CLAIMS:

1. A nasal interface comprising:

an interface body configured to substantially form a seal with a patient's nasal airways, the interface body configured to deliver gases to a first naris of the patient and to a second naris of the patient,

and a gases inlet for delivery of respiratory gases into the nasal interface, wherein the gases inlet is in fluid communication with the interface body to deliver the respiratory gases from the gases inlet through the interface body to the first naris and second naris of the patient in use, and

wherein the nasal interface is configured to receive incoming gases from the gases inlet and to provide, from the incoming gases, a first flow stream of gases configured to be substantially provided to the first naris of the patient in use and a second flow stream of gases configured to be substantially provided to the second naris of the patient in use, and is configured to direct more of the incoming gases to the first flow stream of gases than to the second flow stream of gases, to create an asymmetric flow of gases at a patient's nasal airways throughout a respiratory cycle of a patient.

2. The nasal interface according to claim 1, wherein the interface body comprises a first outlet or first outlet portion configured to substantially deliver gases to the first naris of the patient, and comprises a second outlet or second outlet portion configured to substantially deliver gases to the second naris of the patient.

3. The nasal interface according to claim 2, wherein the gases inlet is at least partly aligned with the first outlet or first outlet portion and is less aligned or is not aligned with the second outlet or second outlet portion.

4. The nasal interface according to claim 3, wherein the gases inlet is substantially axially aligned with the first outlet or first outlet portion.

5. The nasal interface according to claim 4, wherein at least half of a transverse cross-sectional area of the gases inlet is axially aligned with at least half of a transverse cross-sectional area of the first outlet or first outlet portion.

6. The nasal interface according to any one of claims 3 to 5, wherein the gases inlet comprises an outer portion for connecting to a respiratory conduit to provide a flow of gases for a gases source to the interface body, and further comprises an inner portion in fluid communication with the interface body.

7. The nasal interface according to claim 6, wherein the inner portion of the gases inlet is at least partly aligned with the first outlet or first outlet portion.

8. The nasal interface according to claim 2, wherein the gases inlet is angled toward the first outlet or first outlet portion.

9. The nasal interface according to any one of claims 2 to 8, wherein the first flow stream of gases has at least one dimension that is larger than a corresponding dimension of the second flow stream of gases.

10. The nasal interface according to claim 9, wherein the at least one dimension comprises a lateral dimension of the first flow stream of gases, and wherein the corresponding dimension comprises a lateral dimension of the second flow stream of gases.

11. The nasal interface according to claim 9 or 10, wherein the first flow stream of gases has a larger diameter, cross-sectional area, and/or volume than a corresponding diameter, cross-sectional area, and/or volume of the second flow stream of gases.

12. The nasal interface according to any one of claims 2 to 11, wherein a ratio of the cross-sectional area of the first flow stream of gases to the corresponding cross-sectional area of the second flow stream of gases is between about 2:1 and about 5:1, optionally between about 2:1 and about 4:1, optionally between about 2.5:1 and about 3.5:1, optionally about 3:1.

13. The nasal interface according to any one of claims 2 to 12, wherein the first outlet or first outlet portion and the second outlet or second outlet portion comprise substantially the same cross-sectional areas.

14. The nasal interface according to any one of claims 2 to 13, wherein the nasal interface is configured to deliver a lower velocity of gases flow through the first

outlet or first outlet portion than a velocity of gases flow through the second outlet or second outlet portion during an inhalation phase of a respiratory cycle.

15. The nasal interface according to any one of claims 2 to 14, wherein the nasal interface is configured to deliver a higher pressure of gases flow through the first outlet or first outlet portion than a pressure of gases flow through the second outlet or second outlet portion during an inhalation phase of a respiratory cycle.

16. The nasal interface according to any one of claims 2 to 15, comprising a single outlet for delivering gases to the first naris and second naris of the patient, wherein the single outlet comprises the first outlet portion and the second outlet portion, and wherein the nasal interface is configured such that the first flow stream of gases is configured to be substantially delivered to the first outlet portion and the second flow stream of gases is configured to be substantially delivered to the second outlet portion.

17. The nasal interface according to any one of claims 2 to 16, wherein the interface body comprises a first nasal delivery element comprising the first outlet and a second nasal delivery element comprising the second outlet, wherein the nasal interface is configured such that the first flow stream of gases is configured to be substantially delivered to the first nasal delivery element and the second flow stream of gases is configured to be substantially delivered to the second nasal delivery element, and wherein the first nasal delivery element and the second nasal delivery element are each configured to seal with a respective naris of a patient.

