CLAIMS

1. A breathing conduit for providing a flow of respiratory gases, whether formed with a patient interface or as a separate conduit, the conduit comprising a collapsible portion, a lateral cross section of the collapsible portion comprising:

a first side for positioning against a user's face,

a second side opposite the first side and facing away from the user's face,

the first and second sides joined by first and second fold points, in an open configuration the first and second fold points spaced away from the user's face in use,

wherein an inner length of the first side between the fold points and an inner length of the second side between the fold points are substantially equal, and

in a partially closed or closed configuration the second side being moved towards or against the first side with the collapsible portion folding at the first and second fold points,

wherein the thickness of the first and second fold points is less than the thickness of the remainder of the lateral cross section of the collapsible portion.

2. The breathing conduit as claimed in claim 1, wherein the first side comprises a flat portion for positioning against the user's face.

3. The breathing conduit as claimed in claim 1 or 2, wherein when in the open configuration the second side is curved outwardly and/or

the first side comprises an outwardly curved portion between the flat portion and each of the first and second fold points.

4. The breathing conduit as claimed in any one of the preceding claims, wherein in the closed configuration the first and second fold points are moved to be against or adjacent the face of a user.

5. The breathing conduit as claimed in any one of the preceding claims, wherein the thickness of the outwardly curved portion tapers from the flat portion towards the respective fold point, from a greater thickness to a reduced thickness.

6. The breathing conduit as claimed in any one of the preceding claims, wherein the thickness of the first side and/or the second side tapers towards each fold point, from a greater thickness to a reduced thickness.

7. The breathing conduit as claimed in any one of the preceding claims, wherein in the open configuration the first side adjacent each fold point is at an angle to the flat portion such that an external angle between the first side adjacent the first and second

fold point and the flat portion is about 60 to 70 degrees, or about 62 to 68 degrees, or is about 64 to 66 degrees, or is about 65 degrees.

8. The breathing conduit as claimed in any one of the preceding claims, wherein the flat portion has a thickness of about 0.5mm, and the first and second fold points have a thickness of about 0.2mm.

9. The breathing conduit as claimed in any one of the preceding claims, wherein the flat portion has a length of about 5mm to 10mm or about 7mm, and/or

wherein a lateral width of the cross section of the collapsible portion is between 10mm and 15mm or about 13mm.

10. The breathing conduit, as claimed in any one of the preceding claims wherein the first side: tapers from a thickness of 0.5mm to a thinner thickness at the fold point and/or

diverges outwardly either side of the flat portion towards the respective fold point.

11. The breathing conduit as claimed in any one of the preceding claims, wherein the ratio of:

i) the thickness of the centre of the first and/or second sides of the lateral cross section and the thickness of the first and second fold points is in the range of about 1 to 8, and/or

ii) the thickness of the flat portion of the first side and the thickness of the first and second fold points is in the range of about 1 to 8, and/or

iii) the thickest part of the lateral cross section to the thinnest part of the lateral cross section being the fold points is in the range of about 1 to 8.

12. The breathing conduit as claimed in any one of the preceding claims, wherein the first and second fold points delimit or define the extent of the first and second sides, or the first and second sides each extend fully between the fold points, from the first fold point to the second fold point.

13. The breathing conduit as claimed in any one of the preceding claims, wherein the collapsible portion has reflective symmetry about a centre line of the lateral cross section, the centre line extending through a centre of the first and second sides of the lateral cross section.

14. The breathing conduit as claimed in any one of the preceding claims, wherein a distance between the first and second fold points is greater than a width of the flat portion.

15. The breathing conduit as claimed in any one of the preceding claims, wherein the collapsible portion is formed from an elastomeric/resilient material.

16. A breathing conduit for providing a flow of respiratory gases, whether formed with a patient interface or as a separate conduit, the conduit comprising a collapsible portion, a lateral cross section of the collapsible portion comprising:

a first side for positioning against a user's face,

a second side opposite the first side to face away from the user's face,

the first and second sides joined by first and second fold points,

the conduit adapted to collapse from an open configuration to a closed configuration by folding at the fold points so that the first side and the second side are positioned in contact or adjacent each other to substantially occlude flow through the conduit when in the closed configuration,

wherein the thickness of the first and second fold points is less than the thickness of the remainder of the lateral cross section of the collapsible portion.

17. The breathing conduit as claimed in claim 16, wherein an inner length of the first side between the first and second fold points and an inner length of the second side between the first and second fold points are substantially equal.

18. The breathing conduit as claimed in claim 16 or 17, wherein the lateral cross section has reflective symmetry about at least one of: a line extending through the first and second fold points, or

a centre line of the cross section, the centre line extending through a centre of the first and second sides of the cross section.

19. The breathing conduit as claimed in any one of claims 16 to 18, wherein the second side and/or the first side is curved outwardly when in the open configuration.

20. The breathing conduit as claimed in any one of claims 16 to 19, wherein in the closed configuration the first and second fold points are moved to be against or adjacent the face of a user in use.

21. The breathing conduit as claimed in any one of claims 16 to 20, wherein the thickness of the first side and/or the second side tapers towards each fold point, from a

greater thickness to a reduced thickness, the maximum thickness being at an apex of each of the first side and second side respectively.

22. The breathing conduit as claimed in any one of claims 16 to 21, wherein the second side is thinner than the first side.

23. The breathing conduit as claimed in any one of claims 16 to 22, wherein the ratio of:

i) the thickness of the centre of the first and/or second sides of the lateral cross section and the thickness of the first and second fold points is in the range of about 1 to 8, and/or

ii) the thickness of the flat portion of the first side and the thickness of the first and second fold points is in the range of about 1 to 8, and/or

iii) the thickest part of the lateral cross section to the thinnest part of the lateral cross section being the first and second fold points is in the range of about 1 to 8.

24. The breathing conduit as claimed in any one of claims 16 to 23, wherein in the open configuration a line tangential to the portion of the first side adjacent to each folding point is an angle to a line extending between the first and second fold points such that an angle between the line and the portion adjacent the fold point is less than 70 degrees, or less than 65 degrees, or less than 60 degrees, or less than 55 degrees, or less than 50 degrees, or less than 45 degrees, or less than 40 degrees, or less than 35 degrees, or less than 30 degrees, or is about 30 to 60 degrees, or is about 40 to 50 degrees, or is about 45 degrees.

25. The breathing conduit as claimed in any one of claims 16 to 24, wherein the first and second fold points delimit or define the extent of the first and second sides, or the first and second sides each extend fully between the fold points, from the first fold point to the second fold point.

26. The breathing conduit as claimed in any one of claims 16 to 25, wherein a maximum width of the lateral cross section is defined by a distance between the first and second fold points.

27. The breathing conduit as claimed in any one of claims 16 to 26, wherein the first and second sides are curved outwardly, the lateral cross section being substantially oval or elliptical but with the first and second sides converging to a point at each fold point.

28. The breathing conduit as claimed in any one of claims 1 to 27, wherein the conduit is a conduit portion of the patient interface.

29. The breathing conduit as claimed in claim 28, wherein the patient interface is a nasal cannula.

30. The patient interface comprising a breathing conduit as claimed in any one of claims 1 to 29, wherein the interface is a nasal interface comprising a single inlet, at least one nasal outlet, and the breathing conduit extending between the single inlet and the at least one nasal outlet.