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(54) **HOOKAH BOWL AND HEAT MANAGEMENT ACCESSORY**

WASSERPFEIFENSCHALE UND WÄRMEVERWALTUNGSZUBEHÖR

FOYER DE NARGUILÉ ET ACCESSOIRE DE GESTION DE LA CHALEUR

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(73) Proprietor: **Kaloud, Inc.**
Los Angeles, California 90048 (US)

(72) Inventor: **BAVAR, Reza**
Los Angeles, California 90048 (US)

(74) Representative: **RGTH**
Patentanwälte PartGmbB
Neuer Wall 10
20354 Hamburg (DE)

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Description

BACKGROUND OF THE INVENTION

[0001] The subject matter described herein relates generally to a system, device, and method preparing tobacco or other organic material for smoking using a water pipe, such as a hookah. Particularly, the present invention is related to system and platform according to claims 1 and 13, respectively. Traditional water pipes generally include a plate for supporting charcoal, a head for containing tobacco, a body including an internal pipe, a base for containing water, and a hose. Typically a user will first fill the base with water and then place the internal pipe into the water such that the body creates an airtight seal with the base. The head is then filled with tobacco or other organic material and placed over the internal pipe such that an airtight seal is created between the internal pipe and the head. Next the user places the plate over the head, places one or more lit charcoals on the plate and these charcoals serve to heat the tobacco underneath the plate. The hose is typically attached to the body such that it has an airtight connection with air above the water in the base. The user can inhale through the hose which draws smoke from the heated tobacco in the head through the internal pipe, through the water contained in the base, through the hose and into the user's lungs.

[0002] Additionally, CN 2 774 181 Y discloses a cut tobacco burning device for water pipes, which comprises a smoke pan.

[0003] While US 2010/275937 A1 discloses head for hubble-bubble devices used in smoking and using tobacco with the capability of immediate tobacco replacement and easy regulation of the distance between charcoal and tobacco.

[0004] Also, WO 2010/061233 A2 discloses a narghile, with body, with heat transmitter and combustible admitting unit for the heating of the tobacco, tobacco holder, water jar, hose, where the enumerated components are associated in such way that they make possible the guided passing of the air through the hose by the person who uses the narghile.

[0005] Further, GB 2 490 352 A discloses a single use pre-packed disposable hookah (sheesha) container head contains tobacco or tobacco and charcoal.

[0006] Still further, WO 2013/184847 A1 discloses a hookah heat management accessory comprising a base plate configured to rest on the tobacco bowl sitting on the top of a hookah and which conducts heat from charcoal, or other heat source, to the tobacco beneath it.

[0007] The embodiments provided herein teach features and advantages heretofore untaught by the prior art, as will be clear to one of ordinary skill in the art.

SUMMARY OF THE INVENTION

[0008] Briefly and in general terms, the embodiments described herein provide for a system, method and de-

vice for smoking tobacco (or other organic matter) via a water pipe.

[0009] These and other aspects and advantages of the instant invention will be apparent from the following detailed description and the accompanying drawing, which illustrates by way of example the principles and features of the instant invention.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)

[0010] Illustrated in the accompanying drawing(s) is at least one of the best mode embodiments of the present invention. In such drawing(s):

FIG. 1A illustrates an example embodiment of a water pipe.

FIG. 1B shows a schematic view of an example embodiment of a water pipe

FIG. 2A shows a side view of the example embodiment of a bowl.

FIG. 2B shows a cutaway view of the example embodiment of a bowl.

FIG. 3A shows a perspective view of an example embodiment of a ventilated cover platform in accordance with the present invention.

FIG. 3B shows a perspective view of an example embodiment of a ventilated cover platform in accordance with the present invention.

FIG. 3C shows a cutaway side view of an example embodiment of a ventilated cover platform in accordance with the present invention.

FIG. 3D shows a side view of an example embodiment of a ventilated cover platform in accordance with the present invention.

FIG. 3E shows a top view of an example embodiment of a ventilated cover platform in accordance with the present invention.

FIG. 4A shows a perspective view of the example embodiment of a ventilated cover cap on a bowl in accordance with the present invention.

FIG. 4B shows a perspective view of the example embodiment of a ventilated cover cap in accordance with the present invention.

FIG. 4C shows a side view of the example embodiment of a ventilated cover cap in accordance with the present invention.

FIG. 4D shows a top view of the example embodiment of a ventilated cover cap in accordance with the present invention.

FIG. 4E shows a cutaway side view of the example embodiment of a ventilated cover cap in accordance with the present invention.

FIG. 5A shows a cross sectional view of the example embodiment of a coupled ventilated cover cap, platform and head including airflow in accordance with the present invention.

FIG. 5B shows a close-up cross sectional view of

the example embodiment of a coupled ventilated cover cap, platform and head in accordance with the present invention.

FIG. 5C shows a side view of the example embodiment of a coupled ventilated cover cap, platform and head in accordance with the invention.

FIG. 5D shows a side view of the example embodiment of a coupled ventilated cover cap, platform and head in accordance with the invention.

FIG. 5E shows a perspective view of the example embodiment of a coupled ventilated cover cap, platform and head in accordance with the invention.

FIG. 5F shows a perspective view of the example embodiment of a coupled ventilated cover platform and head with decoupled ventilated cover cap in accordance with the invention.

FIG. 5G shows a side view of the example embodiment of a decoupled ventilated cover cap and platform according to the invention.

FIG. 6A shows a top perspective view of an example embodiment of a ventilated cover with closed cover vents in accordance with the present invention.

FIG. 6B shows a top perspective view of an example embodiment of a ventilated cover with partially closed cover vents in accordance with the present invention.

FIG. 6C shows a top perspective view of a ventilated cover with open cover vents in accordance with at least one embodiment of the present invention.

FIG. 6D shows a top perspective view of an example embodiment of a ventilated cover with top removed in accordance with the present invention.

FIG. 6E shows an example embodiment of a bottom perspective view of a ventilated cover in accordance with the present invention.

FIG. 7A-7E show an example embodiment of a use case of a ventilated cover in accordance with the present invention.

FIG. 8A shows an example embodiment of a perspective view of a ventilated cover cap and multi-functional tongs.

FIG. 8B shows an example embodiment of a perspective view of multi-functional tongs.

FIG. 8C shows an example embodiment of a side view of a ventilated cover and coupled bowl with multi-functional tongs in a use case.

FIG. 9A shows an example embodiment of a top perspective view of a ventilated cover cap in accordance with the present invention.

FIG. 9B shows an example embodiment of a bottom perspective view of a ventilated cover cap in accordance with the present invention.

FIG. 10 shows an example embodiment of a top perspective view of a ventilated cover platform in accordance with the present invention.

FIG. 11A shows a side cutaway view of an example embodiment of a coupled ventilated cover cap, platform and head in a closed configuration in accordance

with the present invention.

FIG. 11B shows a side cutaway view of an example embodiment of a coupled ventilated cover cap, platform and head in an open configuration in accordance with the present invention.

FIG. 11C shows an example embodiment of a ventilated cap coupled to a bowl.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0011] The above described drawing figures illustrate the described invention and method of use in at least one of its preferred, best mode embodiment, which is further defined in detail in the following description. Therefore, it should be understood that what is illustrated is set forth only for the purposes of example.

[0012] FIG. 1 illustrates an exemplary water pipe 10. As shown in FIG. 1A, the water pipe generally comprises: a base 100, a stem 200, a bowl 300, and a hose 400. An exemplary water pipe is described in U.S. Pat. Appl. No. 13/489,475, filed on June 6, 2012.

[0013] As shown for example in FIG. 1B, in general, the base 100 comprises a concave vessel having an open top portion for containing water or other liquid 102 therein. The stem 200 extends into the base such that a distal end of the stem is partially submerged within the liquid 102 contained therein. The stem 200 also couples to the open top portion of the base so as to form a substantially airtight seal therewith. Accordingly, a first base grommet 104 may be provided to couple the stem 200 and the base 100 so as to form the substantially airtight seal. In this manner, a chamber is formed by the base 100 and stem 200/grommet 104. The hose 400 extends into the base 100 such that a proximal portion of the hose 400 is in fluid communication with the chamber 106, though preferably not within the contained liquid 102 (e.g. air can pass between chamber 106 and hose 400). Preferably, a substantially airtight seal is formed from the coupling of the hose 400 and base 100. Accordingly, a second hose grommet 108 may be provided to couple the hose 400 and the base 100 so as to form the substantially airtight seal. In some embodiments, a hose valve (not shown) may be intermediate the hose 400 and the base 100, the hose valve extending into the chamber 106 at one end and exterior to the chamber 106, coupling with the hose 400, at the other. Bowl 300 couples to a proximal end of stem 200 such that a substantially airtight seal is formed therebetween. Accordingly, a third bowl grommet 110 may be provided to couple bowl 300 and stem 200 so as to form the substantially airtight seal. In operation, organic matter to be smoked 308 may be contained within bowl 300, and bowl 300 may be covered with a cover 112, such as punctured foil, or a ventilated cover such as that described in U.S. Pat. Appl. No. 13/489,475, filed on June 6, 2012. Coals 114 or other combustible heating material can be placed on or in cover 112 to heat the tobacco 308.

[0014] Critically, bowl 300, stem 200 and hose 400 each comprise a hollow tube such that when base 100, bowl 300, stem 200 and hose 400 are coupled, an airflow path is formed. As illustrated in FIG. 1B, a user inhaling at the distal end of hose 400 may thus draw heated air into bowl 300, causing the organic material 308 therein to burn, releasing smoke that is subsequently drawn through bowl 300, through stem 200, and into liquid 102 contained within chamber 106 of base 100. The smoke then rises through liquid 102 into the preferably sealed area above liquid 102 in the chamber 106, becoming filtered in the process, and inhaled through hose 400 as it is smoked by the user.

[0015] Other water pipe components, such as purge valves, ashtrays, base flavorings, etc. are generally known in the art and, while not specifically described herein, are intended to be useable in combination with the presently described embodiments without departing from the scope of the invention.

[0016] An example embodiment of a bowl 300 in will now be described with reference to FIG. 2.

[0017] As shown for example in FIGs. 2A-2B, a bowl 300 preferably generally comprises a substantially hemispherical bowl head 302 extending vertically and radially from a substantially cylindrical bowl stalk 304. As shown, bowl stalk 304 may be flared outward at its bottom end to facilitate easier manipulation. The bowl 300 preferably further comprises interior 307 and exterior 306 surfaces separated by a rim portion 310. In some embodiments, located central to the bowl head 302, and forming a portion of the inner surface of the bowl 300, may be a hollow tube 312 extending the length of the bowl 300 from the bowl head 302 through the bowl stalk 304. The hollow tube 312, and other structures herein described, are additionally shown in FIG. 2B, which is a cross-sectional illustration of an example embodiment of a bowl 300.

[0018] Bowl head 302 preferably further comprises a plurality of compartments 320 therein for containing the organic matter or other material to be smoked. Accordingly, internal walls 322 may separate adjacent compartments 320. A plurality of internal walls 322 may extend inward from the interior surface of the bowl head to hollow tube 312, forming the plurality of compartments 320. Accordingly, each internal wall 322 may partially or wholly separate adjacent compartments 320. Compartments 320 may have varied dimensions and may be uniform or sized differently in different embodiments. In the example embodiment each compartment is of equal depth and similar dimensions and shape. Each compartment may have a "U" shaped cross sectional profile when viewed from a side. Alternatively, each compartment may have a "V" shape, open-top square shape, open-top rectangular shape or other shapes.

[0019] As shown in FIG. 2B, in some embodiments the compartments 320 are slightly recessed from an upper elevation of the rim 310, forming a space 318 between a cover and the organic matter to be smoked so as to promote airflow from the organic matter to the hollow

tube 312.

[0020] As shown for example in FIG. 2B, the bowl stalk 304 may further comprise a grommet 314 for effecting a substantially airtight seal with a water pipe stem. In some embodiments the grommet 314 may include threading, tread, ribs or other surface characteristics. Grommet 314 may be the same material as the rest of bowl 300 although in some embodiments it may also be a different material. For instance, grommet 314 may be rubber to promote better sealing characteristics. Grommet 314 may be flared as shown in the example embodiment of FIG. 2C by the concentric rings at the center. This may create a conical cross section of grommet 314 when viewed from the side of bowl 300. The conical cross section may promote better sealing characteristics with a water pipe stem and ease of user coupling of head 300 with the water pipe stem. In operation, the grommet 314 can replace a traditional bowl grommet shown in FIG. 1B.

[0021] As shown for example in FIG. 2A, an exterior surface of the bowl may comprise a grip portion 316. In some embodiments, this grip portion 316 may include a friction surface providing additional grip to the user. The grip surface may include ridges, bumps, depressions and other features. The grip portion 316 in the example embodiment is a series of lines with arcing features, running generally parallel to each other around bowl 300. A similar series of lines with arcing features in an opposite direction run generally substantially parallel to each other around bowl 300 such that numerous intersections of each set of lines with any one line creates a cross-hatched pattern around bowl 300.

[0022] In at least one embodiment, bowl 300 is made of silicone material. Silicone may have advantages such as improved insulation around the head 302 and improved heat distribution inside the head 302 and may also provide improved uniformity of heat distribution. Improved insulation around head 302 may provide an improved user experience since users are less likely to burn themselves when handling bowl 300 when it is hot. Improved heat distribution inside head 302 may provide an improved user experience since it promotes even heating characteristics for organic matter in compartments 320. As such, organic matter may be evenly heated and less likely to have some portions burn while others remain unheated. In other embodiments clay, marble, glass, or other appropriate materials may be used.

[0023] As shown for example in FIG. 2B, the rim portion 310 may further comprise a coupling surface for frictionally coupling a cover (not shown) to the bowl such that charcoal or other heat source may provide heat to the tobacco or other organic substance while remaining separated therefrom, in accordance with the embodiments and concepts discussed herein. This coupling surface can include ridges 324 which can be arranged in a fashion to promote an airtight seal and a screwing type seal. In some embodiments, the cover preferably comprises a ventilated cover, such as the exemplary ventilated cover show for example in FIGs. 3A-6E, as well as the venti-

lated cover described in U.S. Pat. Appl. No. 13/489,475, filed on June 6, 2012. In some embodiments, a coupling surface may be an interior surface of the rim 310. In some embodiments, the coupling surface may be an exterior surface of the rim 310. In some embodiments, the coupling surface may be an upper surface of the rim 310. In some embodiments, the coupling surface may be a combination of more than one of an exterior, interior and upper surface of the rim 310. Preferably, the coupling surface includes tread, threading, ribs or similar structure adapted to increase the frictional coupling of the cover with the bowl 300.

[0024] In accordance with the bowl of FIG. 2, a user can insert a metered amount of tobacco, shisha or other organic material into one or more of compartments 320 before or after coupling bowl 300 with a stem of a water pipe in order to prepare the bowl 300 for smoking.

[0025] FIGs. 3-4 illustrate an example embodiment of a ventilated cover 500 for use in accordance with at least one embodiment of the present invention. The ventilated cover 500 may include a platform 520 on which to support coal or other heating source as shown in FIG. 3, and a cap 540 resting on or coupled to the platform so as to form a heating chamber 570, as shown in FIG. 4E-4F, 5A-5B. Airflow through cover 500 may be controllable by rotating cap 540 relative to the platform 520.

[0026] As shown in FIG. 3A-3C, 5A-5B and 5F-5G, the platform 520 comprises a recessed tray 522 for containing the heating source. The platform 520 also preferably comprises a plurality of perimeter bowl vents 524 for permitting airflow between the heating chamber and the bowl while in operation. As shown, eight perimeter bowl vents 524 may be used although other numbers of perimeter bowl vents 524 are also contemplated. The platform 520 also preferably comprises a plurality of, perimeter vertical protrusions 530 that mate with corresponding protrusions 544 of the cap 540 to form circumferential vents 526 for controlling the airflow between the exterior atmosphere and the heating chamber. In various embodiments this mating may occur using screws and threading.

[0027] As the cap 540 is rotated relative to the platform 522, for instance by rotating cap 540 using rim 590 of FIG. 4, the respective protrusions 530 and spaces therebetween (i.e. the formed circumferential vents 526) may transition between fully open, partially open and fully closed with respect to adjustable side vents 560. In this manner, airflow to a heating chamber (e.g. 570 of FIG. 4E) may be controlled. In some embodiments, the cap 540 may further comprise additional upper vents 572, which may or may not be adjustable in different embodiments.

[0028] Platform 520 may be comprised of forged aluminum or steel. Similarly, cap 540 may be comprised of forged aluminum or steel.

[0029] Recessed tray 522 includes walls 528 which are flared inward from their upper edges. Walls 528 may prevent coals or other heating elements from sliding or otherwise moving around within heating chamber 570 during

adjustment by users. The inward, downward flare of walls 528 may further promote airflow within heating chamber 570 by channeling air toward the heating elements. In the example embodiment, recessed tray 522 has a star configuration with eight points. Other embodiments may incorporate other shapes without departing from the scope of the invention. It has been discovered, however that the eight-pointed star configuration provides benefits over other shapes, including benefits of even heating and air flow, particularly when combined with the multi-chambered bowl described herein.

[0030] Circumferential vents 526 may comprise alternating spaces between vertical protrusions 530. The inner surface 532 of each vertical protrusion 530 may create a substantially "V" shape with the point directed inward, toward the center of heating chamber 570 from the circumferential vents 526 on either side of the vertical protrusion. Accordingly, air may be channeled toward heating elements on recessed tray 522. Additionally, the point of each "V" may correspond with each star point of recessed tray 522. It has been discovered that embodiments utilizing such an arrangement benefit from the created air channels which may promote circulation within heating chamber 570 and promote even heating of the coals or other heating elements during use.

[0031] Vertical protrusions 530 may be 1mm to 100mm in height. Circumferential vents 526 may be 1mm to 100mm in width and 1mm to 100mm in length.

[0032] Perimeter bowl vents 524 may be diamond, or other, shaped holes allowing airflow from the interior of heating chamber 570 into bowl 300. Each perimeter bowl vent 524 is preferably located near, such as directly in front of, a circumferential vent 526. This may promote a mixture of cool air from the exterior of the cap 540 with heated air from the interior of heating chamber 570 such that during inhalation by a user, heated air is not exclusively the only air being pulled through the water pipe. The location of perimeter bowl vents 524 as radially aligned with and proximate each circumferential vent 526 further promotes air flow, as discussed herein with respect to FIG. 5A. Perimeter bowl vents 524 may have dimensions of 1mm to 100mm in width and 1mm to 100mm in length.

[0033] Rim 590 may be an outward extension of cap 540 from a central axis perpendicular to heating platform 520 that allows users to rotate cap 540 with respect to platform 520. This may allow for different configurations of adjustable side vents 560 with respect to circumferential vents 526, allowing a user to control air flows into and out of heating chamber 570. Rim 590 is shown as a series of pointed extensions, attaching to cap 540 at protrusions 544 in FIG. 4. In some embodiments, rim may be insulated such that it may be handled by hand. Although rim 590 is shown as circumferentially surrounding cap 540 in FIGs. 4 and 5, it should be understood that it may only protrude outward in a single location, in a plurality of locations, or in partial circumferential areas.

