

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF MICHIGAN**

SOLMETEX LLC,

Plaintiffs,

v.

ASCENTCARE DENTAL PRODUCTS,
INC.,

Defendants.

Civil Action No. 1:24-cv-00954-rjj-mv

The Honorable Robert J. Jonker

ASCENTCARE'S UPDATED PROPOSED CLAIM CONSTRUCTIONS

Following the meet and confer on September 22, 2025, Ascentcare provides the following proposed terms for constructions for U.S. Patent No. 11,589,969 (“the ’969 Patent”); U.S. Patent No. 11,589,970 (“the ’970 Patent”); U.S. Patent No. 11,744,686 (“the ’686 Patent”); U.S. Patent No. 12,011,329 (“the ’329 Patent”); U.S. Patent No. 12,290,418 (“the ’418 Patent”); U.S. Patent No. 11,826,217 (“the ’217 Patent”); U.S. Patent No. 12,167,948 (“the ’948 Patent”); U.S. Design Patent No. D962,438 (“the ’438 Patent”); U.S. Design Patent No. D962,439 (“the ’439 Patent”); and U.S. Design Patent No. D1,037,436 (“the ’436 Patent”).

’969 Patent	Claim	Term	Proposed Construction
’969	19	“main body portion”	The portion of the mouthpiece between, but not including, the cheek retractor portion and the suction connector and mouth prop, if present
’969	19	“pocket”	An enclosure without subdivisions that spans between the anterior wall, the posterior wall, an inferior sidewall and/or a superior sidewall
’969	19	“an interior space”	An open space defined by the pocket
’969	19	“a second wall having a shape that corresponds to the shape of the first wall, the shape of the second wall defined by one or more corresponding edges along one or more corresponding sides,”	A second wall having a substantially identical shape to the shape of the first wall, such that the edges of the second wall are aligned with the edges of the first wall
’969	19	“bridge structure”	An internal structure attached to the second wall that prevents the collapse of the first and second wall during suction
’969	19	“an interior surface of the second wall”	a surface of the second wall facing the first wall between, but not including, the edges of the second wall
’969	19	“a connecting wall that connects one or more edges of the first wall to the one or more corresponding edges of the second wall across a	A sidewall that connects either the inferior edge of the first wall to the inferior edge of the second wall or the superior edge of the first wall to the superior edge of the second wall

		span between the first wall and the second wall”	
’969	19	“crest”	the full extending distance of a projection of the internal bridge structure
’969	19	“trough”	a location of the internal bridge structure substantially flush to the surface of the second wall within the interior space
’969	19	“wherein the protrusions of the bridge structure protrude from the interior surface of the second wall toward the first wall in a wave shape comprising one or more crests and one or more troughs	No construction necessary, except for “bridge structure” and “interior surface of the second wall”
’970 Patent	Claim	Term	
’970	18	“main body portion”	The portion of the mouthpiece between, but not including, the cheek retractor portion and the suction connector and mouth prop, if present
’970	18	“pocket”	An enclosure without subdivisions that spans between the anterior wall, the posterior wall, an inferior sidewall and/or a superior sidewall
’970	18	“interior space”	An open space defined by the pocket
’970	18	“a connecting wall that connects one or more edges of the first wall to the one or more corresponding edges of the second wall across a span between the first wall and the second wall”	A sidewall that connects either the inferior edge of the first wall to the inferior edge of the second wall or the superior edge of the first wall to the superior edge of the second wall
’970	18	“bridge structure”	An internal structure attached to the second wall that prevents the collapse of the first and second wall during suction
’970	18	“the interior surface of the second wall”	a surface of the second wall facing the first wall between, but not including, the edges of the second wall
’970	18	“crest” / “trough”	the full extending distance of a projection of the internal bridge structure / a location of the internal bridge structure substantially flush to the surface of the second wall within the interior space
’970	18	“wherein the plurality of protrusions of the bridge structure protrude from the interior surface of the	No construction necessary, except for “bridge structure” and “the interior surface of the second wall”

