

Independent claims 1 and 21 presently recite an ‘intervening wall’ that extends ‘partially across the distance’ between the anterior and posterior walls ‘along an edge.’ See e.g., FIGs. 2, 6 (provided below). FIGs. 2 and 6 of the present *Specification* illustrates, for example, “anterior intervening wall 127” and “posterior intervening wall 134,” both of which extend from a respective ‘edge’ at least partially across the interior space between the main anterior and posterior body walls.

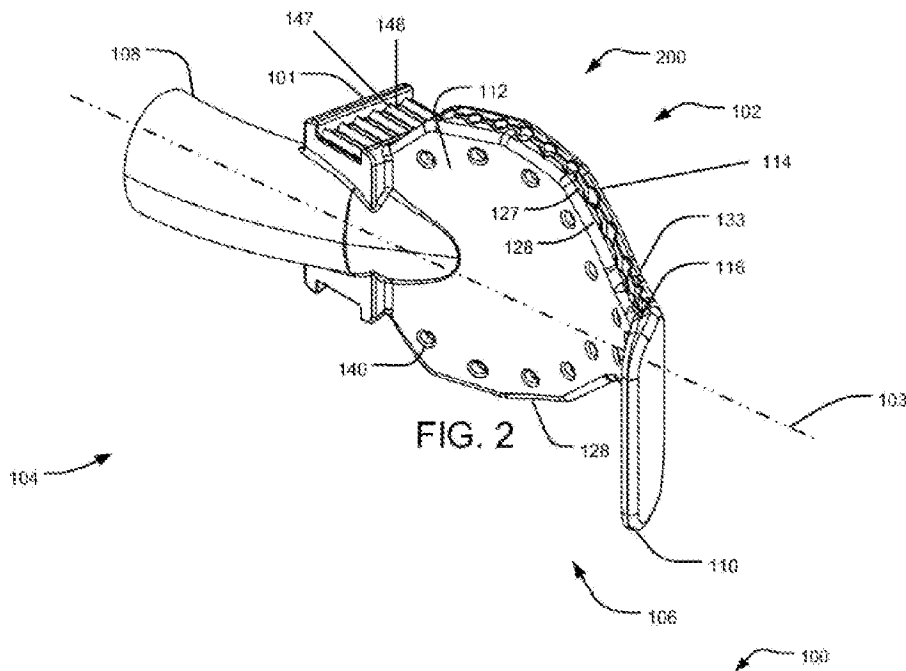


FIG. 2

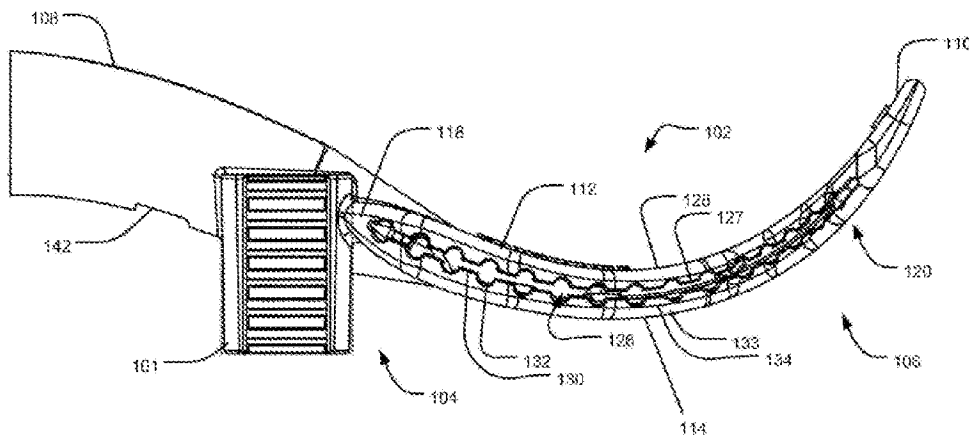


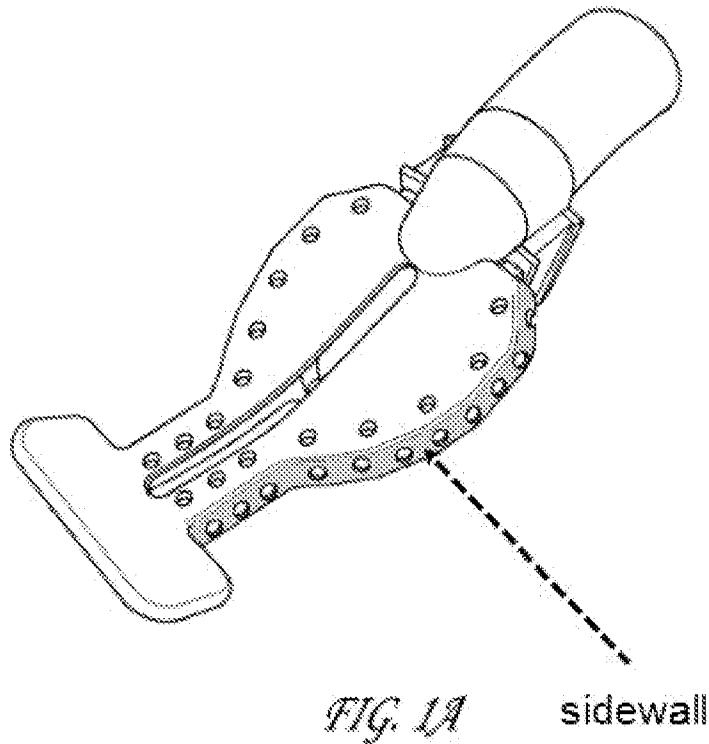
FIG. 6

*See also Specification* at [0034] (noting that “[a]t least one anterior intervening wall 127 may extend from at least one edge 128 of the anterior wall 112 partially towards the posterior wall 114,” and “[t]he span of such anterior intervening wall 127 therefore may not extend the entire distance between the anterior wall 112 and the posterior wall 114”); [0035] (“The posterior wall 114 may have a corresponding at least one posterior intervening wall 134 that extends from at least one edge 133 of the posterior wall 114 and partially extends towards the anterior wall 112”).

The Applicant submits that such an ‘intervening wall’ that extends ‘partially across the distance’ ‘between the anterior wall and the posterior wall’ ‘along an edge’ is novel and non-obvious over the references of record.

pointed by label 180 is the interior space defined by the anterior wall and posterior wall) corresponding to a distance between the anterior wall and the posterior wall (See Annotated Figure A of Fig. 1A and Fig 1A),

- a suction connector portion (120) connected to the first end (See Annotated Figure D of Fig. 1A), the connector portion connecting the interior space to a vacuum suction source (See Annotated Figure D of Fig. 1A; Par. [0042]); and
- a cheek retractor portion (130) connected to the second end (Fig. 7A-7B).



- Nguyen discloses the presence of a sidewall (see figure above) that extends along the edge of both the anterior wall and posterior wall. This sidewall acts to define the suction conduits (holes shown in the shaded area of the figure above). However, Nguyen is silent to the sidewall being made from an at least one anterior intervening wall extending along an edge of the anterior wall partially across the