[0034] In accordance with the embodiments described

above and shown in FIGs. 4 and 5, a user can place or otherwise couple a platform 522 on or with a rim of a bowl 300 and thus, above tobacco, shisha or other organic matter already prepared as described above. Then a user can place coals or other combustible material on platform 522. Once the coals or other combustible material are in place, they can be heated by a heat source, for example a match or lighter, before a user places or otherwise couples a ventilated cap 540 on platform 522.

[0035] Turning to FIG. 5A, a cross sectional view of the exemplary ventilated cover 500 and head 300 including airflows 602, 604 is shown in accordance with at least one embodiment of the present invention. In the example embodiment airflow 602 represents at least one way in which air may move through heating chamber 570 when the device has coals (not shown) on platform 522 but air is not actively being pulled or otherwise inhaled through the water pipe. To elaborate, warm air within heating chamber 570 may rise through upper vents 572. Cooler air may enter heating chamber 570 through adjustable side vents 560 (here since multiple air flows 602 and 604 are shown, represented by adjustable side vent 560a) and then circumferential vents 526 to be heated by coals on platform 522. Thus air flow 602 during idle air times (e.g. non-active air pull or inhalation) is created.

[0036] Airflow 604 including 604a and 604b shows the flow of air when an active air pulling or inhalation through the water pipe occurs and the combination airflow 604c shows airflow through head 300 and into the lower components of the water pipe. Here, when a user is actively pulling air or inhaling through the water pipe, air may enter cap 540 into heating chamber 570 through upper vents 572 as flow 604b. Likewise, air may enter cap 540 into heating chamber 570 through adjustable side vent 560b and circumferential vent 526. Thus, the air passes heated coals on platform 522 and is pulled through perimeter bowl vents 524. At such point, it enters a space 318 between cover 522 and tobacco or other organic matter 308 to be smoked. In this space, the air may pick up smoke particles emanating from the heating of organic matter 308 by coals on platform 522 and combine into a single flow 604c through hollow tube 312.

[0037] FIG. 5B shows a cross sectional view of an example embodiment of ventilated cover 500 and head 300 in accordance with at least one embodiment of the present invention. In the example embodiment platform 522 is shown resting and nested in a complementary shaped rim portion 310 while cap 540 may rest on platform 522. As discussed elsewhere herein, one or both of these resting positions can include coupling mechanisms.

[0038] FIG. 5C shows a side view of an example embodiment of ventilated cover 500 and head 300 in accordance with the invention. FIGs. 5D-5E show an assembly of a head 300, with coupled platform 522 and cap 540. FIG. 5F shows a side view of the exemplary coupled ventilated cover platform 522 and head 300 with decoupled ventilated cover cap 540 in accordance with at least

one embodiment of the invention. FIG. 5G shows a perspective view of an example embodiment of a decoupled ventilated cover cap 540 and platform 522 in accordance with at the invention.

[0039] FIG. 6A shows a top view of a ventilated cover 700 with closed cover vents 750 in accordance with at least one alternative embodiment of the present invention. In the example embodiment a chamber wall 770 may include protrusions 744 that may mate with corresponding locations on platform (shown in FIGs. 6D-6E), for instance with screws. These protrusions 744 may be separated from each other by gaps 760.

[0040] Cap 740 may have a handle 730 which may be coupled or integrated with cap 740. Handle 730 may include an insulated covering 732 which may have grip portions 734 such as ridges, bumps or other protrusions or features. Cap 740 may have an upper cap 742 as a wheel 712, hub 714 and spokes 710. In the example embodiment spokes 710 may have a substantially diamond shape. This may correspond with an upper vent 750 in a lower cap 720 such that in a closed configuration as shown in FIG. 6A, little airflow is permitted between an interior chamber and exterior. Upper cap 742 and lower cap 720 may be coupled at hub 714 such that they may rotate with respect to each other for adjustment of airflow. Coupling may be achieved by a screw and washer or other means. Lower cap may be maintained in position by one or more posts which extend into a heating chamber 780 and contact an inner wall of chamber wall 770. Posts may also contact upper ends of protrusions 744 in some embodiments to prevent rotation of lower cap 720 at the same rate as upper cap 742.

[0041] FIG. 6B shows a top view of a ventilated cover 700 with partially closed upper vents 750 in accordance with at least one embodiment of the present invention while FIG. 6C shows a top view of a ventilated cover 700 with open cover vents 750 in accordance with at least one embodiment of the present invention. Cover vents 750 may be adjusted by a user rotating upper cap 742 with respect to lower cap 720 using handle 730.

[0042] FIG. 6D shows a top view of a ventilated cover with cap 740 removed in accordance with at least one embodiment of the present invention. In the example embodiment platform 722 includes a surface where a heating source may rest and perimeter bowl vents 724 may allow air exchange from a heating chamber to a bowl (not shown) below platform 722. Chamber wall 770 may have an upper surface 772 on which a lower surface of one or both of upper cap 742 and lower cap 720 rest. In some embodiments ridges or other regular or irregular features may allow airflow below a heating source and improve airflow with the chamber.

[0043] FIG. 6E shows a bottom view of a ventilated cover 700 in accordance with at least one embodiment of the present invention. In the example embodiment platform 722 may have small nodules 790 which rest inside a bowl. In some embodiments these nodules 790 may direct heat into individual chambers of the bowl. Nodules

790 may also prevent ventilated cover 700 from inadvertently sliding or being knocked off of a head (not shown) since they may rest inside a bowl of a head.

[0044] FIG. 7A-7E show a use case of a ventilated cover 700 in accordance with at least one embodiment of the present invention. In an example embodiment a ventilated cover 700 as disclosed herein may be placed on a water pipe head 300 as shown in FIG. 7A, such that at least one perimeter bowl vent (not shown) is oriented above the head 300, as shown in FIG. 7B. A heating source may be added within a heating chamber on a platform inside ventilated cover 700, as shown in FIG. 7C. This may be lit with a flame or otherwise heated such that the heating source produces heat. Vents may be closed to warm up the chamber and then the vents may be opened to an appropriate amount by rotating using arm or other adjustment mechanism in order to allow adequate ventilation. Users can wait two to four minutes or other appropriate lengths of time in order for tobacco or other organic matter to be appropriately heated, as shown in FIG. 7D. Air can be drawn through the heated tobacco or shisha contained in bowl 300 by a user inhaling through an adequately coupled hose and smoked and enjoyed accordingly, as shown in FIG. 7E.

[0045] In general, a ventilated cover 700 and bowl 300 may be washed by hand for optimal cleaning using hot water and soap or other appropriate cleaner. Likewise, a ventilated cover may be handled with tongs to ensure a user does contact surfaces which may be hot with the exception of handles or rims to adjust vents. When vents are open or a cap is removed, a ventilated cover 700 will generally be at its coolest temperature. When vents are closed, ventilated cover 700 may be at its hottest temperature. As such, bowl 300 will likewise be at a coolest and hottest temperature in accordance with these principles.

[0046] As would be understood by one in the art, features described herein and shown in the figures may be combined in appropriate combinations and are thus contemplated herein. Further, although FIG. 7 particularly illustrates a use case of the example embodiment ventilated cover 700 shown in FIG. 6, it is understood that one of skill in the art would understand how to use any combination of features as described with respect to the embodiments disclosed herein, including other ventilated covers and bowls. Further, as would be understood in the art, the shapes disclosed herein are not limiting. For instance, a round bowl could be replaced by a triangular or square bowl in various embodiments, as could diamond shapes be replaced by others.

[0047] FIG. 8A shows an example embodiment of a perspective view of a ventilated cover cap 541 and multi-functional tongs 800. In the example embodiment, tongs 800 can be used to adjust and remove various portions of a water pipe, including a ventilated cover cap 541.

[0048] FIG. 8B shows an example embodiment of a perspective view of multi-functional tongs 800. In the example embodiment, tongs 800 can include one, two, or

more of legs 804 which can be made from a variety of materials, including stainless steel, silicone, wood, glass, or any combination thereof. Legs 804 can have a first end 806 which can interface with a lid. Legs 804 can have a second end 808 which can interface with charcoal or other heat source. As shown, second end 808 of tongs 800 can include one or more tong protrusions 805 to interface with charcoal or other heat sources. In some embodiments, tong protrusions 805 can provide insulation properties such that heat is not transferred directly to legs 804.

[0049] Legs 804 can be coupled at a hinge 802 which can be silicone, or some other flexible material, in various embodiments. Hinge 802 can provide users the ability to manipulate the first and second ends 806 and 808 in a simple and intuitive manner, without the possibility of dropping one leg 804. In this manner, legs 804 can be manipulated in a manner similar to chopsticks, but with additional functionality. In the example embodiment, legs 804 are shown as slightly bowed such that there is a gap between them at both first and second ends 806, 808.

[0050] FIG. 8C shows an example embodiment of a side view of a ventilated cover 501 and coupled bowl 300 with multi-functional tongs 800 in a use. In the example embodiment tongs 800 are shown as coupled with ventilated cover 501 for manipulation with respect to bowl 300. Tongs 800 can also be coupled with elements 524, 560, 572, and 590. Thus, tongs 800 can be used to rotate, lift, and otherwise adjust ventilated cover 501. In the example embodiment, first end 806 of legs 804 can be shaped similarly in a complementary fashion to an interface surface of upper holes (e.g. 572 of Fig. 9A) of a ventilated cover 501. In this manner tongs 800 can be used to easily adjust ventilated cover 501. Although not shown, additional components and features of first end 806 can be provided in various embodiments of tongs 800 such as varied surfaces, materials, protrusions, projections and others in order to improve grip and promote convenient and intuitive usage for users. First end 806 of tongs 800 are not limited for use with upper holes of a ventilated cover 501 as shown. They can also be used to grasp, grip or otherwise adjust ventilated cover 501 at various other locations, for instance at rim 590 and at openings 524 and 560.

[0051] FIG. 9A shows an example embodiment of a top perspective view of a ventilated cover cap 541 in accordance with the present invention. In the example embodiment, the upper surface and features of cap 541 can be similar to that shown in FIGs. 4A-4D.

[0052] FIG. 9B shows an example embodiment of a bottom perspective view of a ventilated cover cap 541 in accordance with the present invention. In the example embodiment, teeth 545 can be provided at a lower surface of protrusions 544. Teeth 545 can be locked or otherwise interface with a platform (e.g. 521 of FIG 10) as shown in FIGs. 11A-11B. This can provide various benefits, including a secure interface with other components such that if a water pipe with ventilated cover cap 541 is

knocked over, charcoal or other heat sources will be substantially contained and not fall on a floor, table or other supporting surface. This can help mitigate danger of burns, injury, scars and other damage associated with using heat sources. While four teeth 545 are provided in the example embodiment, other embodiments may include additional or fewer teeth 545.

[0053] FIG. 10 shows an example embodiment of a top perspective view of a ventilated cover platform 521 in accordance with the present invention. In the example embodiment, a raised surface 523 can provide a slight elevation over a normal tray (not shown) or recessed tray 522 for charcoal or other heating elements. As such, heat emanating from the bottom of a heat source can be more evenly distributed across upper tray surfaces. Additionally, a ramp 531 with detents 533 can be provided in order to allow for more precise control of circumferential vents (see element 529 of FIG. 11B, similar to 526 of FIG. 5A). Ramp 531 with detents 533 can provide circumferential vent sizing in both a vertical and horizontal direction and thus the width and height of circumferential vents can be precisely controlled by placement at or on particular detents in order to increase or decrease airflow inside a ventilated cover cap 541. In some embodiments, teeth 545 provide the interface with ramp 531 and in some embodiments can be shaped to rest in detents 533.

[0054] FIG. 11A shows a side cutaway view of an example embodiment of a rotating lid 501 including coupled ventilated cover cap 541, platform 521 and head 301 in a closed configuration in accordance with the present invention. In the example embodiment, the rotating lid 501 is in a closed configuration, meaning that circumferential vents are sealed.

[0055] FIG. 11B shows a side cutaway view of an example embodiment of a rotating lid 501 including coupled ventilated cover cap 541, platform 521 and head 301 in an open configuration in accordance with the present invention. In the example embodiment, a user has rotated cap 541 with respect to platform 521, thus causing circumferential vents 529 to open and allow airflow into cap 541. Also shown are an interlock between a ridge 303 of base 301 and lower lip 529 and upper lip 525 of platform 521 to provide a seal, which in some embodiments is airtight, between rotating lid 501 and bowl 301. As such, lid 501 will not fall off of bowl 301 if adjusted or accidentally knocked over by a user or third party.

[0056] FIG. 11C shows another example embodiment of a ventilated cap 501 coupled to a bowl 1200. In the example embodiment, ventilated cap 501 includes a chamber 511 with an adjustable upper component 509 allowing for separate adjustment of upper vents 572 with respect to heating chamber 570.

Claims

1. A system for facilitating smoking of tobacco from a hookah, the system comprising:

a heating platform (520, 720) for resting on a bowl (300) operable to contain tobacco or other smokable organic substance (308), the heating platform (520, 720) comprising a central surface including a depression (522, 722) with at least one surrounding wall (528) such that a heating source will not slide off the central surface, at least one perimeter vent (524, 724) of the platform (520, 720) to allow air to pass between an area above the central surface and below the central surface and a cap (540, 740) with at least one exterior vent (560a), at least one upper vent (572, 750), at least one movement control extension (590) and at least one rest for resting on the heating platform (520, 720) **characterized in that** the heating platform (520, 720) further comprises: at least one exterior vent (526) located in at least one perimeter wall located around an exterior of the heating platform (520, 720), wherein the at least one exterior vent (526) of the heating platform (520, 720) can be aligned with the at least one exterior vent (560a) of the cap (540, 740).

2. The system according to claim 1, wherein the at least one exterior vent (560a) of the cap is located at a bottom of the cap (540) and can be aligned with the at least one exterior (526) vent of the heating platform (520, 720).
3. The system of claim 2, wherein the at least one exterior vent (560a) of the cap is adjustable using a movement control extension (590) such that its position can be adjusted with respect to the exterior vent (526) of the heating platform (520, 720).
4. The system of claim 3, wherein the at least one movement control extension is an arm (730).
5. The system of claim 3, wherein the at least one movement control extension is a rim (590).
6. The system of claim 2, wherein the cap further comprises:
 - an interior cap (720); and
 - an exterior cap (710).
7. The system of claim 6, wherein the at least one movement control extension (590) can be used to adjust the exterior cap (710) with respect to the interior cap (720).
8. The system of claim 7, wherein adjusting the exterior cap (710) with respect to the interior cap (720) can adjust the at least one upper vent.
9. The system of claim 7, wherein the exterior cap (710) and interior cap (720) are coupled such that they can rotate with respect to each other.

10. The system of claim 3, wherein the movement control extension (590) can be used to lift the cap off the heating platform (520, 720).
11. The system of claim 2, wherein a lower edge of the cap is located at a further radial distance from a central axis perpendicular to the platform surface than a radial distance of the circumference of the heating platform (520, 720).
12. The system of claim 2, wherein the cap can be fixedly coupled with the heating platform (520, 720).
13. A heating platform (520, 720) for use in the system according to claim 1, said heating platform (520, 720) comprising a central surface including a depression (522, 722) with at least one surrounding wall (528) such that a heating source will not slide off the central surface, at least one perimeter vent (524, 724) of the heating platform (520, 720) to allow air to pass between an area above the central surface and below the central surface and at least one exterior vent (526) located in at least one perimeter wall located around an exterior of the heating platform (520, 720), wherein the heating platform (520, 720) can be fixedly coupled with a bowl (300) of the system when resting on the bowl (300).
14. The heating platform (520, 720) of claim 13, wherein the heating platform (520, 720) has at least one ramp for supporting the cap (540, 740), the ramp having at least one detent.
15. The heating platform (520, 720) of claim 13, wherein the heating platform (520, 720) includes ridges for coupling with a bowl (300) of a water pipe.
16. The heating platform (520, 720) of claim 13, wherein the heating platform (520, 720) includes nodules on a bottom surface of the heating platform (520, 720).

Patentansprüche

1. System zur Erleichterung des Rauchens von Tabak aus einer Wasserpeife, wobei das System Folgendes umfasst:
eine Heizplattform (520, 720), zum Aufliegen auf einer Schale (300), die dazu operabel ist, Tabak oder eine andere rauchbare organische Substanz (308) zu enthalten, wobei die Heizplattform (520, 720) eine zentrale Fläche einschließlic einer Vertiefung (522, 722) mit mindestens einer umgebenden Wand (528) umfasst, so dass eine Heizquelle nicht von der zentralen Fläche rutscht, mindestens eine Umlauföffnungsöffnung (524, 724) der Plattform (520, 720), um Luft zwischen einem Bereich oberhalb der zentralen Fläche und unterhalb der zentralen Fläche

durchströmen zu lassen, und eine Kappe (540, 740) mit mindestens einer äußeren Lüftungsöffnung (560a), mindestens einer oberen Lüftungsöffnung (572, 750), mindestens einer Bewegungssteuerungserweiterung (590) und mindestens einer Auflage zum Aufliegen auf der Heizplattform (520, 720), **dadurch gekennzeichnet, dass** die Heizplattform (520, 720) ferner Folgendes umfasst: mindestens eine äußere Lüftungsöffnung (526), die sich in mindestens einer Umfassungswand befindet, die sich um eine Außenseite der Heizplattform (520, 720) herum befindet, wobei die mindestens eine äußere Lüftungsöffnung (526) der Heizplattform (520, 720) mit der mindestens einen äußeren Lüftungsöffnung (560a) der Kappe (540, 740) ausgerichtet sein kann.

2. System gemäß Anspruch 1, wobei sich die mindestens eine äußere Lüftungsöffnung (560a) der Kappe an einer Unterseite der Kappe (540) befindet und mit der mindestens einer äußeren Lüftungsöffnung (526) der Heizplattform (520, 720) ausgerichtet werden kann.
3. System gemäß Anspruch 2, wobei die mindestens eine äußere Lüftungsöffnung (560a) der Kappe unter Verwendung einer Bewegungssteuerungserweiterung (590) einstellbar ist, so dass ihre Position in Bezug auf die äußere Lüftungsöffnung (526) der Heizplattform (520, 720) eingestellt werden kann.
4. System gemäß Anspruch 3, wobei die mindestens eine Bewegungssteuerungserweiterung ein Arm (730) ist.
5. System gemäß Anspruch 3, wobei die mindestens eine Bewegungssteuerungserweiterung ein Rand (590) ist.
6. System gemäß Anspruch 2, wobei die Kappe ferner Folgendes umfasst:

eine innere Kappe (720); und
eine äußere Kappe (710).