		second wall in a wave shape comprising one or more crests and one or more troughs”	
’970	18	“a mouth prop molded in one piece”	No construction necessary”
’686 Patent	Claim	Term	
’686	12	“main body”	The portion of the mouthpiece between, but not including, the cheek retractor portion and the suction connector and mouth prop, if present
’686	12	“a connecting wall that connects one of the first edges of the first wall to one of the second edges of the second wall across a distance between the first wall and the second wall”	A sidewall that connects either the inferior edge of the first wall to the inferior edge of the second wall or the superior edge of the first wall to the superior edge of the second wall
’686	12	“interior space” / “space”	An open space defined by an enclosure without subdivisions that spans between the anterior wall, the posterior wall, an inferior sidewall and/or a superior sidewall
’686	12	“bridge structure”	An internal structure attached to the second wall that prevents the collapse of the first and second wall during suction
’686	12	“the interior surface of the second wall”	a surface of the second wall facing the first wall between, but not including, the edges of the second wall
’686	12	“crest” / “trough”	the full extending distance of a projection of the internal bridge structure / a location of the internal bridge structure substantially flush to the surface of the second wall within the interior space
’686	12	“wherein the plurality of protrusions of the bridge structure protrude in a wave shape comprising one or more crests and one or more troughs”	No construction necessary, except for “bridge structure”
’329 Patent	Claim	Term	
’329	9, 30	“main body portion”	The portion of the mouthpiece between, but not including, the cheek retractor portion and the suction connector and mouth prop, if present
’329	9, 30	“inner cavity”	An open space defined by an enclosure without subdivisions that spans between the anterior wall, the posterior wall, an inferior sidewall and/or a superior sidewall

'329	9, 30	"a plurality of protrusions"	An internal structure attached to the second wall that prevents the collapse of the first and second wall during suction
'329	9, 30	"third wall connecting the first wall and the second wall such that the first wall is spaced from the second wall to define an inner cavity"	Indefinite Or, in the alternative, A sidewall that connects either the inferior edge of the first wall to the inferior edge of the second wall or the superior edge of the first wall to the superior edge of the second wall
'329	9, 30	"an interior surface of the second wall"	a surface of the second wall facing the first wall between, but not including, the edges of the second wall
'329	30	"wherein the first wall and the second wall are shaped such that the first edge of the first wall corresponds to the third edge of the second wall and the second edge of the first wall corresponds to the fourth edge of the second wall,"	A second wall having a substantially identical shape to the shape of the first wall such that the edges of the second wall are aligned with the edges of the first wall
'329	9, 30	"crest" / "trough"	the full extending distance of a projection of the internal bridge structure / a location of the internal bridge structure substantially flush to the surface of the second wall within the interior space
'329	10	"cutout has a shield shape"	No construction necessary
'418 Patent	Claim	Term	
'418	1, 11, 20	"main body portion / "main body"	The portion of the mouthpiece between, but not including, the cheek retractor portion and the suction connector and mouth prop, if present
'418	1, 11, 20	"an interior surface of the second wall"	a surface of the second wall facing the first wall between, but not including, the edges of the second wall
'418	1, 11, 20	"a plurality of crests of a wave-like structure"; "a plurality of crests"	An internal structure attached to the second wall that prevents the collapse of the first and second wall during suction
'418	1	"wherein the first wall and the second wall are shaped such that the first edge of	A second wall having a substantially identical shape to the shape of the first wall

