CLAIMS:

1. A nasal interface comprising

a gases inlet,

a first prong and a second prong that are asymmetrical to each other,

and a gases flow path from the gases inlet to the first prong and the second prong,

wherein the first prong has a larger inner cross-sectional area in a direction transverse to gases flow through the first prong than a corresponding inner cross-sectional area of the second prong,

and wherein the first prong is downstream in the gases flow path from the second prong.

2. The nasal interface according to claim 1, wherein the direction transverse to gases flow is substantially perpendicular or normal to gases flow through the respective prong.

3. The nasal interface according to claim 1 or 2, wherein the inner cross-sectional areas are at outlets of the first and second prongs.

4. The nasal interface according to any one of claims 1 to 3, wherein the nasal interface comprises a cannula body comprising the first prong and the second prong.

5. The nasal interface according to claim 4, comprising a gases manifold, wherein the gases manifold is integral with the cannula body or is separate from and couplable with the cannula body.

6. The nasal interface according to claim 5, wherein the nasal interface comprises a face mount part, and wherein the first prong and the second prong comprise a pair of asymmetrical tubular nasal prongs, integrally moulded with or removably attached to the face mount part.

7. The nasal interface according to claim 6, wherein the face mount part comprises at least one substantially horizontal side entry passage to the interior of a base

portion or cannula body of the face mount part for releasably receiving an outlet of the gases manifold therethrough.

8. The nasal interface according to claim 7, wherein the face mount part comprises a pair of opposed side entry passages to the interior of the base portion or cannula body, each adapted to releasably receive the outlet of the gases manifold therethrough.

9. The nasal interface according to any one of claims 6 to 8, wherein the gases manifold is insertable into the face mount part, or wherein the gases manifold is insertable into the face mount part from either of two opposing horizontal directions.

10. The nasal interface according to any one of claims 6 to 9, wherein the gases manifold is formed from a relatively harder material and the face mount part provides a soft interfacing component to a patient, wherein the gases manifold fluidly couples the conduit to the nasal prongs of the face mount part.

11. The nasal interface according to any one of claims 1 to 10, wherein the first prong and second prong are configured to engage with nasal passages of a patient in an unsealed manner and/or wherein the first and second prongs allow exhaled gases to escape around the first and second prongs.

12. The nasal interface according to any one of claims 1 to 11, wherein the first and second prongs are configured to provide gases to a patient without interfering with the patient’s spontaneous respiration.

13. The nasal interface according to any one of claims 1 to 12, wherein the first and second prongs are curved to extend into a patient's nares in use and to provide a smooth flow path for gases to flow through, and/or inner surfaces of the first and second prongs are contoured to reduce noise, and/or bases of the first and second prongs include curved surfaces to provide for smoother gases flow, and/or the first and second prongs are substantially hollow and substantially tubular in shape, and/or the first and second prongs are consistent in diameter along their lengths or alternatively are shaped to fit the contours of nares of a patent, and/or a or the

face mount part is shaped to generally follow contours of a patient's face around the upper lip area, and/or a or the face mount part is moulded or pre-formed to be able to conform to and/or is pliable to adapt, accommodate and/or correspond with contours of a patient’s face in the region of the face where the nasal interface is to be located.

14. The nasal interface according to any one of claims 1 to 13, wherein a ratio of the inner cross-sectional area of the first prong to the inner cross-sectional area of the second prong 112 is between about 60:40 and about 80:20; or between about 65:35 and about 80:20; or between about 70:30 and about 80:20; or between about 70:30 and about 75:25; or about 70:30, about 71:29, about 72:28, about 73:27, about 74:26, or about 75:25; or between about 75:25 and 80:20; or about 75:25, about 76:24, about 77:23, about 78:22, about 79:21, or about 80:20.

15. The nasal interface according to any one of claims 1 to 14, wherein the gases flow path is defined by a flow channel that has a gases flow direction that is substantially perpendicular to gases flow paths through the first prong and the second prong, and wherein the first prong is more distal the gases inlet and the second prong is more proximal the gases inlet.

16. The nasal interface according to claim 15, wherein the nasal interface comprises a cannula body comprising the first prong and the second prong, wherein the nasal interface comprises a gases manifold, wherein the gases manifold is integral with the cannula body or is separate from and couplable with the cannula body, wherein a first section of the flow channel in the gases manifold has a first large vertical dimension, an opposite end of the flow channel forms a flow cavity in the cannula body that delivers gases to the first prong and the second prong, the flow cavity is in fluid communication with the flow passages through the first prong and the second prong when the gases manifold is in position in the cannula body, and wherein at least part of the flow cavity has a vertical dimension that is smaller than the first vertical dimension.

17. The nasal interface according to claim 16, wherein the gases manifold comprises one or more internal angled walls to provide a reduction in dimensions from the

first vertical dimension to the vertical dimension that is smaller than the first vertical dimension and to direct the gases flow into the first prong and/or the second prong.

