CLAIMS

~~1. A nasal cannula assembly comprising:~~

~~a face mount part having a base portion and at least one nasal prong extending from the base portion and capable of fitting in at least one of a user's nares, and~~

~~a gases flow manifold part having a gases inlet for receiving a flow of gas from a gas source, and a gases outlet for delivering the flow of gas to the at least one nasal prong of the face mount part, the manifold part being adapted to be received by the base portion of the face mount part to fluidly connect the outlet of the manifold with the at least one nasal prong of the face mount part, and wherein the manifold part further comprises a groove at the outlet to establish a gap between the base portion of the face mount part and the manifold part in a region of the base portion configured to locate adjacent a user's philtrum in use to thereby eliminate or at least alleviate pressure on the user's septum from the manifold part in use.~~

~~2. A nasal cannula as claimed in claim 1, wherein the gases flow manifold part is formed from a relatively harder material than the face mount part.~~

~~3. A nasal cannula as claimed in either claim 1 or claim 2, wherein the gases flow manifold part is formed from a substantially rigid plastics material, such as Polycarbonate.~~

~~4. A nasal cannula as claimed in any one of claim 1 to claim 3, wherein the face mount part is formed from a substantially soft plastics material, such as Silicone.~~

~~5. A nasal cannula as claimed in any one of claim 1 to claim 4, wherein the groove at the outlet of the manifold part is formed by a pair of opposed recesses on either side of a periphery of the outlet.~~

~~6. A nasal cannula as claimed in claim 5 wherein, the periphery of the outlet of the manifold is adapted to sealably engage an interior of the base portion of the face mount part.~~

~~7. A nasal cannula as claimed in claim 6, wherein the outlet of the manifold part comprises a lip extending about the periphery of the outlet and the interior of the base portion comprises a corresponding recess adapted to releasably receive the lip of the outlet of the manifold part.~~

~~8. A nasal cannula as claimed in any one of claim 1 to claim 7, wherein the face mount part comprises at least one substantially horizontal side entry passage to the interior of the base portion for releasably receiving the outlet of the manifold part therethrough.~~

~~9. A nasal cannula as claimed in claim 8, wherein the face mount part comprises a pair of opposed side entry passages to the interior of the base portion, each adapted to releasably receive the outlet of the manifold part therethrough.~~

~~10. A nasal cannula as claimed in any one of claim 1 to claim 9, wherein the face mount part comprises a pair of nasal prongs.~~

~~11. A nasal cannula as claimed in claim 10, wherein the base portion of the face mount part comprises a dipped region between the nasal prongs to extend the base portion away from the user's septum and further alleviate pressure on the septum in use.~~

~~12~~1. A headgear for a patient interface comprising

a strap forming a part of the headgear, the strap for assisting in retaining or stabilising of a patient interface upon a user,

wherein the strap, or a section of the strap, to be located upon or to be placed in contact with the face or a portion of a user's face includes a surface region for frictionally engaging with the user's face, the surface region being of a relatively higher frictional surface material than the remainder of the strap forming the or a part of the headgear.

~~13~~2. A headgear as claimed in claim ~~12~~ 1 wherein the strap or a respective section of the strap, includes two symmetric surface regions for frictionally engaging with two symmetric portions on either side of the user's face.

~~14~~3. A headgear as claimed in either one of claim ~~12~~ 1 or claim ~~13~~ 2 wherein a remainder of the strap is arranged to extend as a non-facial contacting strap or section of strap which is to extend beyond the user's face or the portion of the user's face.

~~15~~4. A headgear as claimed in any one of claim~~s~~ ~~12~~ 1 to claim ~~14~~ 3 wherein each surface region for frictionally engaging with the user's face or a portion of the user's face including the relatively higher frictional surface material assists with retaining or stabilising of a patient interface upon the face of a user.

~~16~~5. A headgear as claimed in any one of claim ~~12~~ 1 to claim ~~15~~ 4 wherein each surface region comprises a material applied to the strap or the respective section of strap.

~~17~~6. A headgear as claimed in claim ~~16~~ 5 wherein the material applied is in the form of a sleeve positioned about the strap or the respective section of strap.

~~18~~7. A headgear as claimed in claim ~~17~~ 6 wherein the sleeve is configured to removeably couple about the strap or the section of the strap.

~~19~~8. A headgear as claimed in claim ~~18~~ 7 wherein the strap or the respective section of the strap extends through a passage in the sleeve.

~~20~~9. A headgear as claimed in claim ~~19~~ 8 wherein the strap or the respective section of the strap is adapted to be threaded through the passage.

10. A headgear as claimed in claim 8 or claim 9, wherein the strap remains free to be stretched or elasticised or extended when in a sleeved configuration.

