

WHAT IS CLAIMED IS:

1. A PAP kit comprising an interface with a first seal having a first size and a second seal having a second size that is different than the first size, wherein the second size is between 1.9% to 22.9% larger in width than the first size when measured horizontally between edges of an opening of the seal, and 5.4% to 18.5% larger in height than the first size when measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region, wherein the width of the second size is between 58.1% to 67.0% of the height of the second size.

2. The kit of Claim 1, further comprising a frame, wherein the first seal and the second seal are configured to be removably and interchangeably connectable to the frame; and

~~3. The kit of Claim 1 or 2,~~ further comprising at least one headgear, wherein the at least one headgear is configured to be removably and interchangeably connectable to the first seal and the second seal, or the at least one headgear comprises a first headgear configured to be removably connectable to the first seal and a second headgear configured to be removably connectable to the second seal.

34. The kit of ~~any one of Claims 1 or 2-3,~~ wherein the first size has a height of about 81mm when measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region and a width of about 50.5mm when measured horizontally between edges of an opening of the seal,

wherein the height and width of the first and second size may be within a range of ± 2.5 mm of the disclosed dimensions.

45. The kit of any one of Claims 1-~~34,~~ wherein the second size has a height of about 90.5mm when measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region and a width of about 56.5mm when measured horizontally between edges of an opening of the seal; and

wherein the height and width of the first and second size may be within a range of ± 2.5 mm of the disclosed dimensions.

~~6. The kit of any one of Claims 1-5, wherein the first size seals a maximum lip length of 65mm.~~

7. — ~~The kit of any one of Claims 1-6, wherein the second size seals a maximum lip length of 76mm.~~

8. — ~~The kit of any one of Claims 1-7, wherein a lip length between 51.5mm and 59.5mm is sealed by both the first size and the second size.~~

9. — ~~The kit of any one of Claims 1-8, wherein the second size seals users having a Sublabiale-Sellion height between 83mm and 103mm.~~

10. — ~~The kit of any one of Claims 1-9, wherein a Sublabiale-Sellion height between 84.5mm and 96mm may be sealed by both the first size and the second size.~~

11. — ~~The kit of any one of Claims 1-10, wherein a width of an opening of the second size is approximately 0% to 22.9% greater than a width of an opening of the first size, when measured horizontally between edges of the openings.~~

512. The kit of any one of Claims 1-411, wherein a width of an opening of the second size is ~~approximately about~~ 11.9% greater than a width of an opening of the first size.

613. The kit of any one of Claims 1-512, wherein a width of an opening of the second size is approximately 1mm to 11mm greater than a width of an opening of the first size, when measured horizontally between edges of the openings.

714. The kit of Claim 613, wherein a width of an opening of the second size is approximately 6mm greater than a width of an opening of the first size.

815. The kit of any one of Claims 1-714, wherein a ~~difference in height is approximately twice a difference in width between the first size and~~ of the second size is approximately 4.5mm to 14.5mm greater than a height of the first size, ~~the height being when~~ measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region ~~and the width being measured horizontally between edges of an opening of the seal.~~

916. The kit of any one of Claims 1-815, wherein a difference in height is approximately twice a difference in width between the first size and the second size, ~~is equal to or less than 9.5mm,~~ the height being measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region and the width being measured horizontally between edges of an opening of the seal.

17. — ~~The kit of any one of Claims 1-16, wherein a difference in height between the first size and the second size is equal to or less than 11.7%, the height being measured along~~

~~a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region.~~

~~18.—The kit of any one of Claims 1-17, wherein a width of the first size is between 57.5% to 67.5% of a height of the first size, the height being measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region and the width being measured horizontally between edges of an opening of the seal.~~

~~19.—The kit of Claim 18, wherein the width of the first size is 62.3% of the height of the first size.~~

~~20.—The kit of any one of Claims 1-19, wherein a width of the second size is between 58.1% to 67.0% of a height of the second size, the height being measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region and the width being measured horizontally between edges of an opening of the seal.~~

~~21.—The kit of Claim 20, wherein the width of the second size is 62.4% of the height of the second size.~~

~~22.—The kit of any one of Claims 1-21, wherein the first size and the second size have equal width versus height proportions.~~

~~23.—The kit of any one of Claims 1-22, wherein an upper portion of the first and second seals each include a seal having a forwardly deflectable upper portion, wherein the heights are measured in a relaxed position of the forwardly deflectable upper portions.~~

~~24.—The kit of Claim 23, wherein the forwardly deflectable upper portion rolls in a forward direction relative to a lower portion of the seal.~~

~~25.—The kit of any one of Claims 1-24, further comprising an automatically adjusting headgear.~~

~~26.—A mask system comprising a mask frame, a first seal and a second seal that are interchangeably mountable to the mask frame, the first seal having a first size and a second seal having a second size different than the first size.~~

~~27.—The mask system of Claim 26, wherein the first size has a height of about 81mm when measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region and a width of about 50.5mm when measured horizontally between edges of an opening of the seal.~~

28. — ~~The mask system of Claim 26 or 27, wherein the second size has a height of about 90.5mm when measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region and a width of about 56.5mm when measured horizontally between edges of an opening of the seal.~~

29. — ~~The mask system of any one of Claims 26-28, wherein the first size seals a maximum lip length of 65mm.~~

30. — ~~The mask system of any one of Claims 26-29, wherein the second size seals a maximum lip length of 76mm.~~

31. — ~~The mask system of any one of Claims 26-30, wherein a lip length between 51.5mm and 59.5mm is sealed by both the first size and the second size.~~

32. — ~~The mask system of any one of Claims 26-31, wherein the second size seals users having a Sublabiale-Sellion height between 83mm and 103mm.~~