18. The nasal interface according to any one of claims 1 to 17, wherein a or the gases manifold of the nasal interface is configured to not obstruct any part of the internal cross-section of either of the first prong and the second prong, or wherein the gases manifold is configured to partly obstruct the internal cross-section of one or both of the prongs.

19. The nasal interface according to any one of claims 1 to 18, wherein the nasal interface is configured such that at least about 60% of a total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong, or such that between about 60% and about 90% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong, or such that between about 60% and about 80% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong, or such that between about 65% and about 80% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong, or such that between about 70% and about 80% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong, or such that between about 70% and about 75% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong, or such that about 70% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong, or such that between about 75% and about 80% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong, or such that about 75% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong, or such that about 80% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong.

20. The nasal interface according to any one of claims 1 to 19, wherein the nasal interface is configured such that between about 60% and about 80% of a total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong when the total volumetric flow rate of gases flow into the gases inlet is at least about 5 litres per minute (lpm), or is more than about 5 lpm, or is between about 5 lpm and about 120 lpm, or is between about 5 lpm and about 70 lpm.

21. The nasal interface according to any one of claims 1 to 20, wherein the nasal interface is configured such that between about 70% and about 80% of a total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong when the total flow rate of gases flow into the gases inlet is between about 5 litres per minute (lpm) and about 70 lpm, or the nasal interface is configured such that between about 70% and about 75% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong when the total flow rate of gases flow into the gases inlet is between about 5 lpm and about 70 lpm, or the nasal interface is configured such that between about 75% and about 80% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong when the total flow rate of gases flow into the gases inlet is between about 5 lpm and about 70 lpm, or the nasal interface is configured such that about 75% of the total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong when the total flow rate of gases flow into the gases inlet is between about 5 lpm and about 70 lpm.

22. The nasal interface according to any one of claims 1 to 21, wherein the gases inlet is in fluid communication with a breathable tube.

23. The nasal interface according to claim 22, wherein water vapour can pass through a wall of the breathable tube, but liquid water and a bulk flow of gases cannot flow through the wall of the breathable tube.

24. The nasal interface according to any one of claims 1 to 23, wherein the nasal interface comprises a or the cannula body comprising the first prong and the second prong, and comprises a or the gases manifold, wherein the gases manifold

is reconfigurable relative to the cannula body between a first configuration and a second configuration, wherein the first configuration corresponds to the gases manifold being inserted into the cannula body from a first side of the cannula body such that the second prong is more proximal the gases inlet and the first prong is more distal the gases inlet, and the second configuration corresponds to the gases manifold being inserted into the cannula body from a second side of the cannula body such that the first prong is more proximal the gases inlet and the second prong is more distal the gases inlet.

25. The nasal interface according to any one of claims 1 to 24, wherein the first prong and the second prong are asymmetrical to each other and/or are not symmetrical to each other and/or differ in shape and configuration to each other and/or are asymmetrical when compared to each other.

26. A nasal interface comprising

a first prong and a second prong,

and a gases manifold comprising a gases inlet,

wherein the first prong and the second prong are in fluid communication with the gases inlet,

wherein the nasal interface is configured to cause an asymmetrical flow of gases at a patient's nares,

and wherein the gases inlet is in fluid communication with a breathable tube.

27. A nasal interface comprising

a first prong having a shape and a second prong having a shape,

and a gases manifold comprising a gases inlet,

wherein the first prong and the second prong are in fluid communication with the gases inlet,

wherein the first prong has a larger inner cross-sectional area in a direction transverse to gases flow through the first prong than a corresponding inner cross-sectional area of the second prong in a direction transverse to gases flow through the second prong, and

wherein at least the first prong is made of an elastomeric material that enables the first prong to deform and set its shape in use in response to temperature and contact with the patient's naris.

28. A nasal interface comprising

a cannula body comprising a first prong and a second prong, wherein the first prong and the second prong are asymmetrical to each other,

and a gases manifold comprising a gases inlet,

wherein the first prong and the second prong are in fluid communication with the gases inlet,

wherein the nasal interface is configured to cause an asymmetrical flow of gases at a patient's nares,

and wherein the gases manifold is reconfigurable relative to the cannula body between a first configuration and a second configuration, wherein the first configuration corresponds to the gases manifold being inserted into the cannula body from a first side of the cannula body and such that the second prong is more proximal the gases inlet and the first prong is more distal the gases inlet, and the second configuration corresponds to the gases manifold being inserted into the cannula body from a second side of the cannula body such that the first prong is more proximal the gases inlet and the second prong is more distal the gases inlet.

29. A nasal interface comprising

a first prong and a second prong that are asymmetrical to each other,

and a gases manifold comprising a gases inlet,

wherein the first prong and the second prong are in fluid communication with the gases inlet,

and wherein the nasal interface is configured such that at least about 60% of a total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong.

