two side straps comprise two lateral sets of an upper and a lower side strap, each set of side straps for connection to corresponding sides of the patient interface, and wherein the two upper side straps comprise a unitary panel which extends across
10 the rear portion of the headgear and the unitary panel is provided within a lapped region across at least part of the rear portion of the headgear and within a pair of distal non-lapped regions.

11. The headgear of claim 10, wherein a set of upper and lower side strap comprise a unitary panel, the unitary panel configured to extend around a
15 rear of an ear of a patient.

12. The headgear of claim 11, wherein an edge profile of each ear loop comprises a pair of straight-line portions.

13. The headgear of any one of claims 10 to 12, wherein terminal portions of either or both of the upper and lower side straps include gripping tabs comprising a first and second tab panels, the tab panels respectively overlapping
20 and underlapping the terminal portion at a first tab region and lapping each other at a more distal second tab region.

14. The headgear of claim 13, wherein the headgear at the second more distal tab region is of greater stiffness than the headgear at the first tab region.
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15. The headgear of any one of claims 10 to 14, wherein each side strap of the set of side straps comprises a series of tactile features along at least one surface of the side strap, the tactile features for providing tactile feedback to a patient of different adjustment conditions of the respective strap.

16. The headgear of claim 15, wherein the series of tactile features
30 provide for indexing of the adjustment of each respective side strap.

17. The headgear of any one of claims 10 to 16, wherein each side strap comprises a strap panel, the strap panel lapped on at least one major face with a tactile feedback panel, wherein the tactile feedback panel is one or more of thinner, harder, and stiffer than the strap panel which it laps and wherein the tactile
35 feedback panel and the strap panel are bonded by an adhesive.

18. The headgear of claim 17, wherein the tactile feedback panel comprises the tactile features, the tactile features provided by a series of voids

through the tactile feedback panel which present the tactile feedback panel as having a series of ridges relative to the strap panel to which it is lapped.

19. The headgear of claim 18, wherein the tactile feedback panel is one or both of harder and stiffer than the strap panel, and the series of ridges are for mechanically engaging with a buckle of the patent interface.

20. The headgear of any one of claims 4 to 19, wherein an edge of one or more of the crown strap, rear portion, and side straps, is treated with a conditioner.

21. The headgear of any one of claims 4 to 20, wherein one or more of the set of side straps, the rear portion, and the crown strap comprise at least in part a relatively elastic panel which is overlapped and underlapped by respective relatively inelastic panels.

22. The headgear of any one of claims 1 to 21, wherein at one or more lapped regions the headgear is at least partially one or both of overlapped and underlapped by an adhesive.

23. The headgear of any one of claims 1 to 22, wherein the adhesive comprises a hot-melt adhesive which is interposed between the panels at the or each at least one lapped region.

24. The headgear of any one of claims 1 to 23, wherein the adhesive is provided in a sheet or film-like form.

25. The headgear of any one of claims 1 to 24, wherein at least part of a panel at an edge of the headgear is rolled back onto itself and an adhesive is provided between the rolled-back part of the panel and a part of the panel onto which it is rolled back.

26. The headgear of any one of claims 1 to 25, wherein at least part of an edge of the headgear comprises an edge softening panel, a portion of which is lapped to a more interior panel, and wherein the edge panel comprises a material that is thinner and/or softer than that of the more interior panel to which it is lapped.

27. The headgear of claim 26, wherein the edge softening panel is lapped to a more interior panel of the headgear such that the edge softening panel defines at least part of an internal surface, relative to the head of a patient in use, of the headgear.

28. The headgear of claim 26 or 27, wherein an edge softening panel is provided at an upper side of the rear portion, and the edge softening panel is provided within both a lapped region and a non-lapped region, and wherein the non-lapped region forms at least part of an upper peripheral edge of the rear portion, and wherein the edge softening panel at the non-lapped region is

configured, in use and towards the upper peripheral edge of the rear portion, to roll away from the head of the patient.

29. The headgear of claim 28, wherein the edge softening panel at the non-lapped region extends away from an adjacent lapped region a distance of
- 5 about 5 times to about 20 times a thickness of the edge softening panel.