7. System gemäß Anspruch 6, wobei die mindestens eine Bewegungssteuerungserweiterung (590) dazu verwendet werden kann, die äußere Kappe (710) relativ zu der inneren Kappe (720) einzustellen.
8. System gemäß Anspruch 7, wobei das Einstellen der äußeren Kappe (710) relativ zu der inneren Kappe (720) die mindestens eine obere Lüftungsöffnung einstellen kann.
9. System gemäß Anspruch 7, wobei die äußere Kappe (710) und die innere Kappe (720) derart gekoppelt sind, dass sie sich relativ zueinander drehen können.

10. System gemäß Anspruch 3, wobei die Bewegungssteuerungserweiterung (590) dazu verwendet werden kann, die Kappe von der Heizplattform (520, 720) zu heben.
11. System gemäß Anspruch 2, wobei eine untere Kante der Kappe sich in einem weiteren radialen Abstand von einer Zentralachse senkrecht zur Plattformfläche befindet als ein radialer Abstand des Umfangs der Heizplattform (520, 720).
12. System gemäß Anspruch 2, wobei die Kappe fest mit der Heizplattform (520, 720) gekoppelt werden kann.
13. Heizplattform (520, 720) zur Verwendung in dem System gemäß Anspruch 1, wobei die Heizplattform (520, 720) eine zentrale Fläche einschließlich einer Vertiefung (522, 722) mit mindestens einer umgebenden Wand (528) umfasst, so dass eine Heizquelle nicht von der zentralen Fläche rutscht, mindestens eine Umluftöffnungsöffnung (524, 724) der Heizplattform (520, 720), um Luft zwischen einem Bereich über der zentralen Fläche und unterhalb der zentralen Fläche passieren zu lassen, und mindestens eine äußere Lüftungsöffnung (526), die sich in mindestens einer Umfassungswand befindet, die sich um eine Außenseite der Heizplattform (520, 720) herum befindet, wobei die Heizplattform (520, 720) fest mit einer Schale (300) des Systems gekoppelt werden kann, wenn sie auf der Schale (300) aufliegt.
14. Heizplattform (520, 720) gemäß Anspruch 13, wobei die Heizplattform (520, 720) mindestens eine Rampe zum Stützen der Kappe (540, 740) aufweist, wobei die Rampe mindestens eine Arretierung aufweist.
15. Heizplattform (520, 720) gemäß Anspruch 13, wobei die Heizplattform (520, 720) Rippen zum Koppeln mit einer Schale (300) einer Wasserpeife beinhaltet.
16. Heizplattform (520, 720) gemäß Anspruch 13, wobei die Heizplattform (520, 720) Noppen auf einer Bodenfläche der Heizplattform (520, 720) beinhaltet.

Revendications

1. Système destiné à faciliter le fumage de tabac à partir d'un narguilé, le système comprenant : une plateforme de chauffage (520, 720) destinée à s'appuyer sur un bol (300) conçu pour contenir du tabac ou une autre substance organique fumable (308), la plateforme de chauffage (520, 720) comprenant une surface centrale incluant une dépression (522, 722) avec au moins une paroi enveloppante (528) de telle sorte qu'une source de chauffa-

ge ne glissera pas de la surface centrale, au moins un événement de périmètre (524, 724) de la plateforme (520, 720) pour permettre à l'air de passer entre une zone au-dessus de la surface centrale et en dessous de la surface centrale et un capuchon (540, 740) avec au moins un événement extérieur (560a), au moins un événement supérieur (572, 750), au moins une extension de commande de déplacement (590) et au moins un appui pour l'appui sur la plateforme de chauffage (520, 720), **caractérisé en ce que** la plateforme de chauffage (520, 720) comprend en outre : au moins un événement extérieur (526) situé dans au moins une paroi périmétrique située autour d'un extérieur de la plateforme de chauffage (520, 720), dans lequel l'au moins un événement extérieur (526) de la plateforme de chauffage (520, 720) peut être aligné avec l'au moins un événement extérieur (560a) du capuchon (540, 740).

2. Système selon la revendication 1, dans lequel l'au moins un événement extérieur (560a) du capuchon se situe au niveau d'une partie inférieure du capuchon (540) et peut être aligné avec l'au moins un événement extérieur (526) de la plateforme de chauffage (520, 720).
3. Système selon la revendication 2, dans lequel l'au moins un événement extérieur (560a) du capuchon peut être ajusté à l'aide d'une extension de commande de déplacement (590) de telle façon que sa position peut être ajusté par rapport à l'événement extérieur (526) de la plateforme de chauffage (520, 720).
4. Système selon la revendication 3, dans lequel l'au moins une extension de commande de déplacement est un bras (730).
5. Système selon la revendication 3, dans lequel l'au moins une extension de commande de déplacement est un bord (590).
6. Système selon la revendication 2, dans lequel le capuchon comprend en outre :
un capuchon intérieur (720) ; et
un capuchon extérieur (710).

7. Système selon la revendication 6, dans lequel l'au moins une extension de commande de déplacement (590) peut être utilisée pour ajuster le capuchon extérieur (710) par rapport au capuchon intérieur (720).
8. Système selon la revendication 7, dans lequel l'ajustement du capuchon extérieur (710) par rapport au capuchon intérieur (720) peut ajuster l'au moins un événement supérieur.
9. Système selon la revendication 7, dans lequel le ca-

puchon extérieur (710) et le capuchon intérieur (720) sont accouplés de manière à pouvoir tourner l'un par rapport à l'autre.

10. Système selon la revendication 3, dans lequel l'extension de commande de déplacement (590) peut être utilisée pour soulever le capuchon de la plateforme de chauffage (520, 720). 5

11. Système selon la revendication 2, dans lequel un bord inférieur du capuchon se trouve à une plus grande distance radiale d'un axe central perpendiculaire à la surface de plateforme qu'une distance radiale de la circonférence de la plateforme de chauffage (520, 720). 10
15

12. Système selon la revendication 2, dans lequel le capuchon peut être accouplé fixement à la plateforme de chauffage (520, 720). 20

13. Plateforme de chauffage (520, 720) destinée à être utilisée dans le système selon la revendication 1, ladite plateforme de chauffage (520, 720) comprenant une surface centrale incluant une dépression (522, 722) avec au moins une paroi enveloppante (528) de telle sorte qu'une source de chauffage ne glissera pas de la surface centrale, au moins un évent de périmètre (524, 724) de la plateforme de chauffage (520, 720) pour permettre à l'air de passer entre une zone au-dessus de la surface centrale et en dessous de la surface centrale et au moins un évent extérieur (526) situé dans au moins une paroi périmétrique située autour d'un extérieur de la plateforme de chauffage (520, 720), dans laquelle la plateforme de chauffage (520, 720) peut être accouplée fixement avec un bol (300) du système lorsqu'elle s'appuie sur le bol (300). 25
30
35

14. Plateforme de chauffage (520, 720) selon la revendication 13, dans laquelle la plateforme de chauffage (520, 720) comporte au moins une rampe destinée à supporter le capuchon (540, 740), la rampe comportant au moins une détente. 40

15. Plateforme de chauffage (520, 720) selon la revendication 13, dans laquelle la plateforme de chauffage (520, 720) inclut des saillies destinées à l'accouplement avec un bol (300) d'une pipe à eau. 45

16. Plateforme de chauffage (520, 720) selon la revendication 13, dans laquelle la plateforme de chauffage (520, 720) inclut des nodules sur une surface inférieure de la plateforme de chauffage (520, 720). 50

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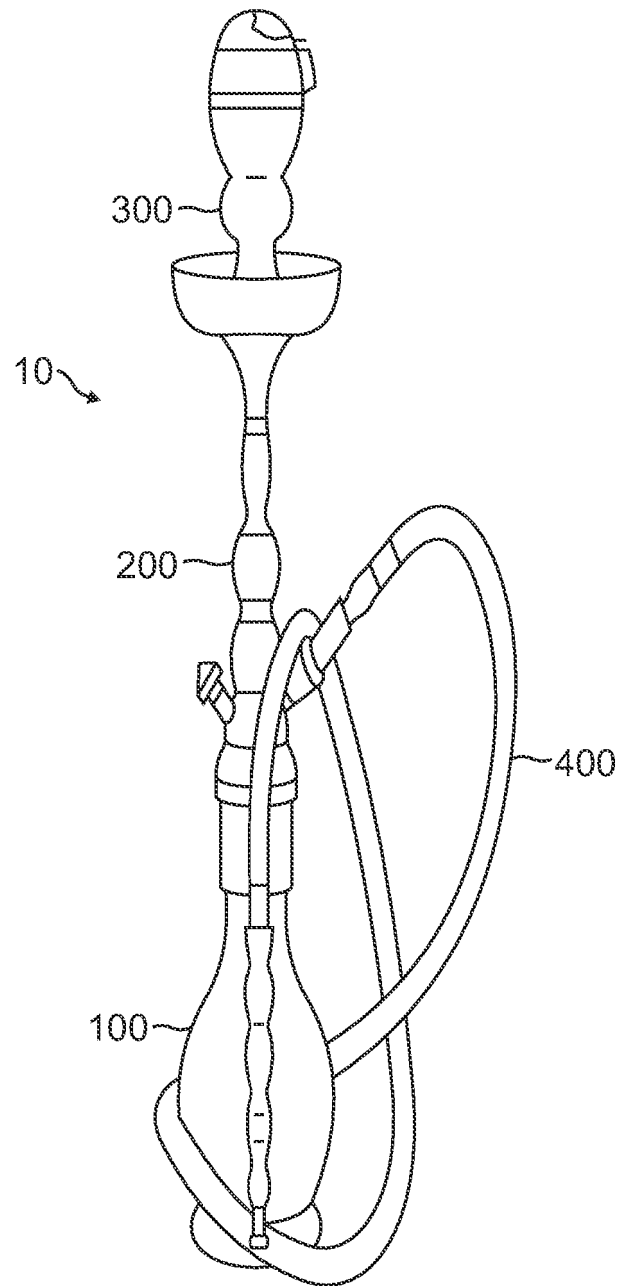