33. — ~~The mask system of any one of Claims 26-32, wherein a Sublabiale-Sellion height between 84.5mm and 96mm may be sealed by both the first size and the second size.~~

34. — ~~The mask system of any one of Claims 26-33, wherein a width of an opening of the second size is approximately 0% to 22.9% greater than a width of an opening of the first size, when measured horizontally between edges of the openings.~~

35. — ~~The mask system of Claim 34, wherein a width of an opening of the second size is approximately 11.9% greater than a width of an opening of the first size. —~~

36. — ~~The mask system of any one of Claims 26-35, wherein a width of an opening of the second size is approximately 1mm to 11mm greater than a width of an opening of the first size, when measured horizontally between edges of the openings.~~

37. — ~~The mask system of Claim 36, wherein a width of an opening of the second size is approximately 6mm greater than a width of an opening of the first size.~~

38. — ~~The mask system of any one of Claims 26-37, wherein a difference in height is approximately twice a difference in width between the first size and the second size, the height being measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region and the width being measured horizontally between edges of an opening of the seal.~~

1039. The ~~kit~~mask system of any one of Claims ~~1-9~~26-28, wherein a difference in height between the first size and the second size is equal to or less than 9.5mm, the height

being measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region.

1140. The ~~mask-system~~kit of any one of Claims 1-10~~26-39~~, wherein a difference in height between the first size and the second size is equal to or less than 11.7%, the height being measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region.

1241. The ~~mask-system~~kit of any one of Claims 1-11~~26-40~~, wherein a width of the first size is between 57.5% to 67.5% of a height of the first size, the height being measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region and the width being measured horizontally between edges of an opening of the seal.

1342. The ~~mask-system~~kit of Claim 1241, wherein the width of the first size is 62.3% of the height of the first size.

~~43.—The mask system of any one of Claims 26-42, wherein a width of the second size is between 58.1% to 67.0% of a height of the second size, the height being measured along a center line of the seal between a midpoint in a chin region and a midpoint in a nasal bridge region and the width being measured horizontally between edges of an opening of the seal.~~

1444. The ~~mask-system~~kit of Claim 1343, wherein the width of the second size is 62.4% of the height of the second size.

1545. The ~~mask-system~~kit of any one of Claims 1-14~~26-44~~, wherein the first size and the second size have equal width versus height proportions.

1646. The ~~mask-system~~kit of any one of Claims 1-15~~26-45~~, wherein an upper portion of the first and second seals each include a seal having a forwardly-deflectable upper portion, wherein the heights are measured in a relaxed position of the forwardly-deflectable upper portions.

1747. The ~~mask-system~~kit of Claim 1646, wherein the forwardly-deflectable upper portion rolls in a forward direction relative to a lower portion of the seal.

~~48.—The mask system of any one of Claims 26-47, further comprising an automatically adjusting headgear.~~

~~49. — A method of providing a mask system, comprising providing a mask frame, a first seal and a second seal, the first seal and the second seal being interchangeable with each other and removably connectable to the mask frame, wherein the first seal has a size determined by facial geometry data of a female population sample and the second seal has a size based on facial geometry data of a male population sample.~~

~~50. — The method of Claim 49, wherein a width of the first seal is between 57.5% to 67.5% of a height of the first seal.~~

~~51. — The method of Claim 50, wherein the width of the first seal is 62.3% of the height of the first seal.~~

~~52. — The method of any one of Claims 49-51, wherein a width of the second seal is between 58.1% to 67.0% of a height of the second seal.~~

~~53. — The method of Claim 52, wherein the width of the second seal is 62.4% of the height of the second seal.~~

~~54. — The method of any one of Claims 49-53, wherein a width of the second seal is approximately 0% to 22.9% greater than a width of the first seal.~~

~~55. — The method of Claim 49, wherein a width of the second seal is approximately 11.9% greater than a width of the first seal.~~

~~56. — The method of any one of Claims 49-55, wherein a difference in height between the first seal and the second seal is equal to or less than 11.7%.~~

~~57. — The method of any one of Claims 49-56, wherein the first seal and the second seal have equal width versus height proportions.~~

~~58. — A method of using a mask system, comprising selecting one of a first seal having a size determined by facial geometry data of a female population sample and a second seal having a size based on facial geometry data of a male population sample, and attaching the selected seal to a seal support.~~

~~59. — The method of Claim 58, wherein the first seal and the second seal have a size based on at least one of face lengths, lip lengths or Sublabiale-Sellion heights.~~

~~60. — The method of Claim 58 or 59, wherein the first seal and the second seal have a size based on median values of at least one of face lengths, lip lengths or Sublabiale-Sellion heights.~~

~~61. — The method of any one of Claims 58-60, wherein the first seal and the second seal are configured to seal 95% of the male and female population samples.~~

~~62. — The method of any one of Claims 58-61, wherein a width of the first seal is between 57.5% to 67.5% of a height of the first seal.~~

~~63. — The method of Claim 62, wherein the width of the first seal is 62.3% of the height of the first seal.~~

~~64. — The method of any one of Claims 58-63, wherein a width of the second seal is between 58.1% to 67.0% of a height of the second seal.~~

~~65. — The method of Claim 64, wherein the width of the second seal is 62.4% of the height of the second seal.~~

~~66. — The method of any one of Claims 58-65, wherein a width of the second seal is approximately 0% to 22.9% greater than a width of the first seal.~~

~~67. — The method of Claim 66, wherein a width of the second seal is approximately 11.9% greater than a width of the first seal.~~

~~68. — The method of any one of Claims 58-67, wherein a difference in height between the first seal and the second seal is equal to or less than 11.7%.~~

~~69. — The method of any one of Claims 58-68, wherein the first seal and the second seal have equal width versus height proportions.~~