30. A nasal interface comprising

a first prong and a second prong that are asymmetrical to each other,

and a gases manifold comprising a gases inlet,

wherein the first prong and the second prong are in fluid communication with the gases inlet,

wherein the nasal interface is configured to cause an asymmetrical flow of gases at a patient's nares,

and wherein the nasal interface is configured such that between about 60% and about 80% of a total volumetric flow rate of gases flow into the gases inlet is delivered out of the nasal interface through the first prong when the total volumetric flow rate of gases flow into the gases inlet is between about 5 liters per minute (lpm) and about 70 lpm.

31. A nasal interface comprising

a gases inlet,

a first prong and a second prong that are asymmetrical to each other,

and a gases manifold comprising a gases inlet,

wherein the first prong and the second prong are in fluid communication with the gases inlet,

wherein the first prong has a larger inner diameter and/or inner cross-sectional area in a direction transverse to gases flow through the first prong than a corresponding inner diameter and/or inner cross-sectional area of the second prong in a direction transverse to gases flow through the second prong.

32. A nasal interface comprising

a first prong and a second prong that are asymmetrical to each other,

and a gases manifold comprising a gases inlet,

wherein the first prong and the second prong are in fluid communication with the gases inlet,

wherein the first prong has a larger inner cross-sectional area in a direction transverse to gases flow through the first prong than a corresponding inner cross-sectional area of the second prong in a direction transverse to gases flow through the second prong,

wherein the second prong has a substantially ovate or substantially elliptical cross-sectional shape in the direction transverse to gases flow through the second prong, the substantially ovate or substantially elliptical cross-sectional shape having a first ratio of a widest dimension to a narrowest dimension,

and wherein the first prong has a less ovate or less elliptical cross-sectional shape in the direction transverse to gases flow through the first prong, the less ovate or less cross-sectional shape having either a second ratio of a widest dimension to a narrowest dimension that is smaller than the first ratio or a substantially circular cross-sectional shape.

33. A nasal interface comprising

a cannula body comprising a first prong and a second prong that are asymmetrical to each other,

and a gases manifold comprising a gases inlet,

wherein the first prong and the second prong are in fluid communication with the gases inlet,

and wherein an external surface of the cannula body between the first prong and the second prong comprises a dip.

34. A nasal interface comprising

a cannula body comprising a first prong and a second prong that are asymmetrical to each other,

and a gases manifold comprising a gases inlet,

wherein the first prong and the second prong are in fluid communication with the gases inlet,

the nasal interface further comprising two side arms comprising wing portions extending laterally from either side of the cannula body,

the nasal interface comprising or provided in combination a tube retention clip.

35. A nasal interface comprising

a first prong and a second prong that are asymmetrical to each other,

and a gases manifold comprising a gases inlet,

wherein the first prong and the second prong are in fluid communication with the gases inlet,

wherein the nasal interface is configured to cause an asymmetrical flow of gases at a patient's nares,

wherein the first prong has an inner cross-sectional area of between about 15 mm^2 and about 80 mm^2, wherein the second prong has an inner cross-sectional area of between about 5 mm^2 and about 50 mm^2, wherein a combined inner cross-sectional area of the first prong and the second prong is between about 20 mm^2 and about 130 mm^2, and wherein a ratio of the inner cross-sectional area of the first prong to the inner cross-sectional area of the second prong is between about 60:40 and about 80:20.

36. A respiratory therapy system comprising:

a respiratory therapy apparatus comprising:

a controller;

a blood oxygen saturation sensor;

an ambient air inlet;

an oxygen inlet;

a valve in fluid communication with the oxygen inlet to control a flow of oxygen through the oxygen inlet; and

a gases outlet;

wherein the controller is configured to control the valve based on at least one measurement of oxygen saturation from the blood oxygen saturation sensor; and

a patient interface comprising a nasal interface, wherein the nasal interface comprises:

a first prong and a second prong that are asymmetrical to each other;

and a gases manifold comprising a gases inlet, wherein the first prong and the second prong are in fluid communication with the gases inlet;

wherein the nasal interface is configured to cause an asymmetrical flow of gases at a patient’s nares.

37. A respiratory therapy system comprising:

a respiratory therapy apparatus comprising:

a gases inlet;

a gases outlet;

a nebulizer to deliver one or more substances into a gases flow; and

a patient interface comprising a nasal interface, wherein the nasal interface comprises:

a first prong and a second prong that are asymmetrical to each other;

a gases manifold comprising a gases inlet, wherein the first prong and the second prong are in fluid communication with the gases inlet, wherein the gases inlet is in fluid communication with the gases outlet to receive gases and the one or more substances from the respiratory therapy apparatus;

wherein the nasal interface is configured to cause an asymmetrical flow of gases at a patient’s nares.