FIG. 1A

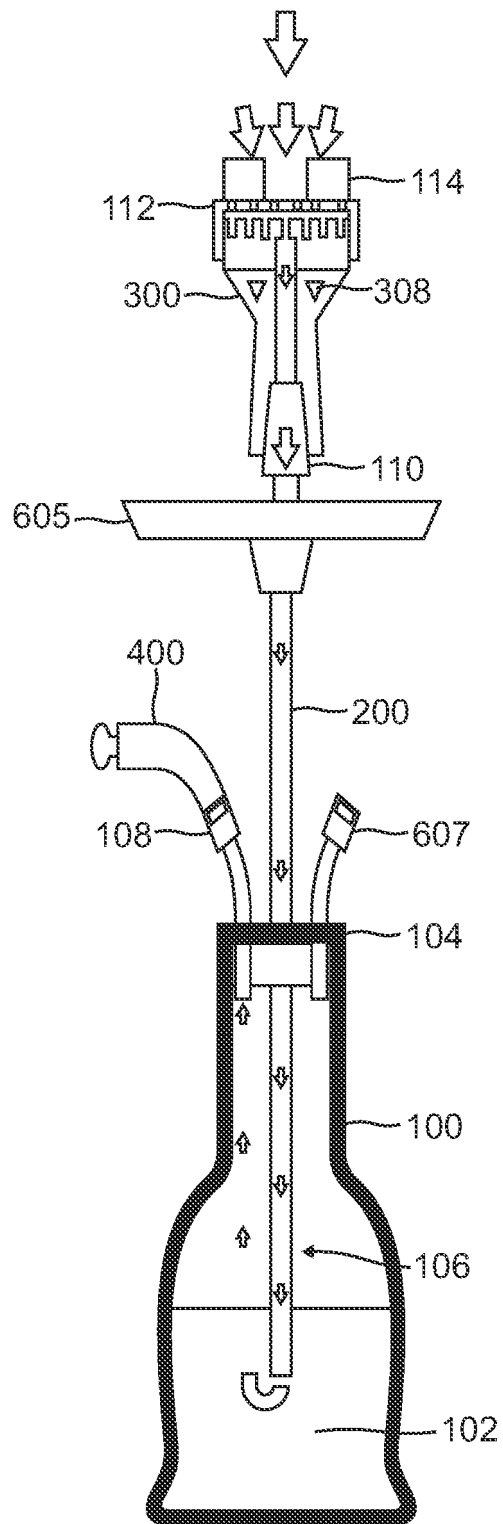


FIG. 1B

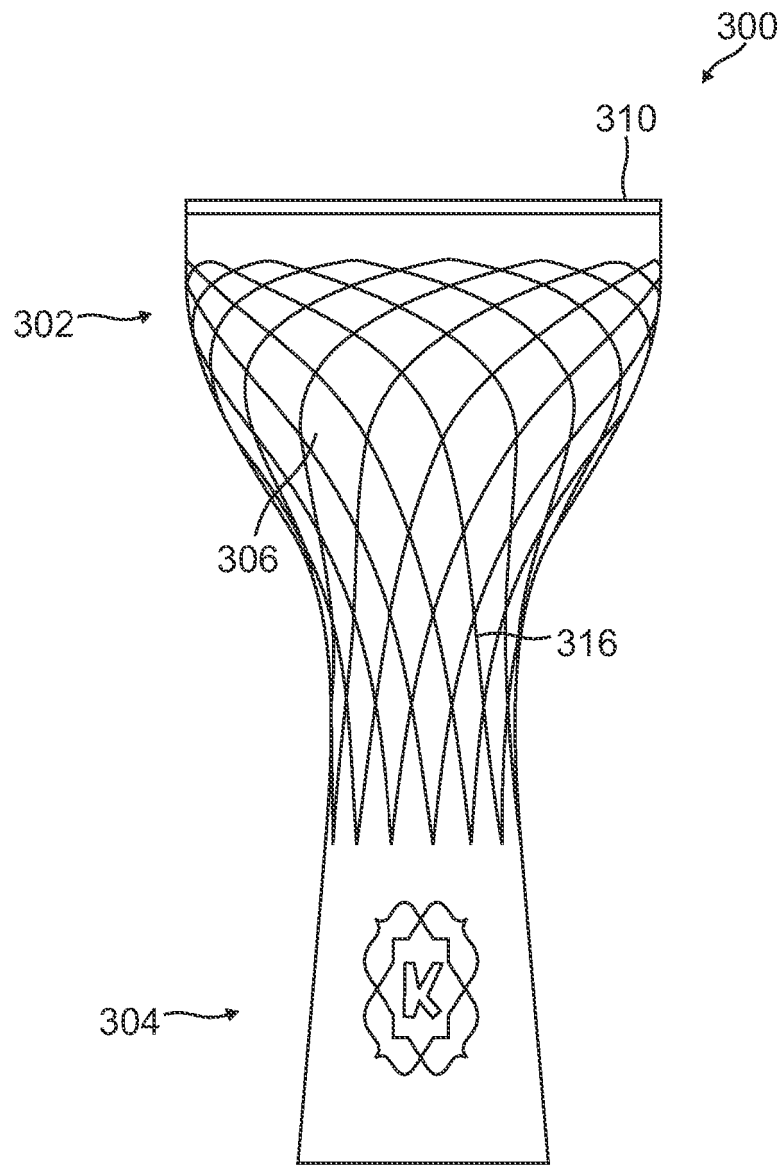


FIG. 2A

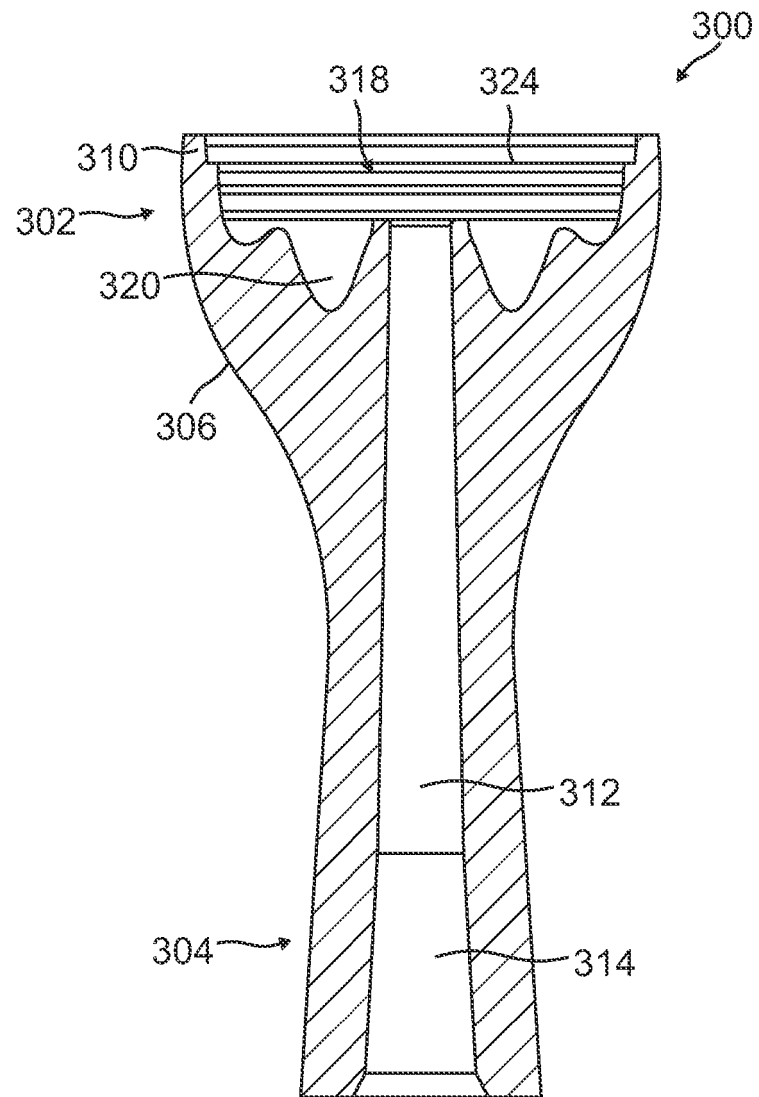


FIG. 2B

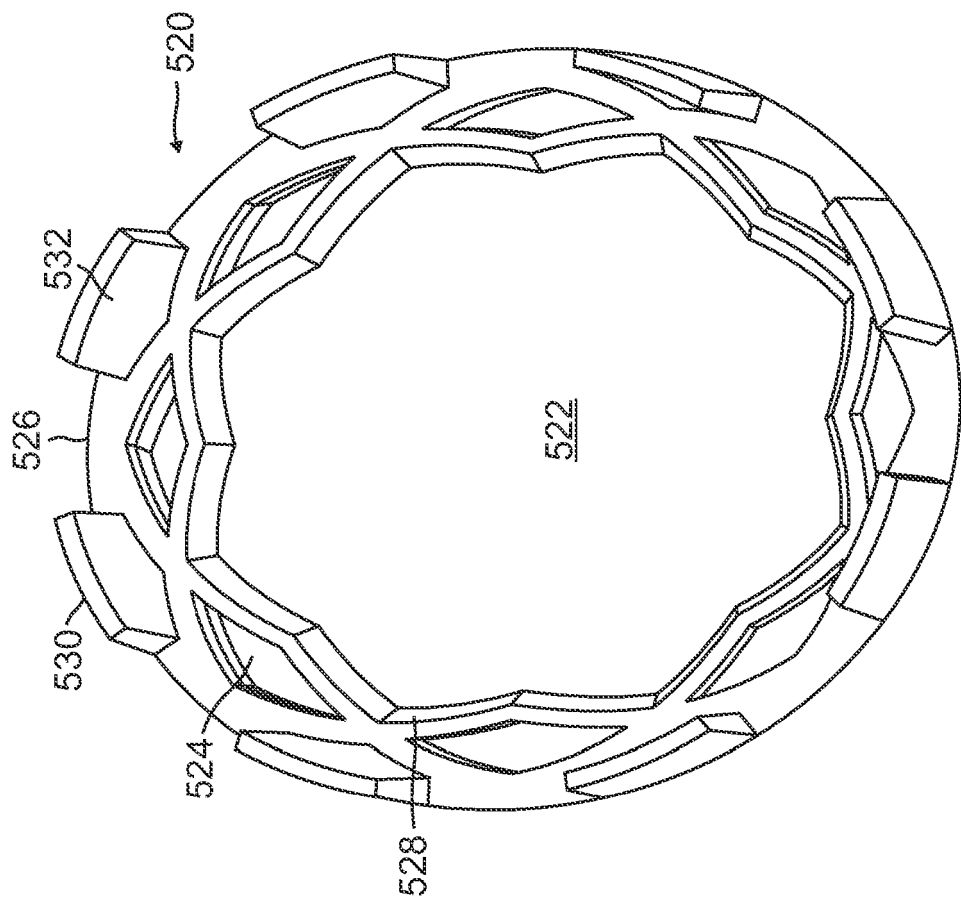


FIG. 3A

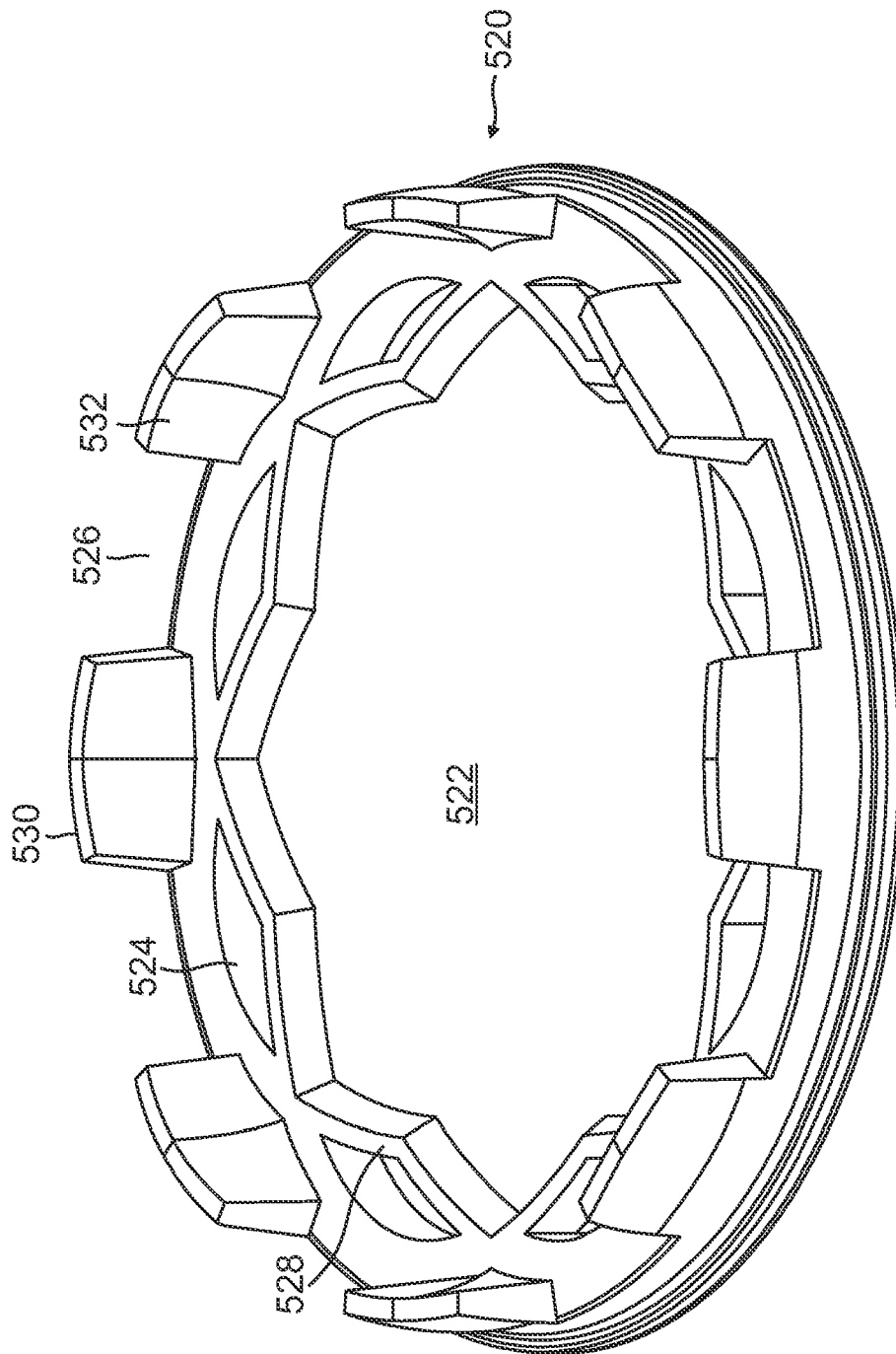


FIG. 3B

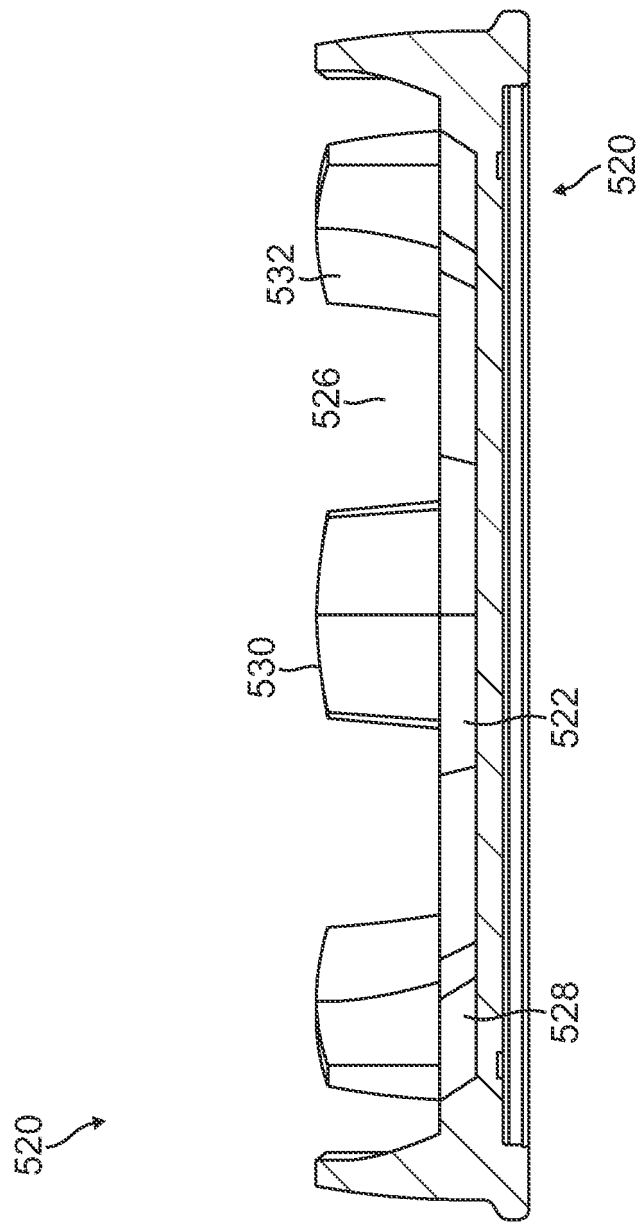