		the first wall corresponds in shape to the third edge of the second wall and the second edge of the first wall corresponds in shape to the fourth edge of the second wall; and wherein the first shape of the first wall corresponds to the second shape of the second wall”	such that the edges of the second wall are aligned with the edges of the first wall
’418	1, 11	“third wall connecting the first wall and the second wall such that the first wall is spaced from the second wall”	Indefinite Or, in the alternative, A sidewall that connects either the inferior edge of the first wall to the inferior edge of the second wall or the superior edge of the first wall to the superior edge of the second wall
’418	20	“a third wall that connects one of the first edges of the first wall to one of the second edges of the second wall”	A sidewall that connects either the inferior edge of the first wall to the inferior edge of the second wall or the superior edge of the first wall to the superior edge of the second wall
’418	20	“interior space”	An open space defined by an enclosure without subdivisions that spans between the anterior wall, the posterior wall, an inferior sidewall and/or a superior sidewall
’418	1, 11, 20	“crest” / “trough”	the full extending distance of a projection of the internal bridge structure / a location of the internal bridge structure substantially flush to the surface of the second wall within the interior space
’418	1, 11	“plurality of crests of a wave-like structure is formed on an interior surface of the second wall to provide contact points with the first wall, and a plurality of troughs of the wave-like structure provides gaps between adjacent ones of the plurality of crests for allowing the suctioning of fluid through the plurality of troughs	No construction necessary, except for “plurality of crests of a wave-like structure” and “interior surface of the second wall”

'418	6	"cutout has a shield shape"	No construction necessary
'418	25	"a mouth prop injection-molded in one piece"	No construction necessary
'217 Patent	Claim	Term	
'217	17	"main body portion"	The portion of the mouthpiece between, but not including, the cheek retractor portion and the suction connector and mouth prop, if present
'217	17	"interior space"	A generally open and unobstructed space allowing for suction to flow throughout and having a similar shape as the shape of the anterior and posterior walls
'217	17	"span that extends partially across the distance of the interior space"	Span that extends only partially but not entirely across the distance of the interior space
'217	17	"alternating crests and troughs that extend different distances partially across the interior space"	Indefinite
'948 Patent	Claim	Term	
'948	23	"main body portion"	The portion of the mouthpiece between, but not including, the cheek retractor portion and the suction connector and mouth prop, if present
'948	23	"interior space"	A generally open and unobstructed space allowing for suction to flow throughout and having a similar shape as the shape of the anterior and posterior wall
'948	23	"first wall is configured at the two edges to have a ridged configuration"	First wall has a ridged intervening wall at each edge
'948	23	"ridged configuration with a plurality of ridges extending different distances partially across the distance between the first wall and the second wall"	Indefinite
'948	23	"the plurality of ridges forming an open meshed"	Indefinite

		configuration between the first and second walls to allow for suction of fluids from a patient's mouth into the interior space between the first and second walls"	Or, in the alternative, Two ridged walls aligned, but unconnected, at their respective ridges allowing for suction of fluids from the patient's mouth into the interior space through openings between aligned ridges of the two ridged walls
Design Patents	Claim	Term	
'438	1	"The ornamental design for a mouthpiece, as shown and described."	The '438 Patent is invalid as indefinite. Alternatively, the '438 Patent is invalid as fully functional. Alternatively, to the extent not fully functional or indefinite, the '438 Patent claims a smooth and unadorned tubular suction connector with one cutout in a triangular shape. The tubular nature of the suction connector is functional and configured to connect to a suction adaptor and not protected unless it contributes to the overall ornamentation of the design. The triangular cutout is also functional and configured to connect to a suction adaptor and not protected unless it contributes to the overall ornamentation of the design.
'439	1	"The ornamental design for a mouthpiece, as shown and described."	The '439 Patent is invalid as indefinite. Alternatively, the '439 Patent is invalid as fully functional. Alternatively, to the extent not fully functional or indefinite, the '438 Patent claims a smooth and unadorned tubular suction connector with one cutout in a triangular shape and an unadorned bite block. The tubular nature of the suction connector is functional and configured to connect to a suction adaptor and not protected unless it contributes to the overall ornamentation of the design. The triangular cutout is also functional and configured to connect to a suction adaptor

			and not protected unless it contributes to the overall ornamentation of the design. The bite block is also functional and configured to the hinge shape of a patient's jaw and not protected unless it contributes to the overall ornamentation of the design.
'436	1	"The ornamental design for a mouthpiece, as shown and described."	The '436 Patent is invalid as indefinite. Alternatively, the '436 Patent is invalid as fully functional. Alternatively, to the extent not fully functional or indefinite, the '436 Patent claims fifteen identically sized and uniformly spaced semi-circles along the four polygonal edges of a dental isolation mouthpiece.

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Respectfully submitted,

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