~~21~~11. A headgear as claimed in claim ~~16~~ 5 wherein the material applied is in the form of a material coated upon the strap or the respective section of strap.

~~22~~12. A headgear as claimed in claim ~~16~~ 5 wherein the material applied is over-moulded upon the strap or the respective section of strap.

~~23~~13. A headgear as claimed in any one of claim ~~15~~5 to claim ~~22~~ 12 wherein the material applied is smooth and comfortable for skin contact.

~~24~~14. A headgear as claimed in any one of claim ~~15~~5 to claim ~~23~~ 13 wherein the material applied is a Thermoplastic Elastomer.

~~25~~15. A headgear as claimed in any one of claim ~~12~~ 1 to claim ~~24~~ 14 wherein each surface region is a surface of wider surface area at an end to be located more adjacent to the patient interface than the surface area of an opposing end more distant from the patient interface.

~~26~~16. A headgear as claimed in claim ~~25~~ 15 wherein each surface region tapers from the relatively wider surface area to the relatively lesser surface area.

~~27~~17. A headgear as claimed in any one of claim ~~12~~ 1 to claim ~~26~~ 16 wherein the strap or each section of the strap including the surface region further comprises a component of the strap configured to releasably couple the patient interface.

18. A headgear as claimed in any one of claim 1 to claim 17, wherein a width of the relatively wider surface region at an end to be located more adjacent to the patient interface is similar to a width of a portion of the patient interface to which the strap couples.

19. A headgear as claimed in any one of claim 1 to claim 18, further comprising a connector, wherein the sleeve is configured to receivably retain the connector therein.

20. A headgear as claimed in claim 19, wherein the sleeve is configured to removably couple about the connector.

21. A headgear as claimed in claim 19 or claim 20, wherein the connector comprises a first male connection part, and the sleeve comprises a corresponding second female connection part to couple the sleeve and connector.

22. A headgear as claimed in any one of claim 19 to claim 21, wherein the connector is adapted to extend through a passage in the sleeve.

23. A headgear as claimed in claim 22, wherein the connector is substantially housed by the sleeve in a region adapted to locate adjacent the user's cheek in use.

~~28~~24. A headgear as claimed in any one of claim ~~12~~ 1 to claim ~~27~~ 23 wherein the or each portion of the user's face upon which the strap or the section of the strap is to be located includes a cheek of the user.

~~29~~25. A patient interface comprising a nasal cannula assembly and a headgear, said interface comprising:

the nasal cannula assembly comprising:

a face mount part having a base portion and at least one nasal prong extending from the base portion and capable of fitting in at least one of a user's nares, and

a gases flow manifold part having a gases inlet for receiving a flow of gas from a gas source, and a gases outlet for delivering the flow of gas to the at least one nasal prong of the face mount part, the manifold part being adapted to be received by the base portion of the face mount part to fluidly connect the outlet of the manifold with the at least one nasal prong of the face mount part, and wherein the manifold part further comprises a groove at the outlet to establish a gap between the base portion of the face mount part and the manifold part in a region of the base portion configured to locate adjacent a user's philtrum in use to thereby

eliminate or at least alleviate pressure on the user's septum from the manifold part in use, and

the headgear for a patient interface comprising:

a strap forming a part of the headgear for assisting in retaining or stabilising of a patient interface upon a user,

wherein the strap, or a section of the strap, to be located upon or to be placed in contact with the face or a portion of a user's face includes a surface region for frictionally engaging with the user's face, the surface region being of a relatively higher frictional surface material than the remainder of the strap forming the or a part of the headgear.

26. A patient interface as claimed in claim 25, wherein the or each surface region comprises a material applied to the strap or the respective section of strap.

27. A patient interface as claimed in claim 26, wherein the material applied is in the form of a sleeve positioned about the strap or the respective section of strap.

28. The patient interface of claim 27, wherein the face mount part comprises at least one elongate wing portion extending laterally from a side of the base portion, and wherein a width of the sleeve is of a substantially similar width to the at least one elongate wing portion.

29. A patient interface as claimed in any one of claim 25 to claim 28, wherein the face mount part comprises a pair of wing portions, the wing portions extending laterally from either side of the base portion, each of the wing portions comprising clip retention formations provided at the distal end of each wing, and wherein each of the terminal ends of the strap comprises a clip component, the clip retention formations configured to releasably couple a clip component of the strap to the nasal cannula assembly.

30. A patient interface as claimed in claim 29, wherein the clip component has a curved shape along its length to fit the contours of a user’s face in the region of the clip component being coupled with the clip retention formations.

31. A patient interface as claimed in claim 29 or claim 30, wherein the distal end portion of each wing is outwardly tapered to enlarge the contact surface area of the respective wing.