FIG. 3C

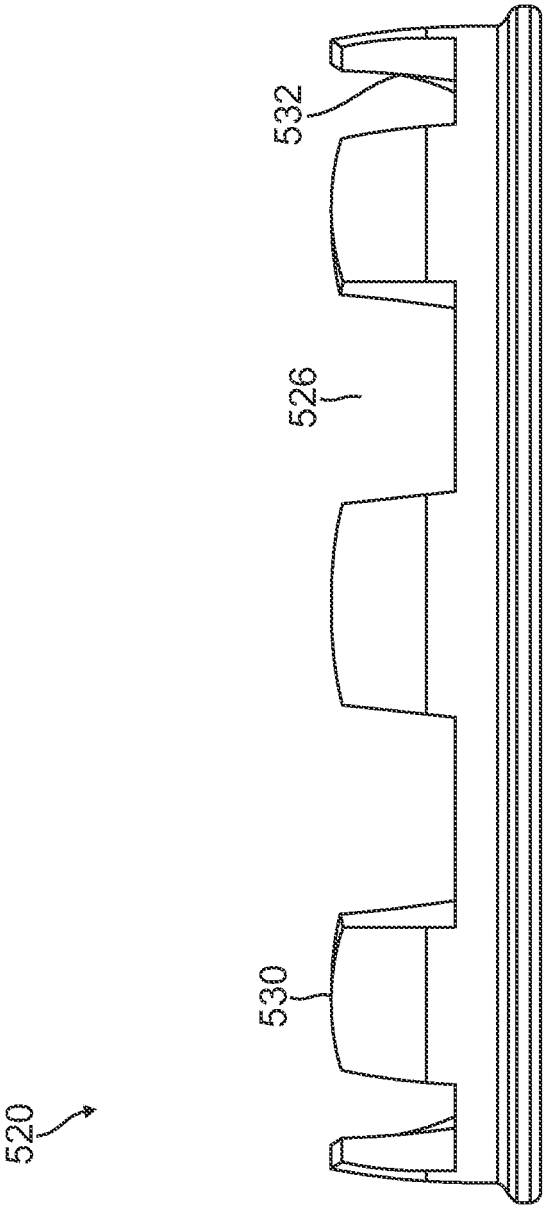


FIG. 3D

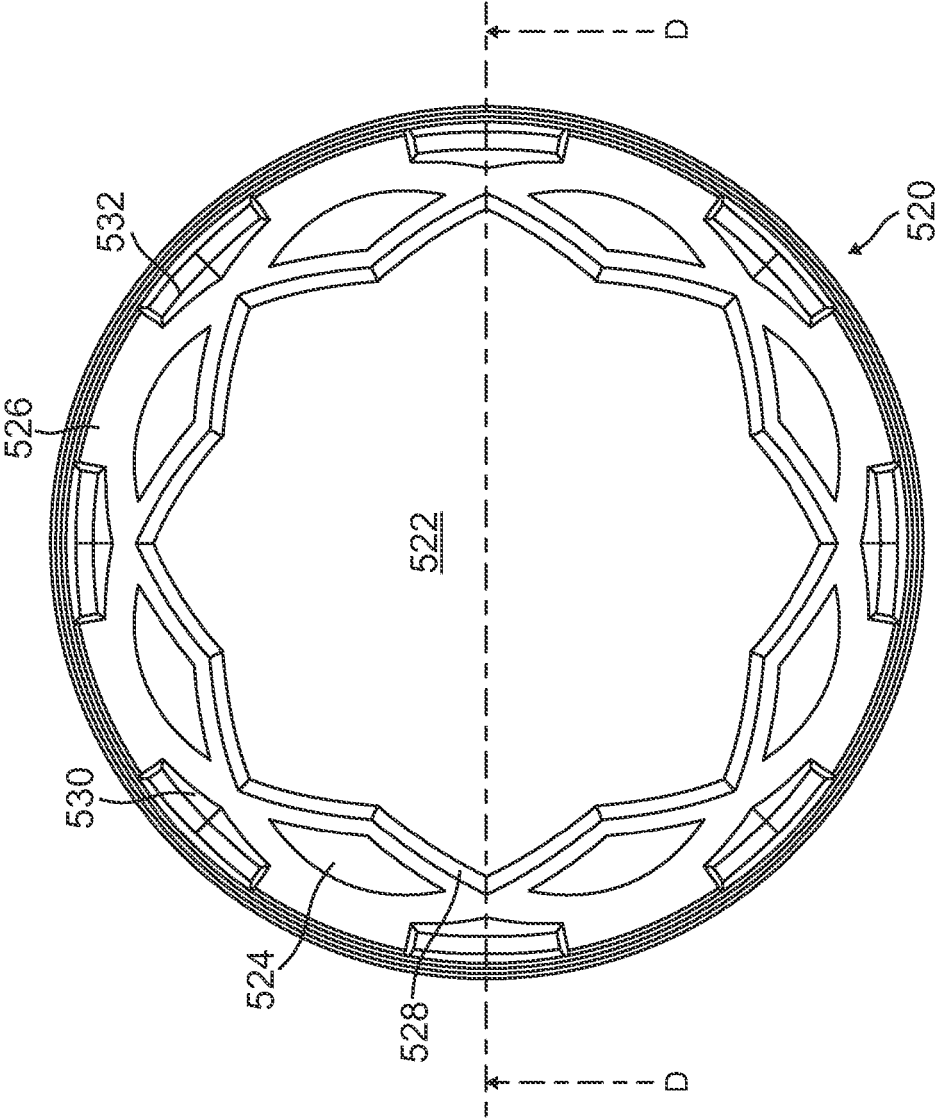


FIG. 3E

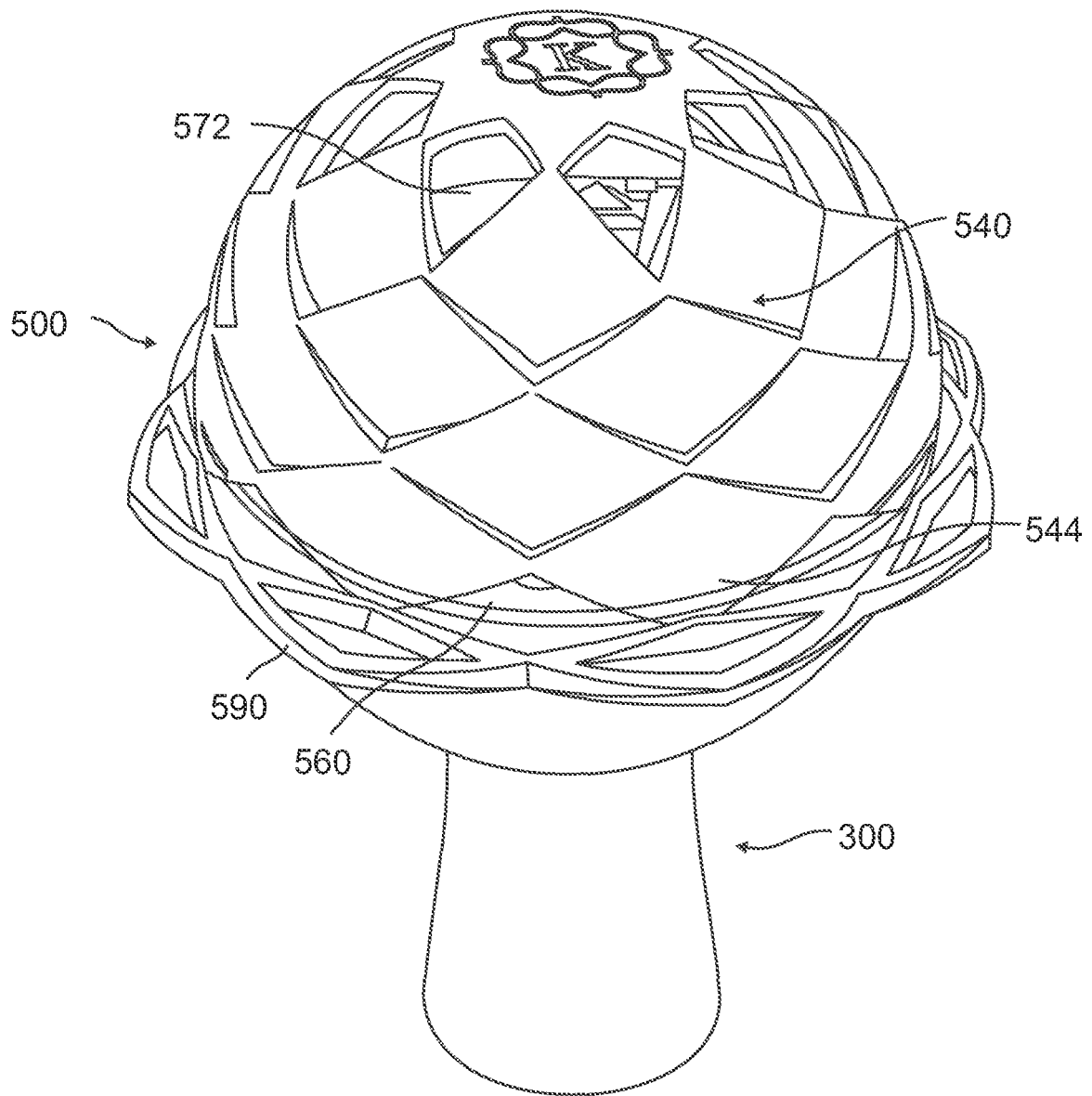


FIG. 4A

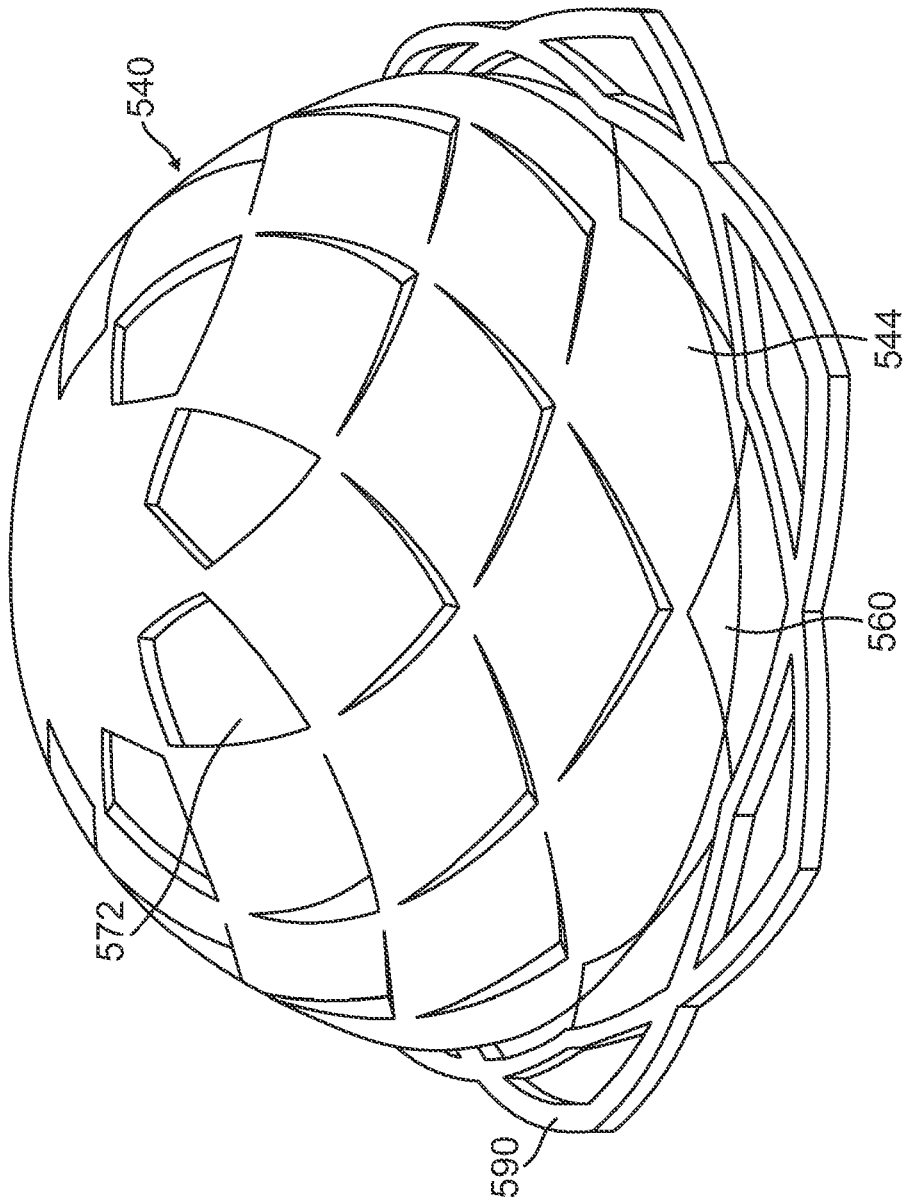


FIG. 4B

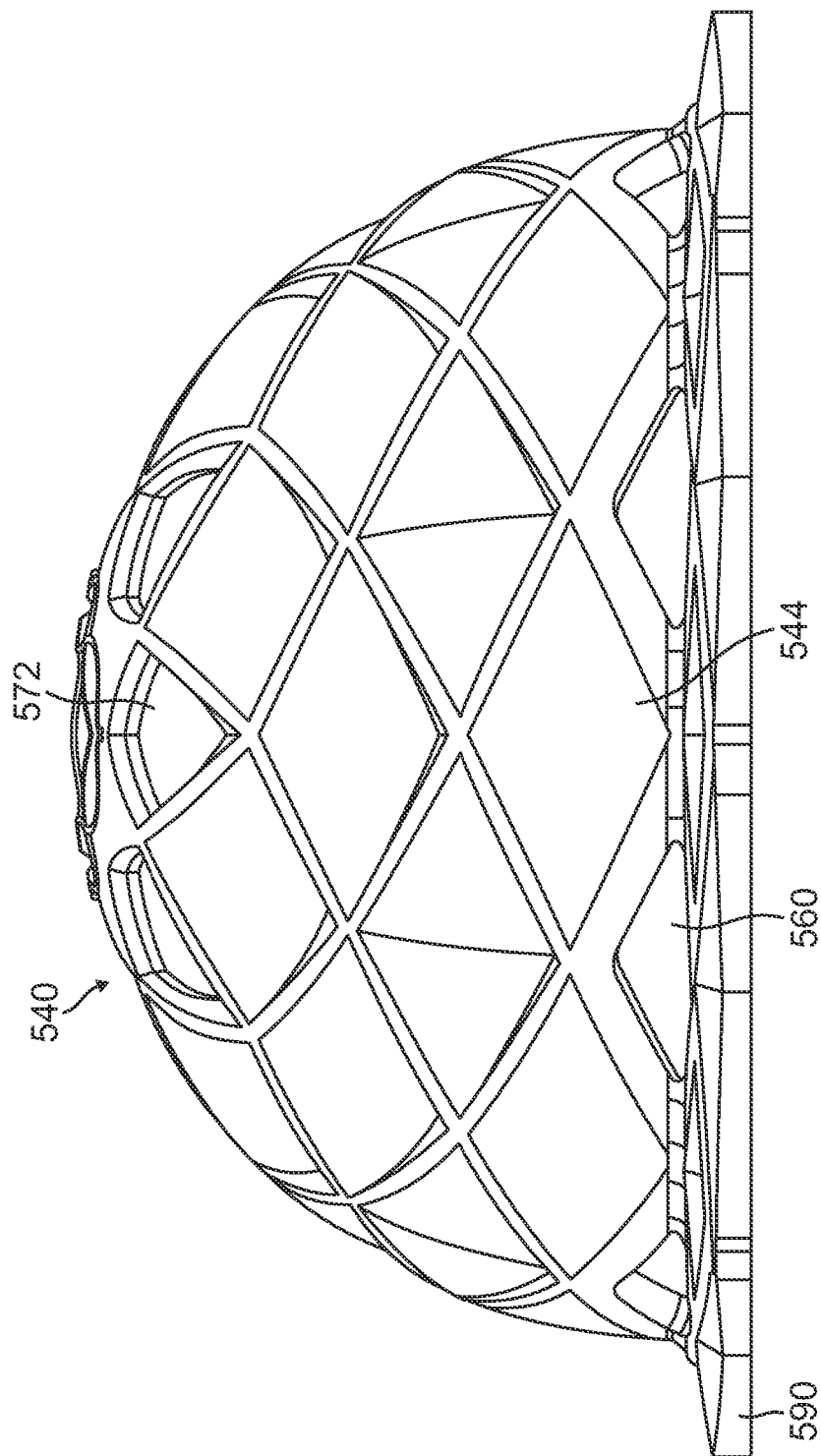


FIG. 4C

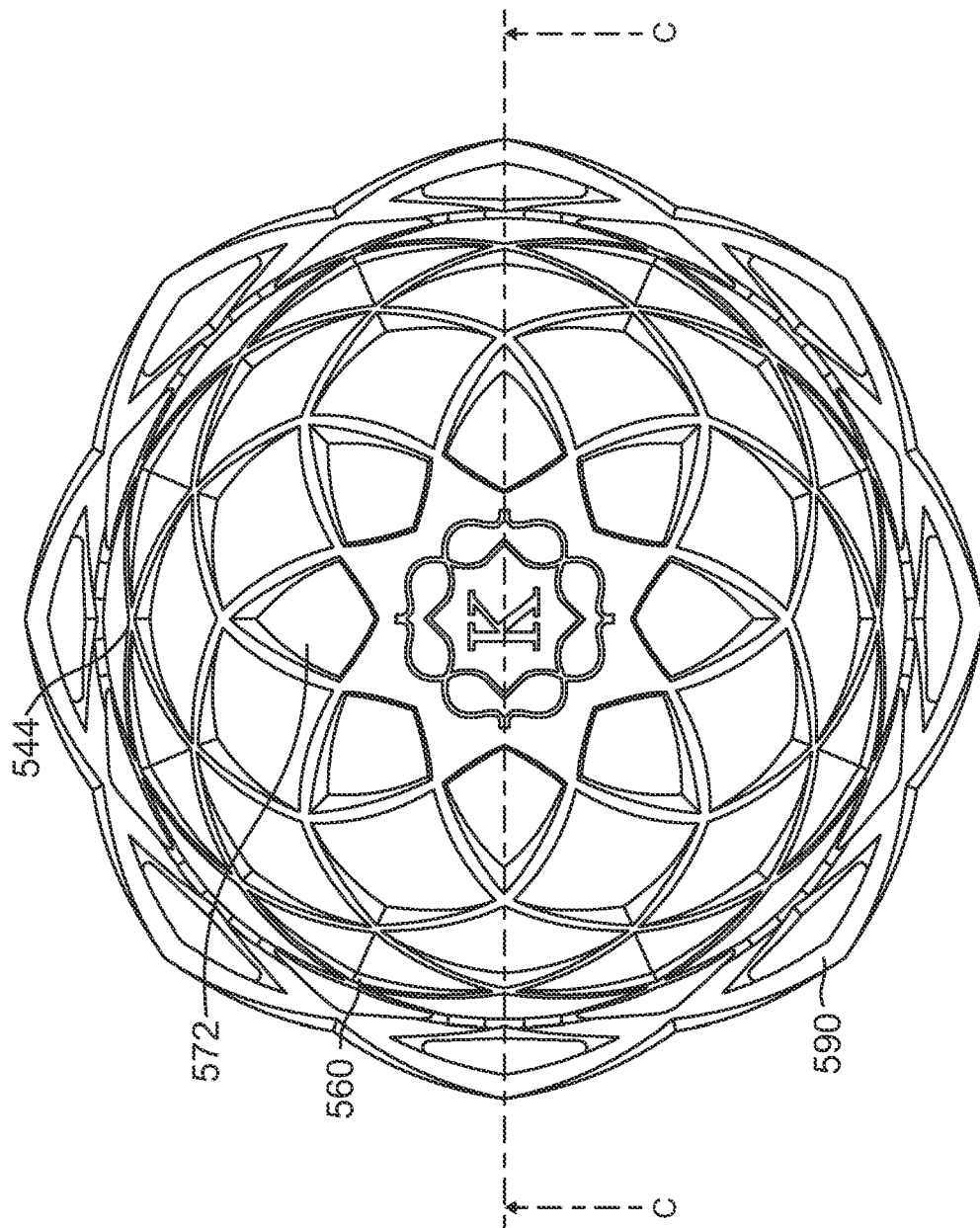