18. The nasal interface according to any one of claims 2 to 17, comprising a flow director that is configured to direct more of the incoming gases from the gases inlet to the first flow stream of gases than to the second flow stream of gases.

19. The nasal interface according to claim 18, comprising a connector or elbow for connecting a respiratory conduit to the patient interface.

20. The nasal interface according to claim 19, wherein the connector or elbow comprises or is the flow director.

21. The nasal interface according to any one of claims 18 to 20, wherein the flow director comprises a nozzle that is configured to accelerate flow towards the first outlet or first outlet portion.

22. The nasal interface according to any one of claims 1 to 21, that is configured to direct more of the incoming gases to the first flow stream of gases than to the second flow stream of gases during an inhalation phase of the respiratory cycle.

23. The nasal interface according to any one of claims 1 to 22, wherein the interface body is a nasal cushion.

24. The nasal interface according to any one of claims 1 to 23, that is configured to simultaneously deliver the respiratory gases from the gases inlet through the interface body to both the first naris and second naris of the patient in use.

25. A nasal interface comprising:

an interface body configured to substantially form a seal with a patient's nasal airways, the interface body configured to deliver gases to a first naris of the patient and to a second naris of the patient,

and a gases inlet for delivery of respiratory gases into the nasal interface, wherein the gases inlet is in fluid communication with the interface body to deliver the respiratory gases from the gases inlet through the interface body to the first naris and second naris of the patient in use, and

wherein the nasal interface is configured to provide a larger dynamic pressure at the first naris of the patient in use and to provide a smaller dynamic pressure at the second naris of the patient in use, to create an asymmetric flow of gases at a patient's nasal airways throughout a respiratory cycle of a patient.

26. The nasal interface according to claim 25, wherein the interface body comprises a first outlet or first outlet portion configured to deliver gases to the first naris of the patient, and comprises a second outlet or second outlet portion configured to deliver gases to the second naris of the patient.

27. The nasal interface according to claim 26, comprising a flow director that is configured to direct more of the incoming gases from the gases inlet to the first outlet or first outlet portion than to the second outlet or second outlet portion.

28. The nasal interface according to claim 27, wherein the flow director comprises a nozzle that is configured to accelerate flow towards the first outlet or first outlet portion.

29. The nasal interface according to any one of claims 25 to 28, wherein the nasal interface is configured to receive incoming gases from the gases inlet and provide, from the incoming gases, a first flow stream of gases configured to be substantially provided to the first naris of the patient in use and a second flow stream of gases configured to be substantially provided to the second naris of the patient in use, and is configured to direct more of the incoming gases to the first flow stream of gases than to the second flow stream of gases.

30. The nasal interface according to claim 30, comprising a flow splitter configured to unevenly split the flow from the gases inlet into the first flow stream of gases and the second flow stream of gases.

31. The nasal interface according to any one of claims 25 to 30, that is configured to simultaneously deliver the respiratory gases from the gases inlet through the interface body to both the first naris and second naris of the patient in use.

32. A respiratory therapy system comprising:

a gases source for respiratory gases and configured to provide pressure controlled respiratory gases;

a breathing tube to receive the pressure controlled respiratory gases; and

the nasal interface according to any one of claims 1 to 31 in fluid communication with the breathing tube to deliver the respiratory gases to a patient.

33. The respiratory therapy system according to claim 32, wherein the interface body comprises a first outlet or first outlet portion configured to deliver gases to the first naris of the patient, and comprises a second outlet or second outlet portion configured to deliver gases to the second naris of the patient, and wherein the nasal interface is configured to create a pressure differential between the first outlet or first outlet portion and the second outlet or second outlet portion when gases are delivered from the gases inlet to both the first outlet or first outlet portion and the second outlet or second outlet portion such that pressure at the

first outlet or first outlet portion is higher than pressure at the second outlet or second outlet portion.

34. The respiratory therapy system according to claim 32 or 33, comprising a respiratory conduit to receive the pressure controlled respiratory gases from the breathing tube, wherein the respiratory conduit is in fluid communication with the breathing tube and the gases inlet of the nasal interface.

35. The respiratory therapy system according to any one of claims 32 to 34, further comprising a humidifier configured to humidify said pressure controlled respiratory gases prior to their delivery to the nasal interface.

36. The respiratory therapy system according to claim 35, wherein the breathing tube is a heated breathing tube, and is configured to receive the pressure controlled respiratory gases from the humidifier.

37. The respiratory therapy system according to any one of claims 32 to 36, wherein a temperature of gases flow exiting the nasal interface for delivery to the patient’s nasal airways is between about 31°C and about 41°C, optionally more than 31°C and up to about 41°C, optionally between about 36°C and about 39°C, optionally about 37°C.