distance towards the posterior wall, and at least one posterior intervening wall extending along an edge of the posterior wall partially across the distance towards the anterior wall, the at least one anterior intervening wall and the at least one posterior intervening wall each having alternating crests and troughs. Further, Nguyen is silent to at least one connector connecting the anterior wall to the posterior wall.

Al-Shawi discloses a medical suction device (400, Fig. 4A) in the analogous art of suction devices and further discloses suction conduits (“flow channels”, [0096]) which are formed by two half-walls (401, 402) having mating projections (422). The mating projections (422) with interspaced flow channels form crest and trough shapes on the two mating half-walls (401, 402) that extend toward each other and abut each other to provide the flow channels within the device (Par. [0096] - [0097]; Fig. 4A-4C).

It would have been obvious to someone skilled in the art before the effective filing date to modify the single solid sidewall of Nguyen to be made from two abutting anterior and posterior sidewalls with complementary mating and abutting crests and troughs to form the flow channels as taught by Al-Shawi in order to use an alternative sidewall arrangement shown in the prior art which would yield predictable results of forming flow channels through a double walled suction device.

He discloses a dental suction device in the same field of endeavor and further discloses at least one connector (Fig. 4, label 34) connecting the anterior wall (Fig. 4, label 31) to the posterior wall (Fig. 4, label 32) found in the main body (See Annotated Figure C of Fig. 1 of He) to stabilize the two walls into place.

It would have been obvious to someone skilled in the art before the effective filing date to modify the dental mouthpiece of Nguyen and Al-Shawi to have at least one connector extending longitudinally along the main body as taught by He to aid in stabilization of the two walls into place during use.