FIG. 4D

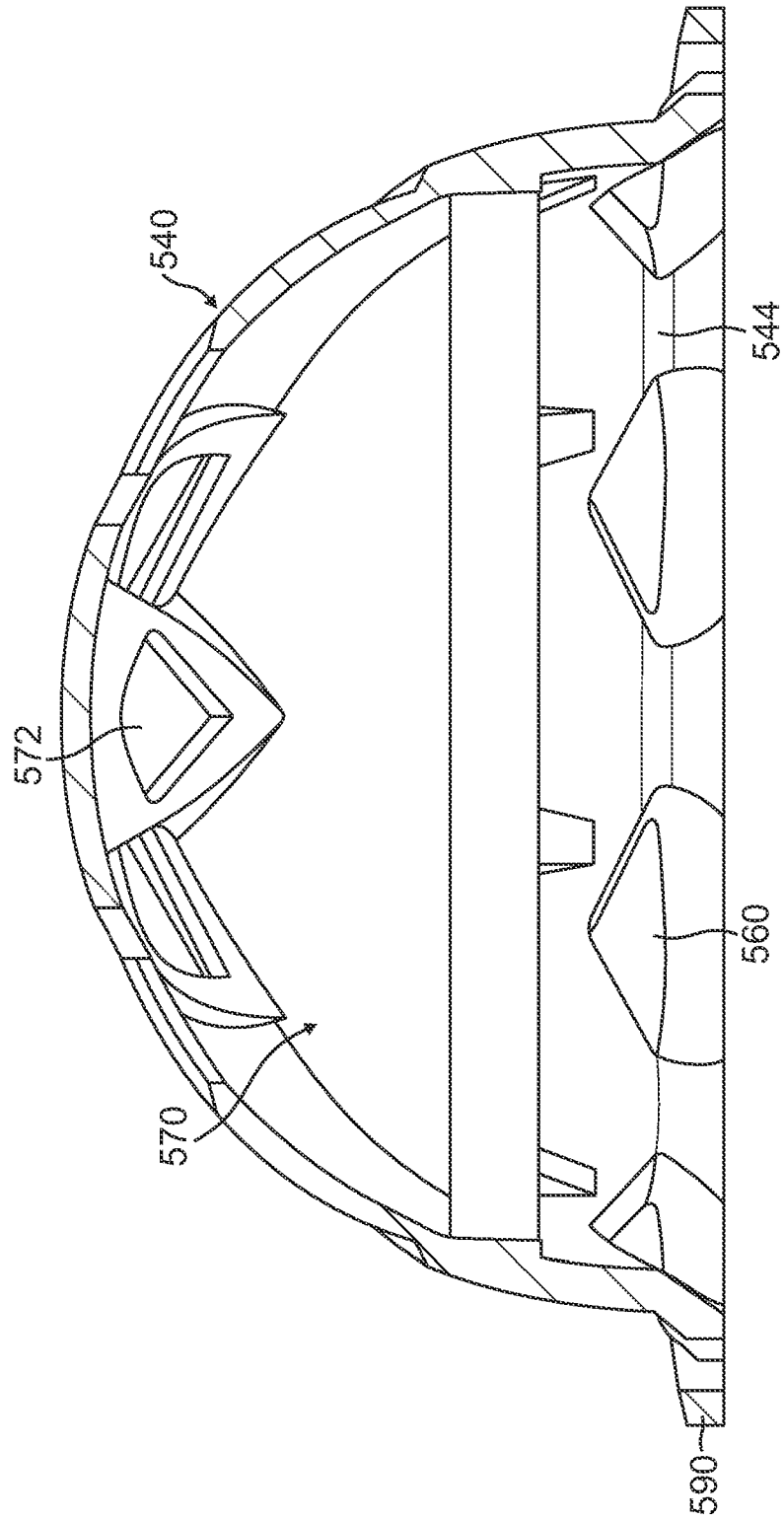


FIG. 4E

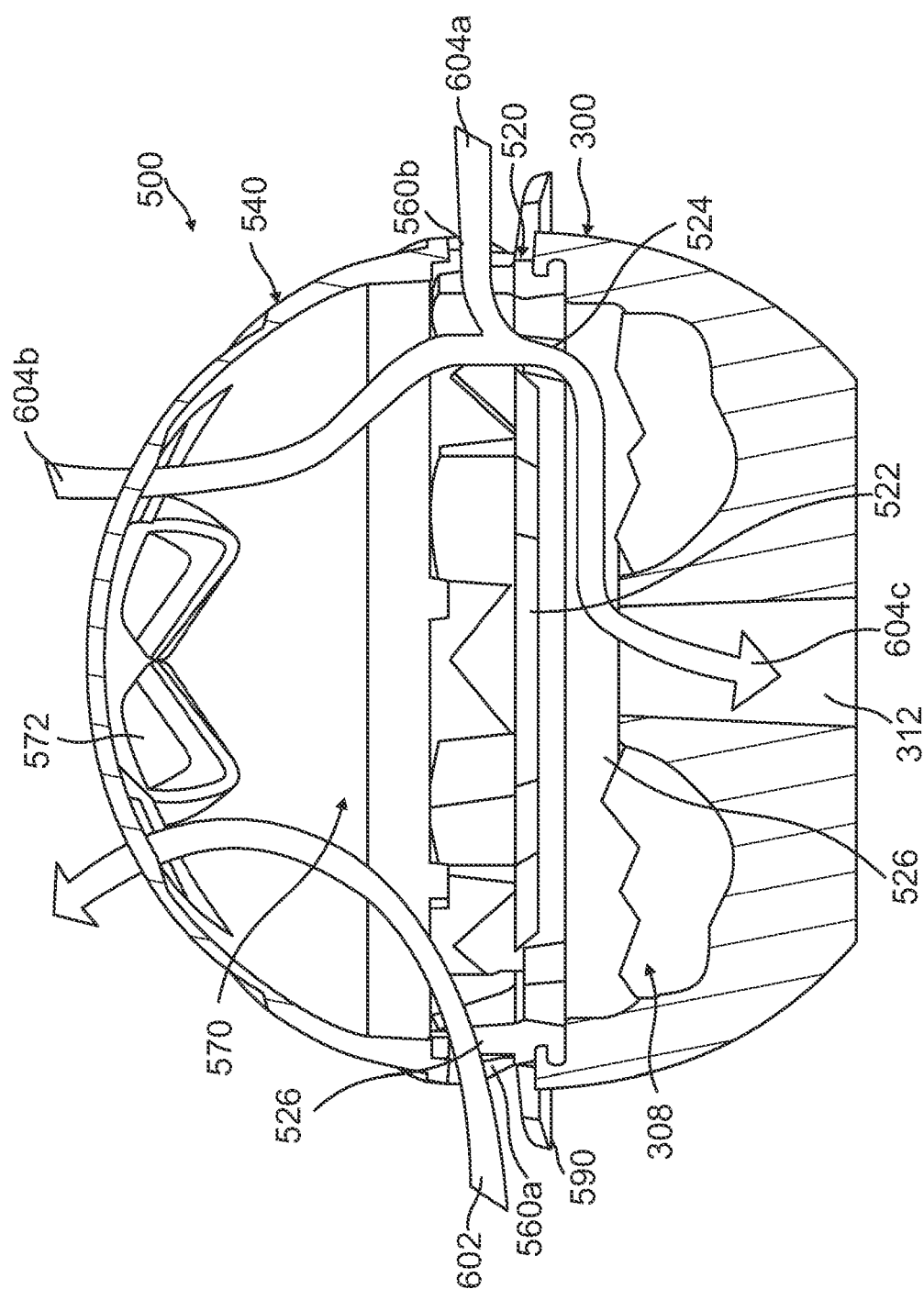


FIG. 5A

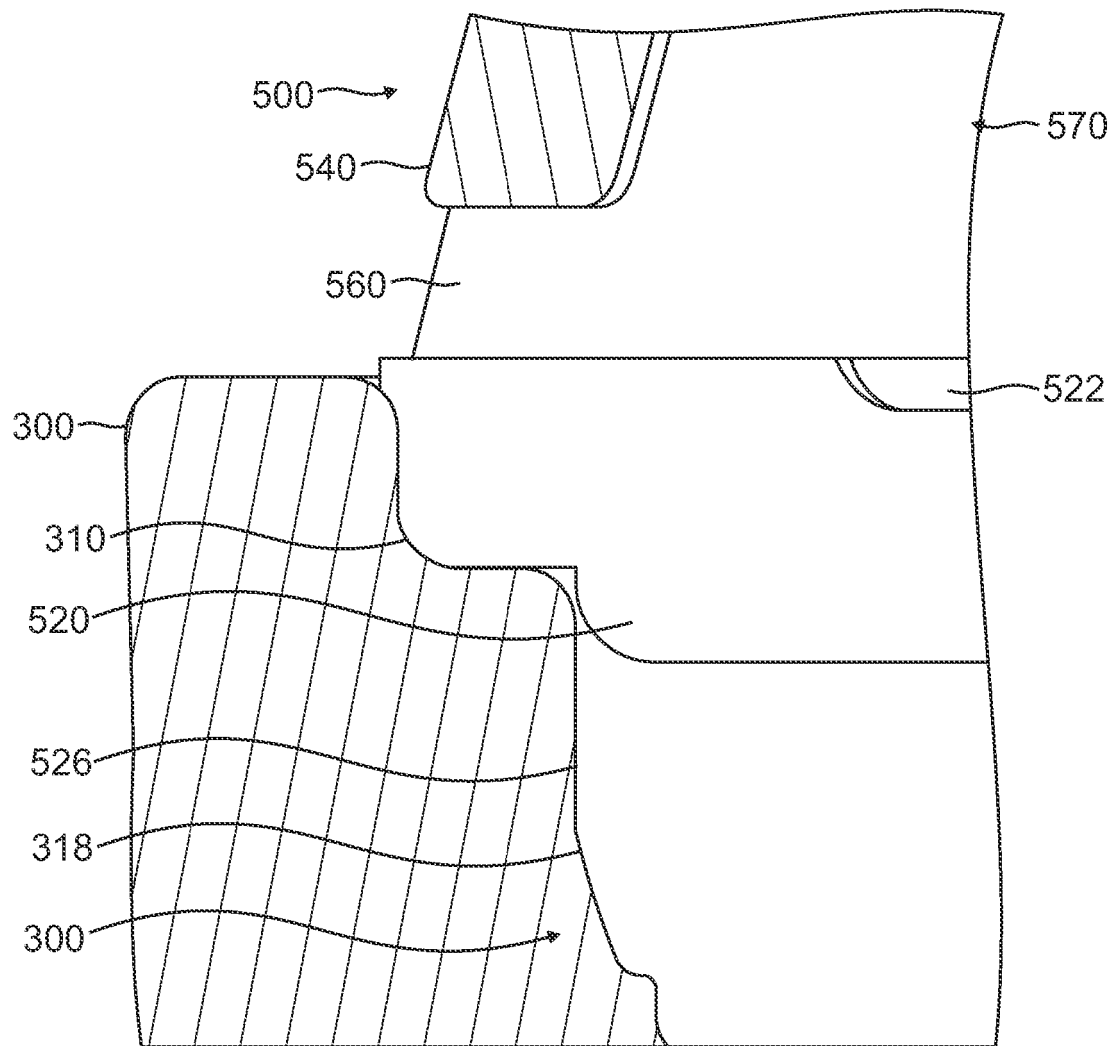


FIG. 5B

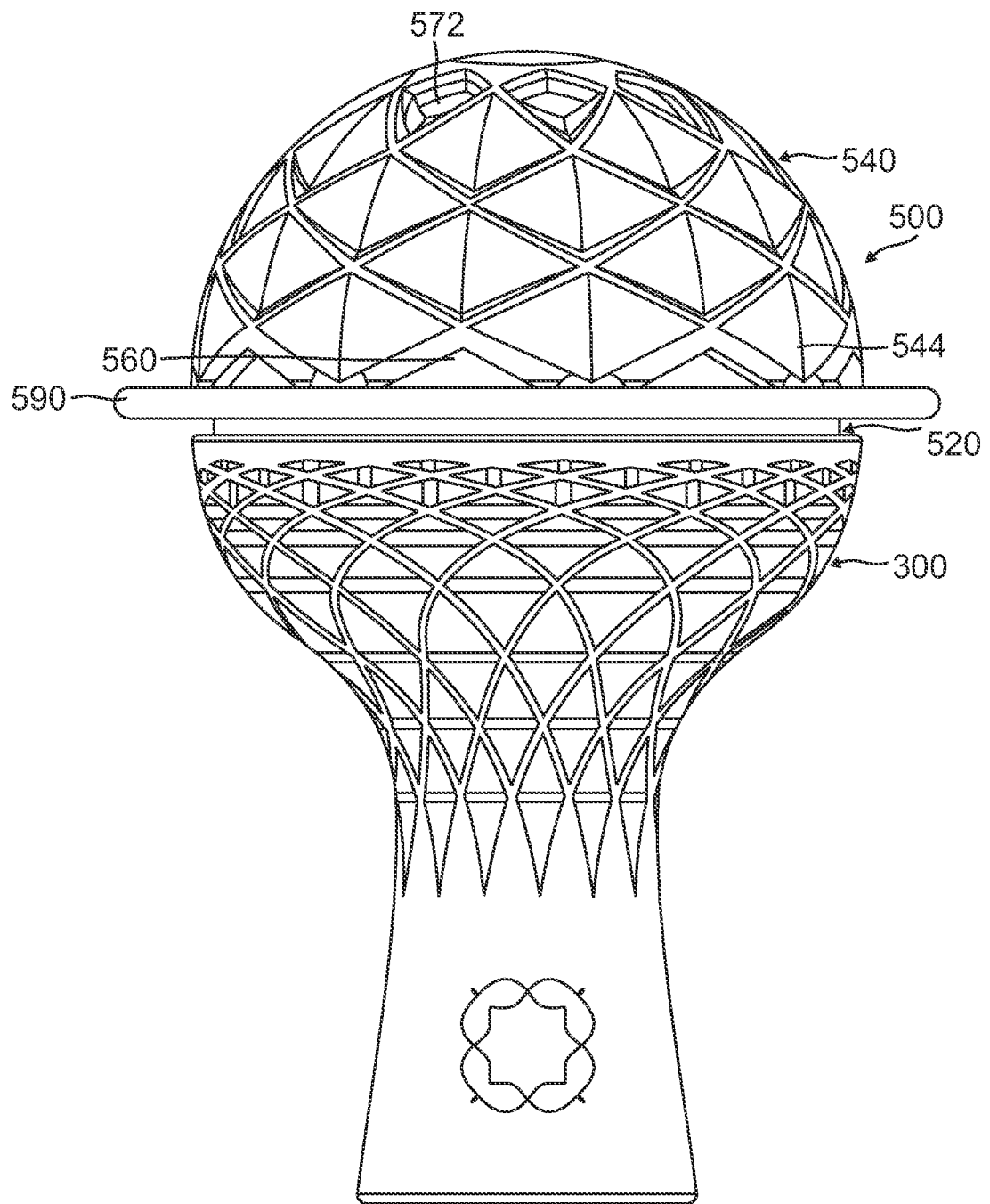


FIG. 5C

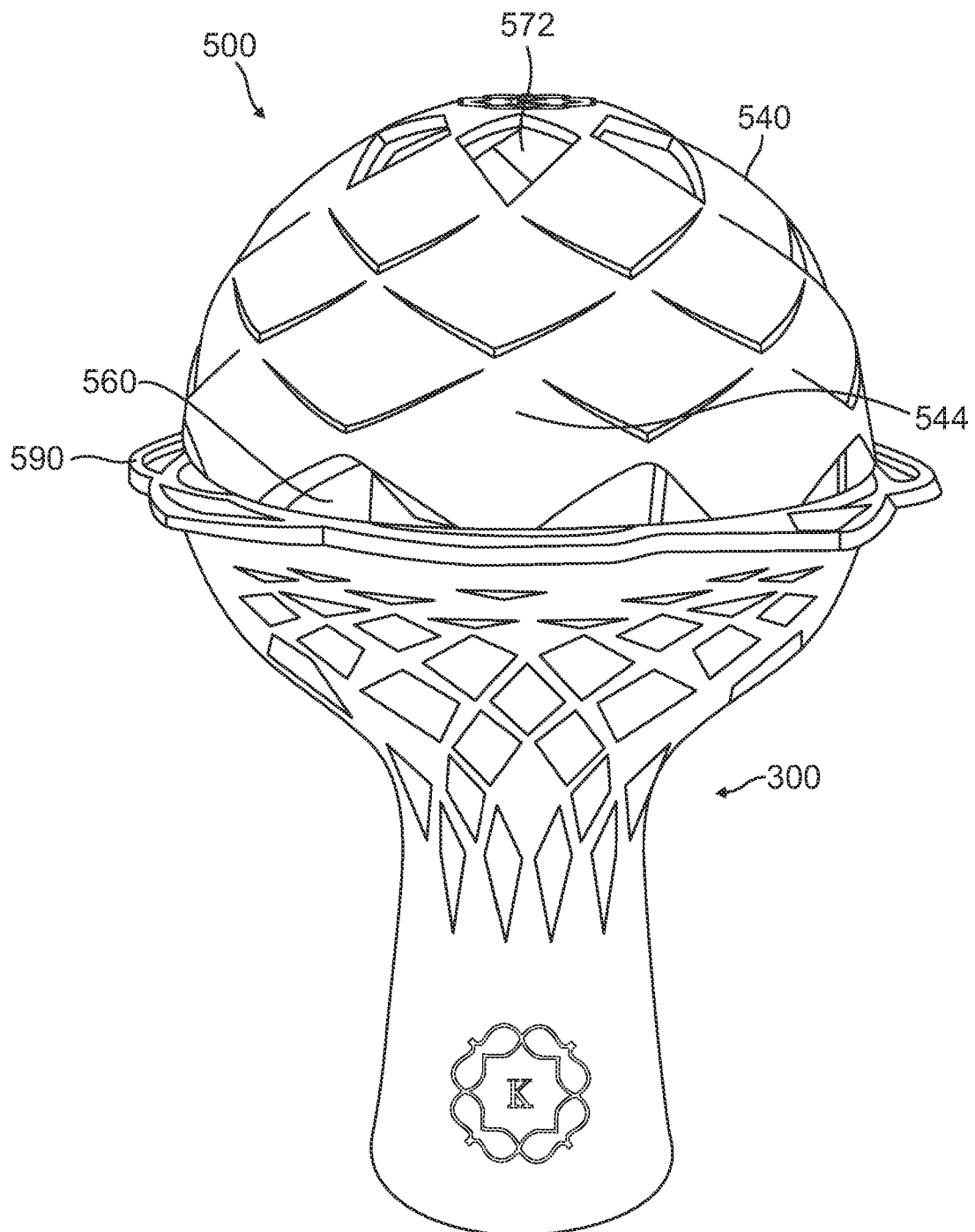


FIG. 5D

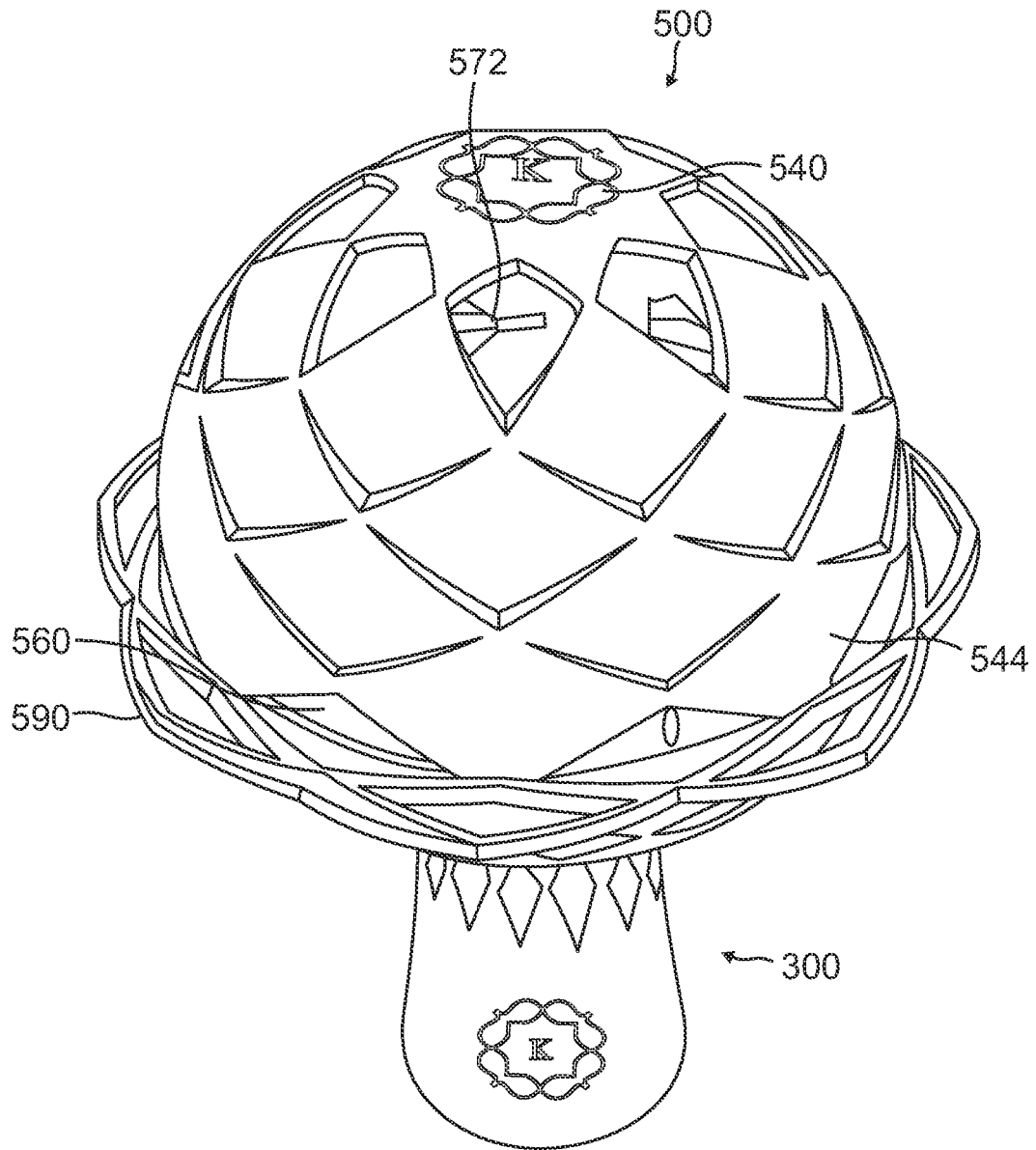


