In this specification, where reference has been made to external sources of information, including patent specifications and other documents, this is generally for the purpose of providing a context for discussing the features of the present invention. Unless stated otherwise, reference to such sources of information is not to be construed, in any jurisdiction, as an admission that such sources of information are prior art or form part of the common general knowledge in the art.

SUMMARY

It is an object of this disclosure to provide a breathing conduit or a patient interface or a headgear connector which goes at least some way towards overcoming one or more of the above mentioned problems or difficulties, or to provide the industry/public with a useful choice.

In accordance with at least one of the embodiments disclosed herein, a breathing conduit for providing a flow of respiratory gases, whether formed with a patient interface or as a separate conduit, comprises a collapsible portion, a lateral cross section of the collapsible portion comprising:

a first side comprising a flat portion 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.

In some embodiments, the first side comprises an outwardly curved portion between the flat portion and each of the first and second fold points when in the open configuration.

In some embodiments, 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.

In some embodiments, the first side is curved outwardly when in the open configuration.

In some embodiments, the nasal interface is a nasal cannula.

In some embodiments, the collapsible portion is formed from an elastomeric/resilient material, for example silicone.

In accordance with at least one of the embodiments disclosed herein, a breathing conduit for providing a flow of respiratory gases, whether formed with a patient interface or as a separate conduit, comprises 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.

In some embodiments, 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.

In some embodiments, the lateral cross section has reflective symmetry about a line extending through the first and second fold points.

In some embodiments, the lateral cross section has reflective symmetry about a centre line of the cross section, the centre line extending through a centre of the first and second sides of the cross section.

In some embodiments, the second side is curved outwardly when in the open configuration.

In some embodiments, the first side is curved outwardly when in the open configuration.

In some embodiments, in the closed configuration the fold points are moved to be against or adjacent the face of a user.

In some embodiments, 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.