FIG. 5E

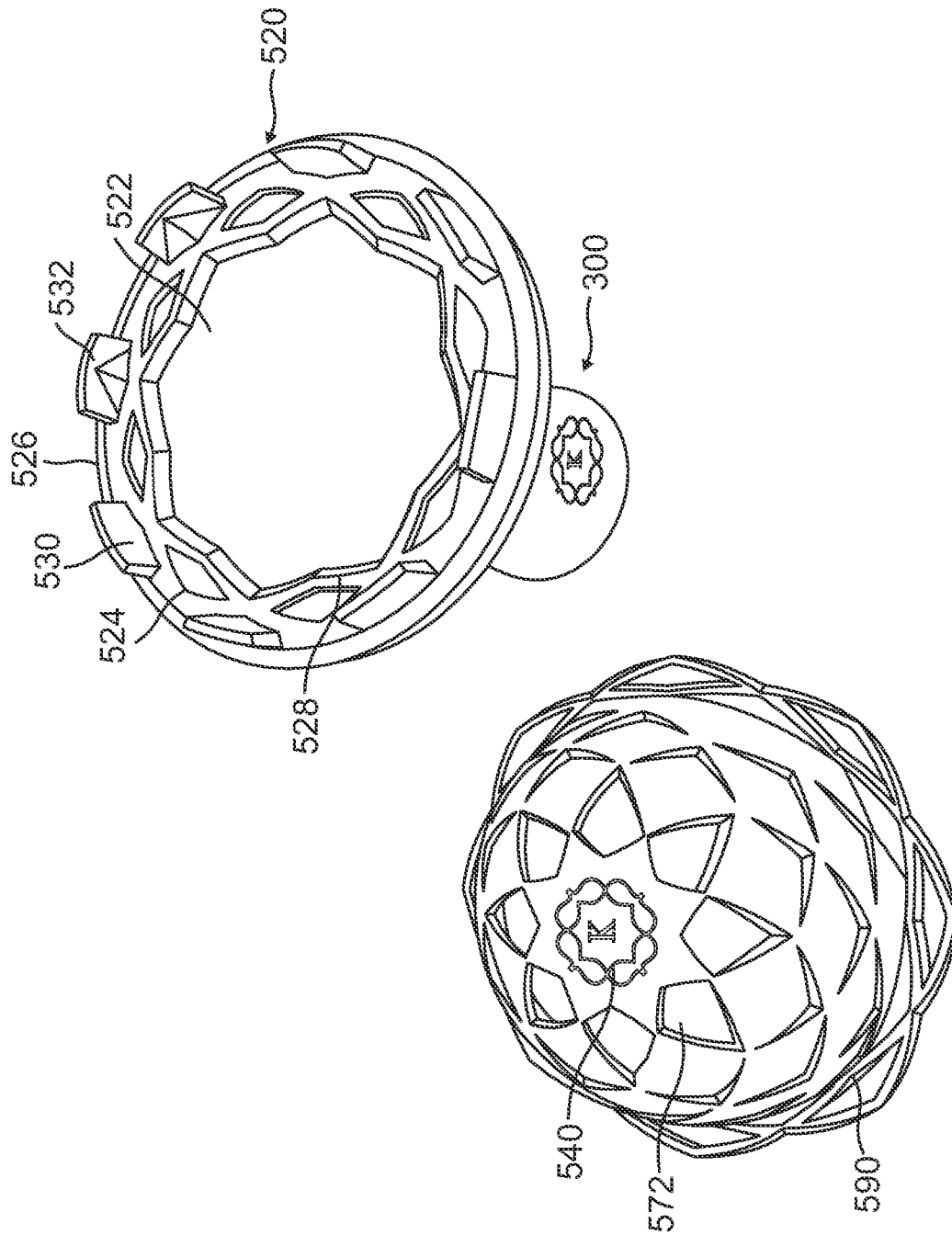


FIG. 5F

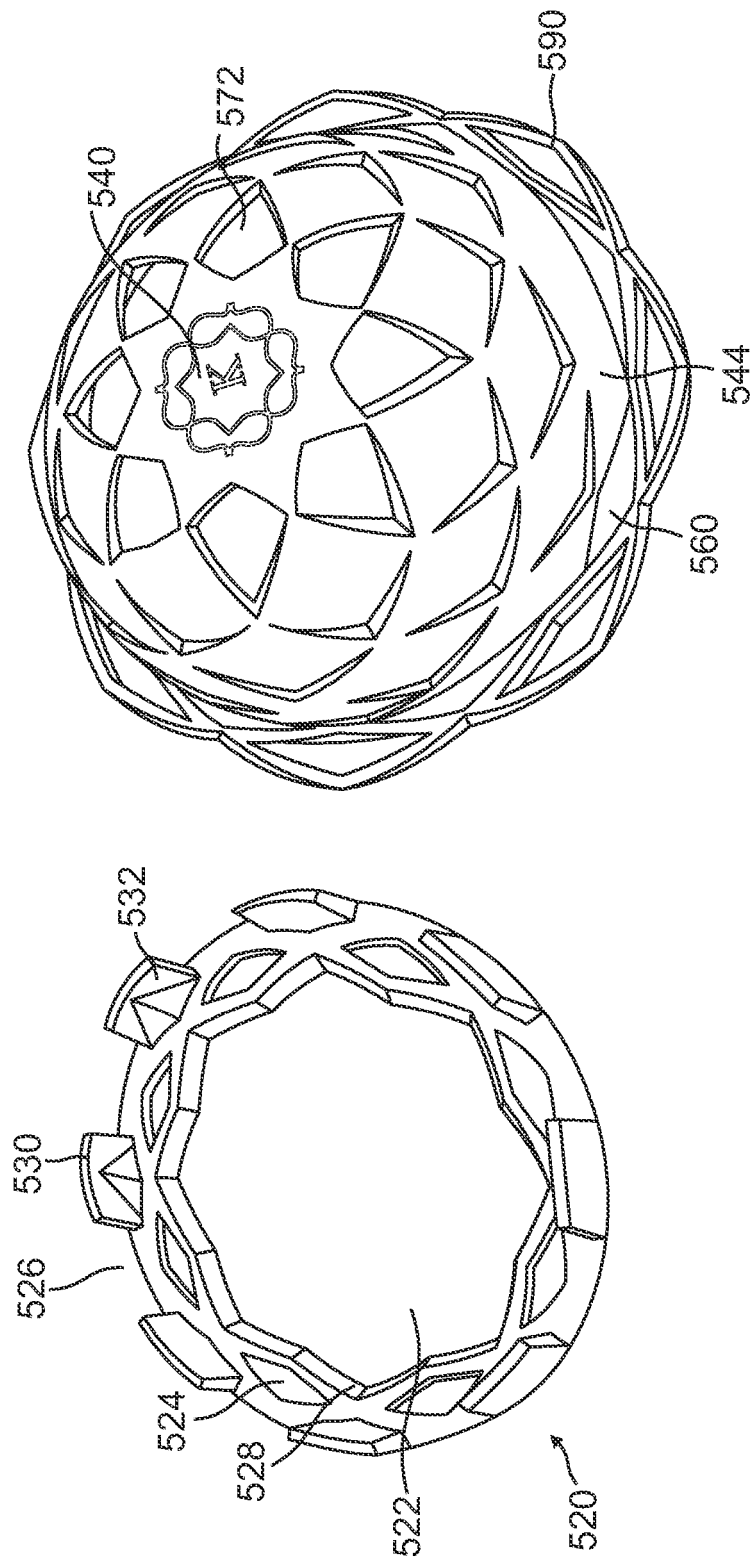


FIG. 5G

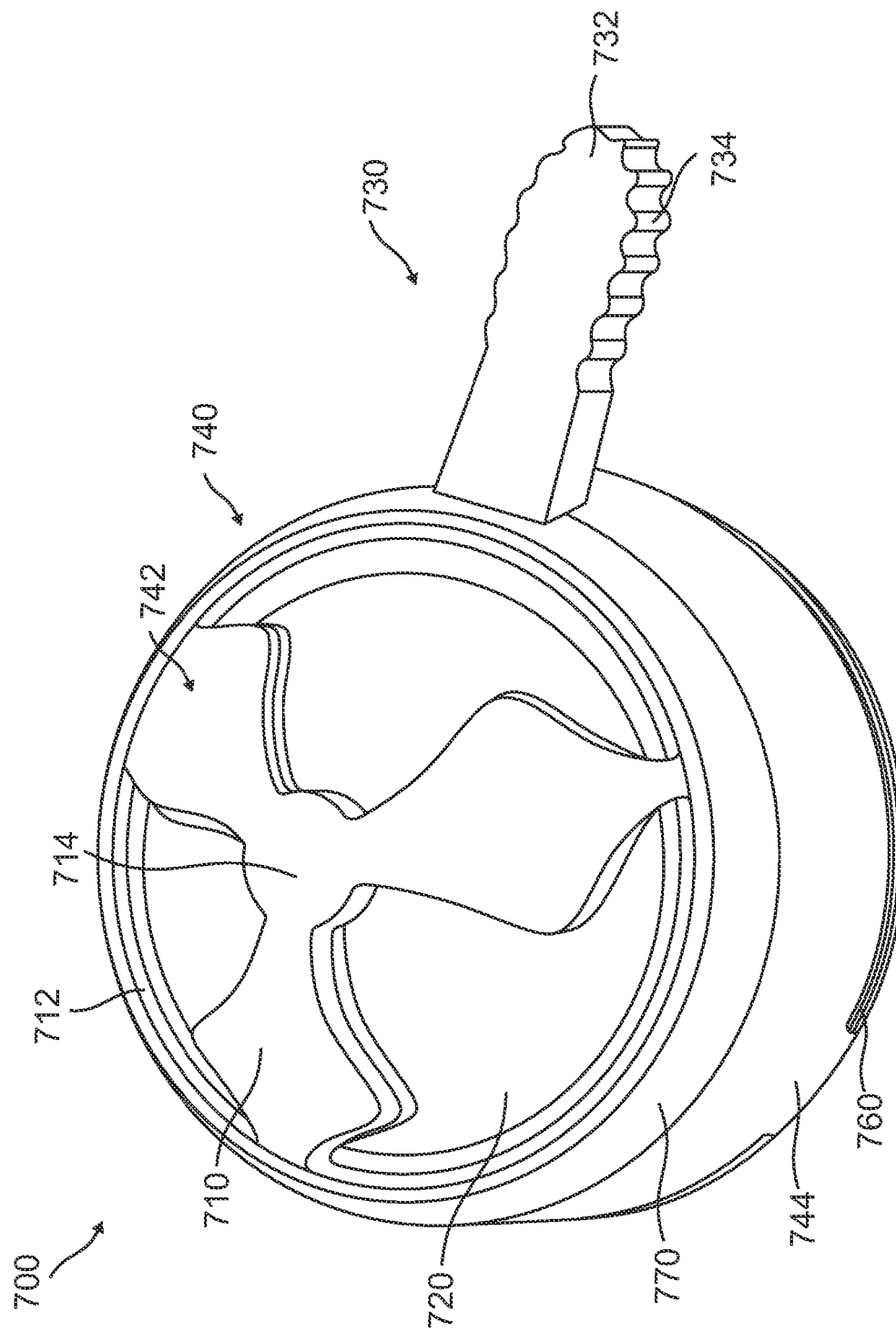


FIG. 6A

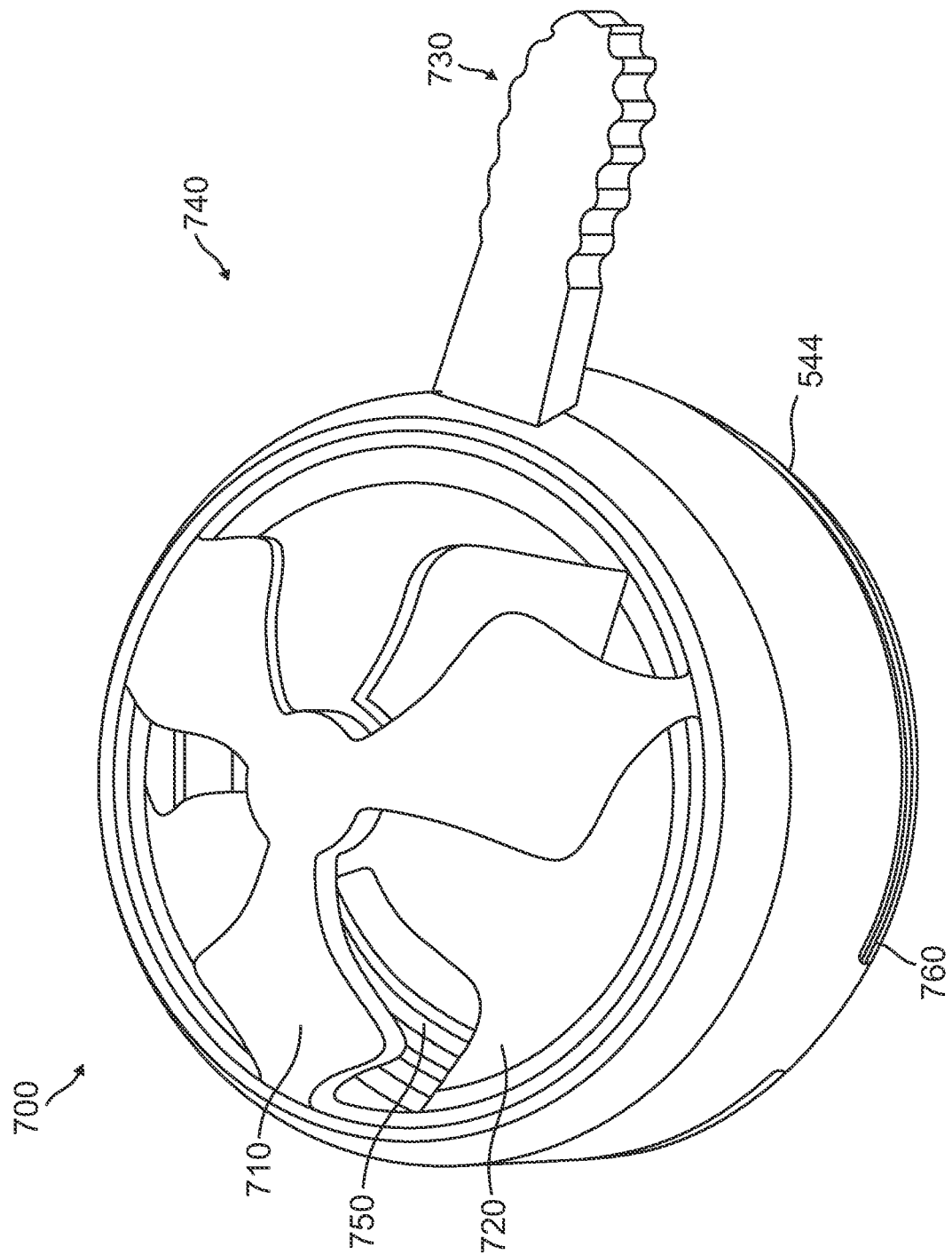


FIG. 6B

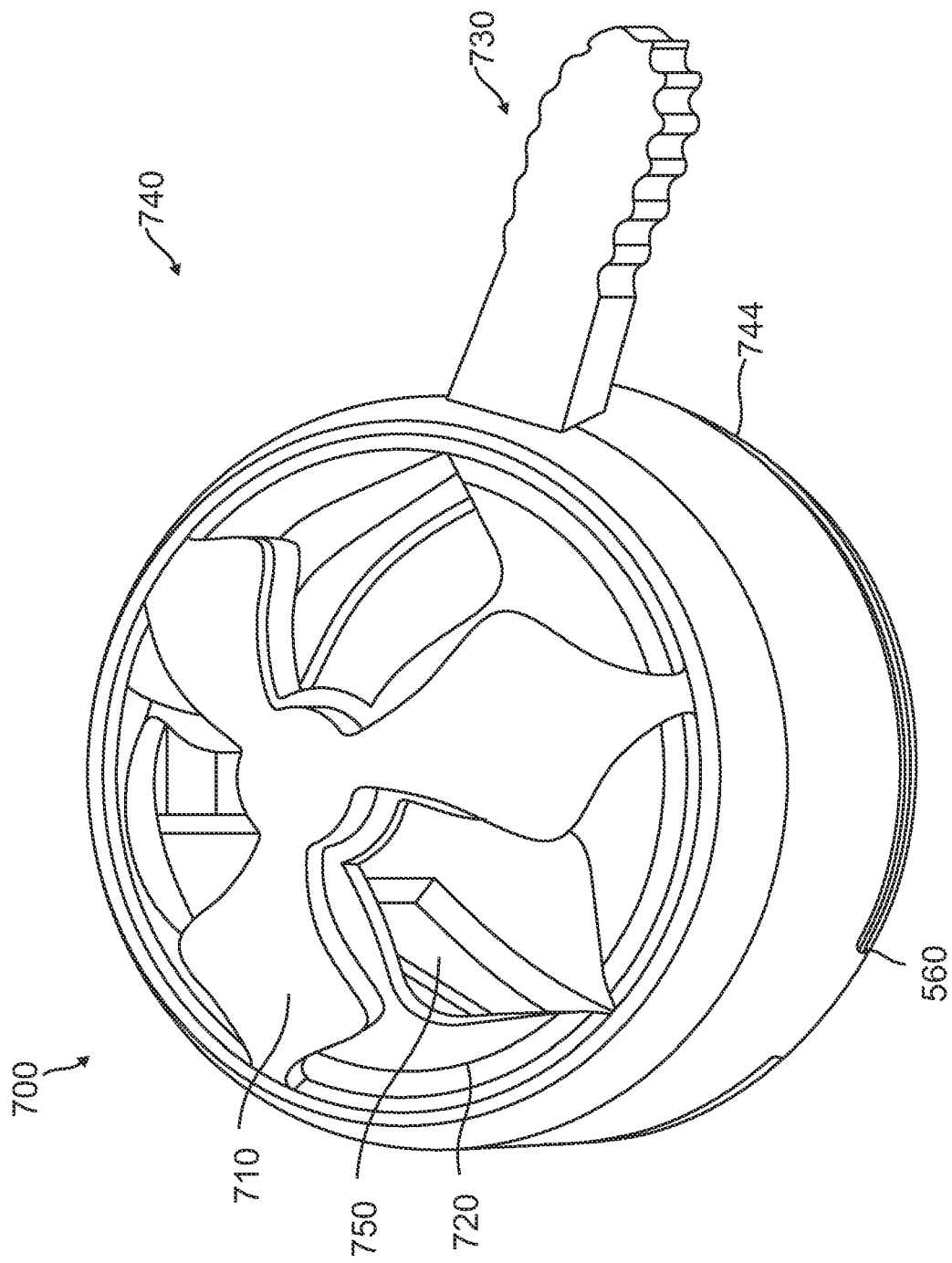
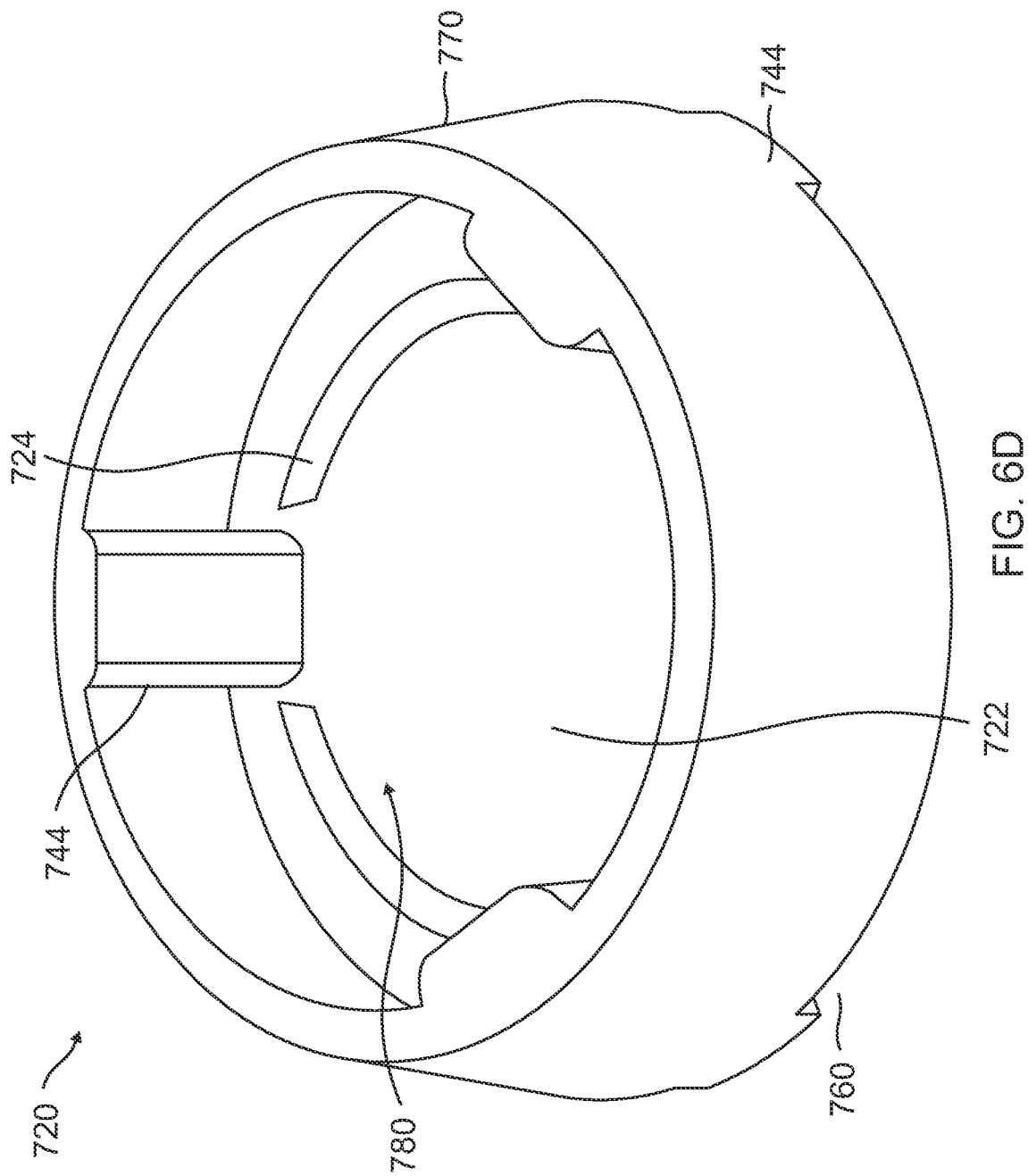


FIG. 6C



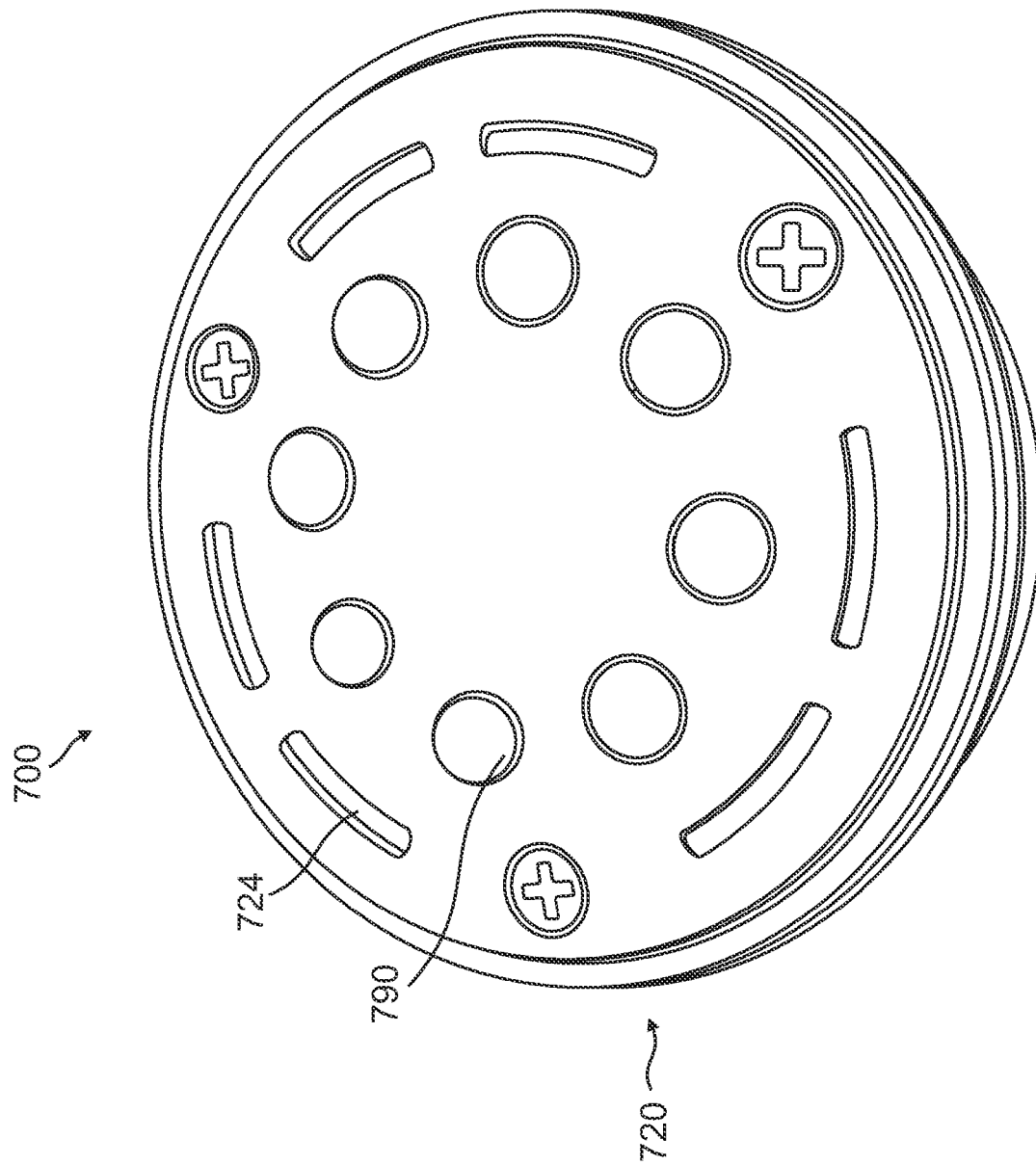


FIG. 6E

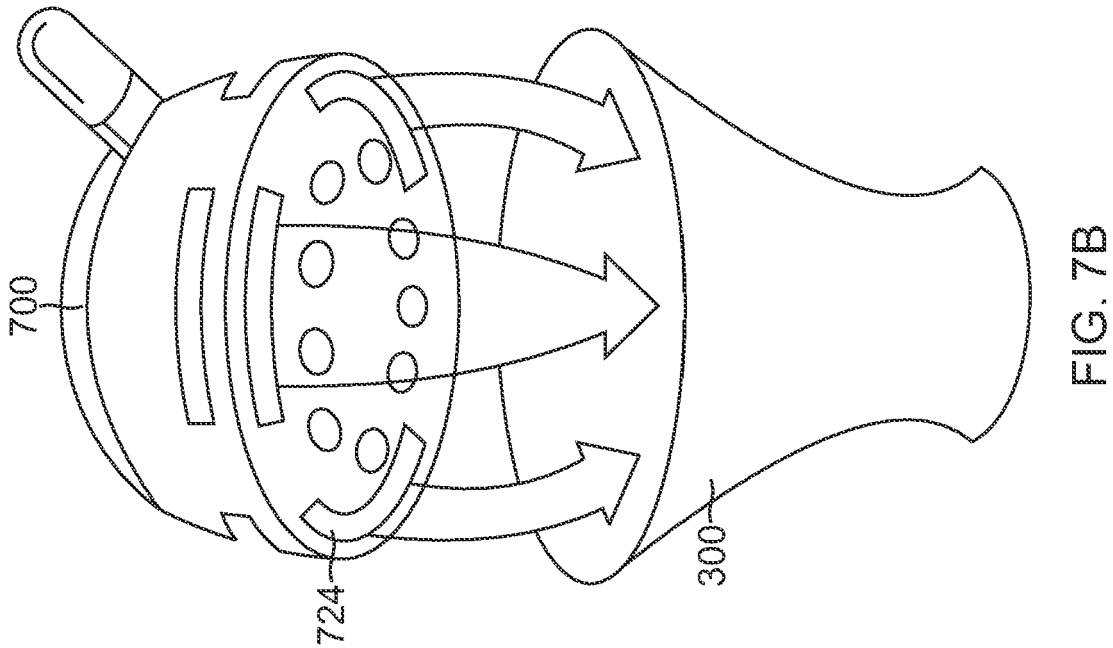


FIG. 7B

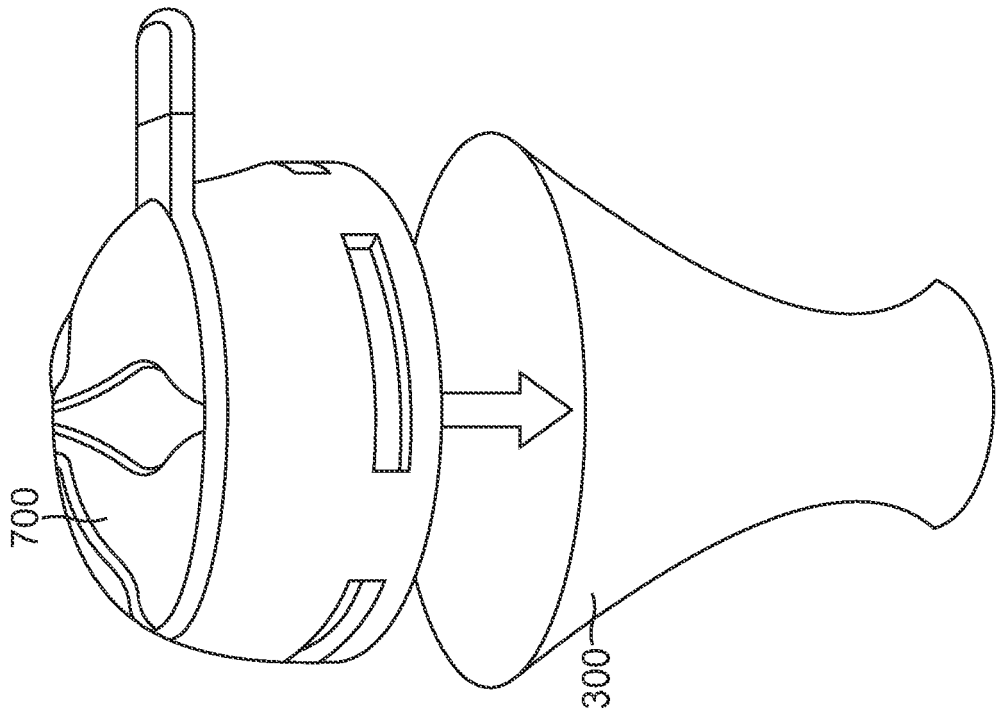


FIG. 7A

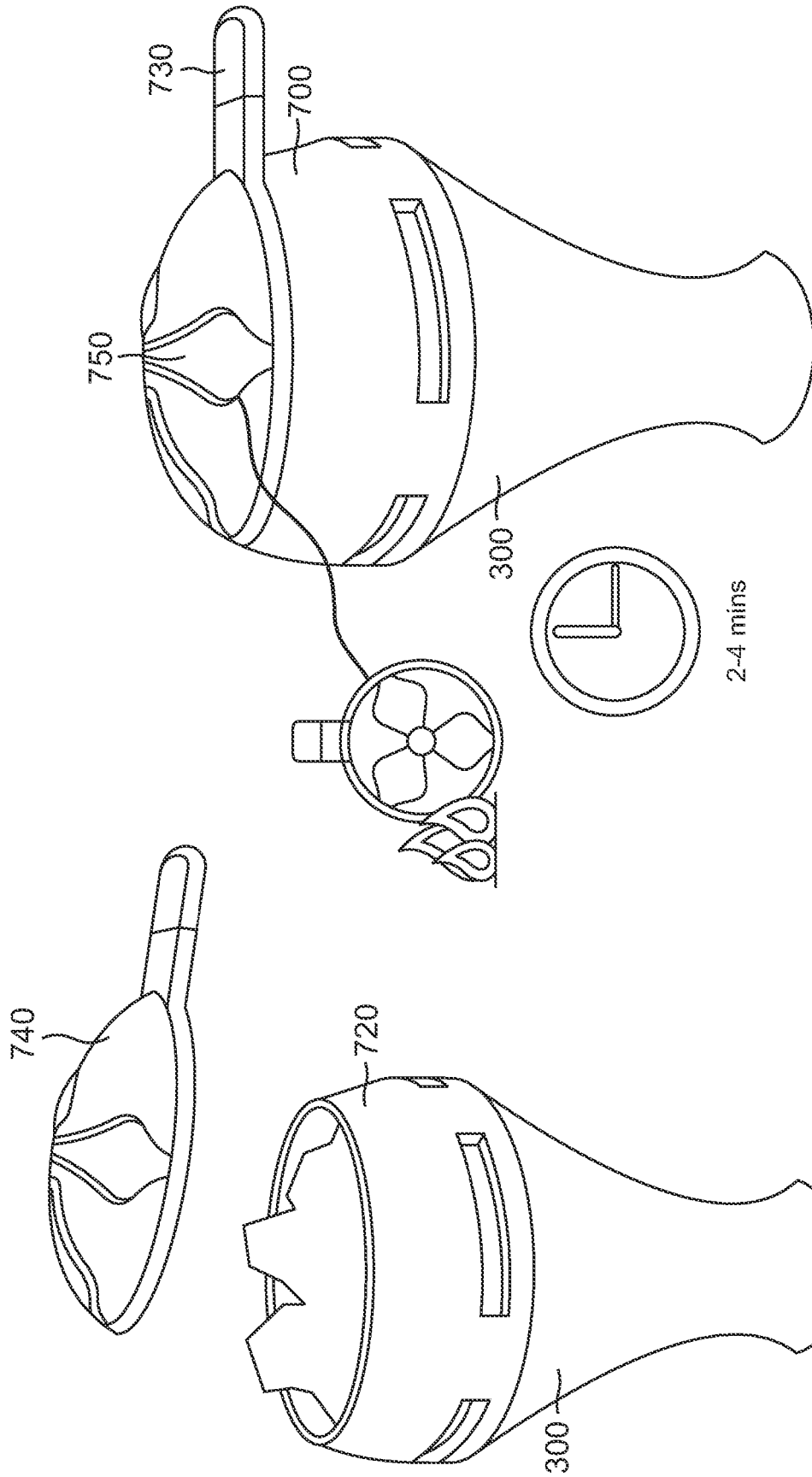


FIG. 7D

FIG. 7C

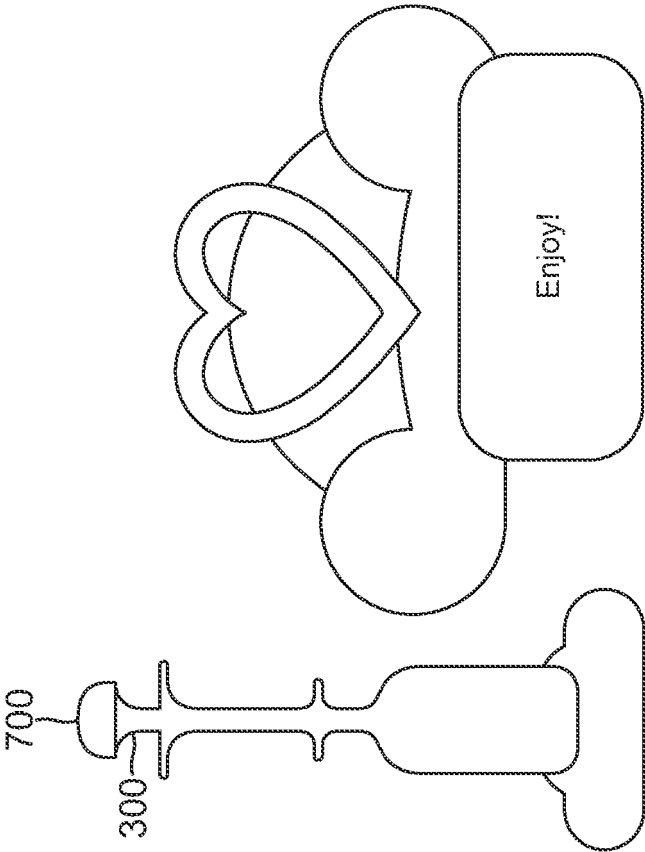


FIG. 7E

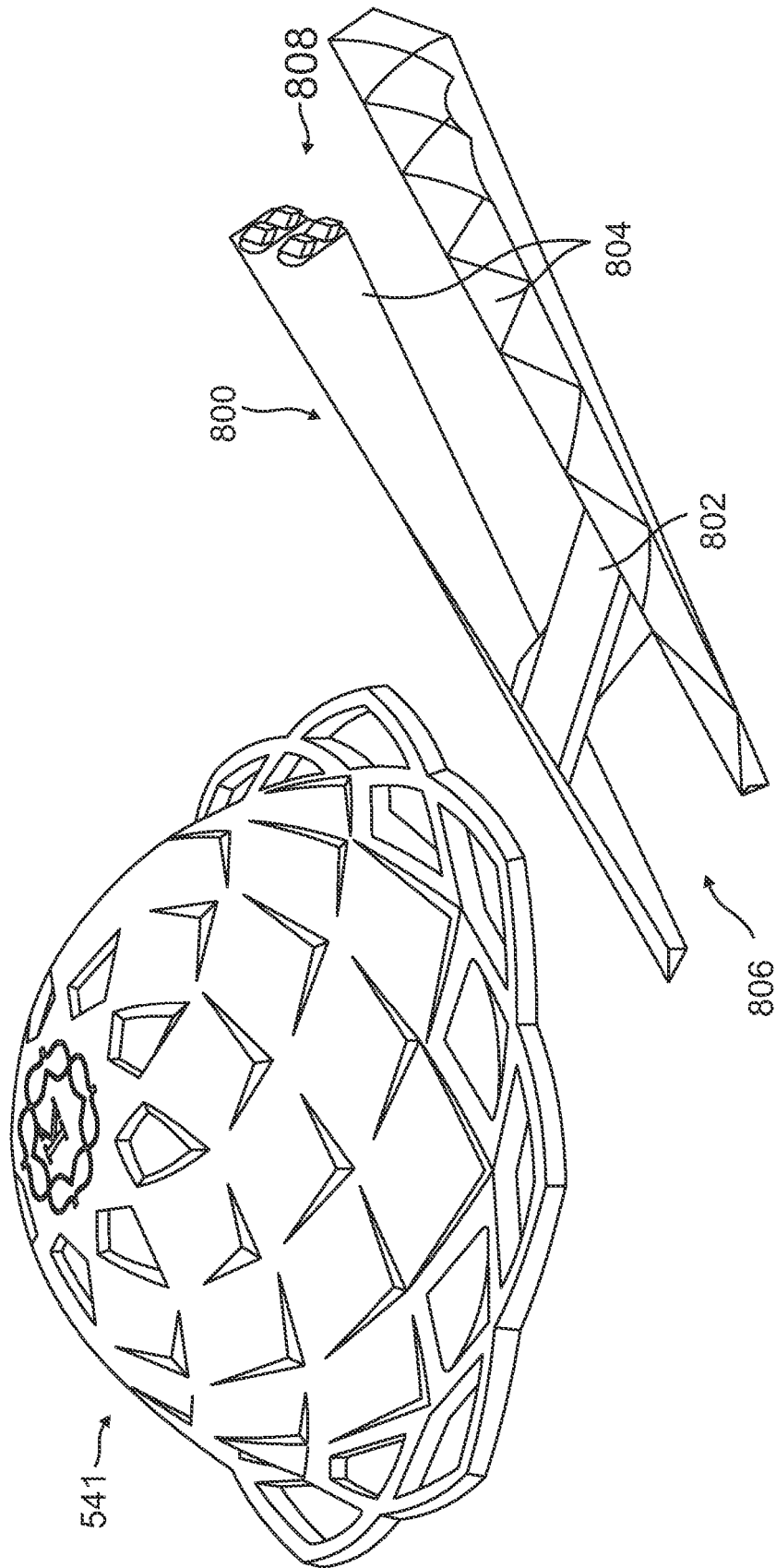


FIG. 8A

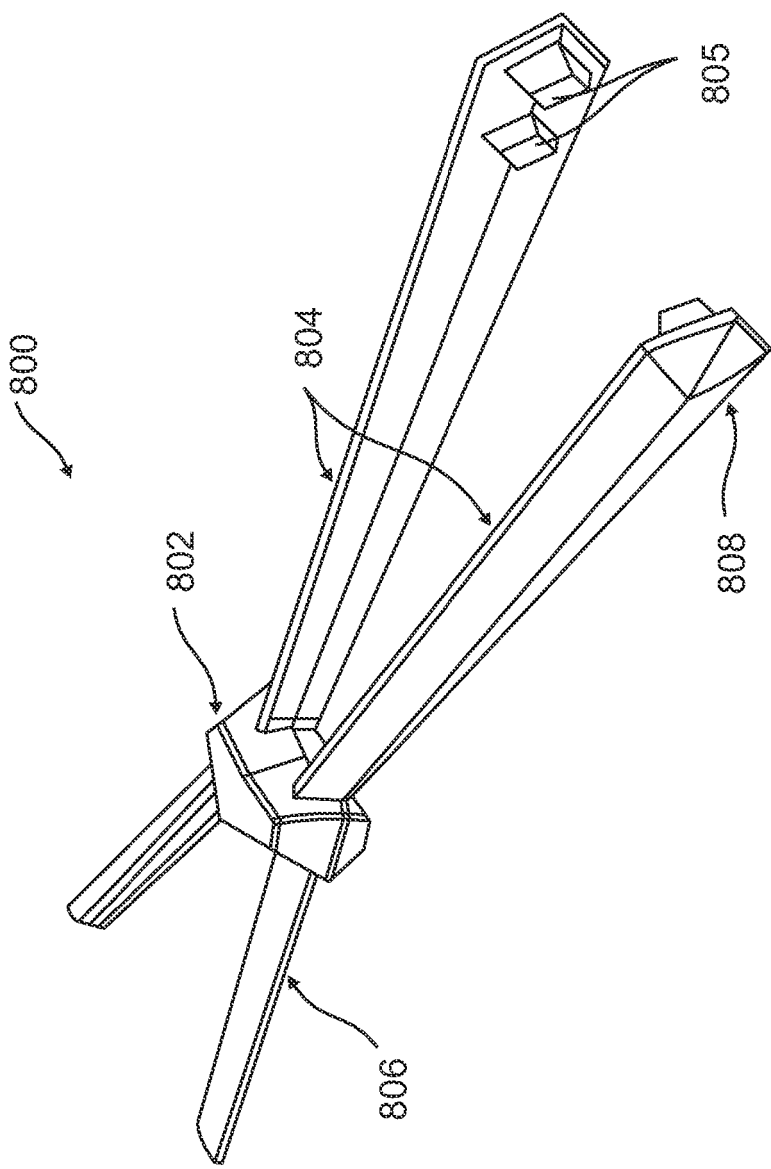


FIG. 8B

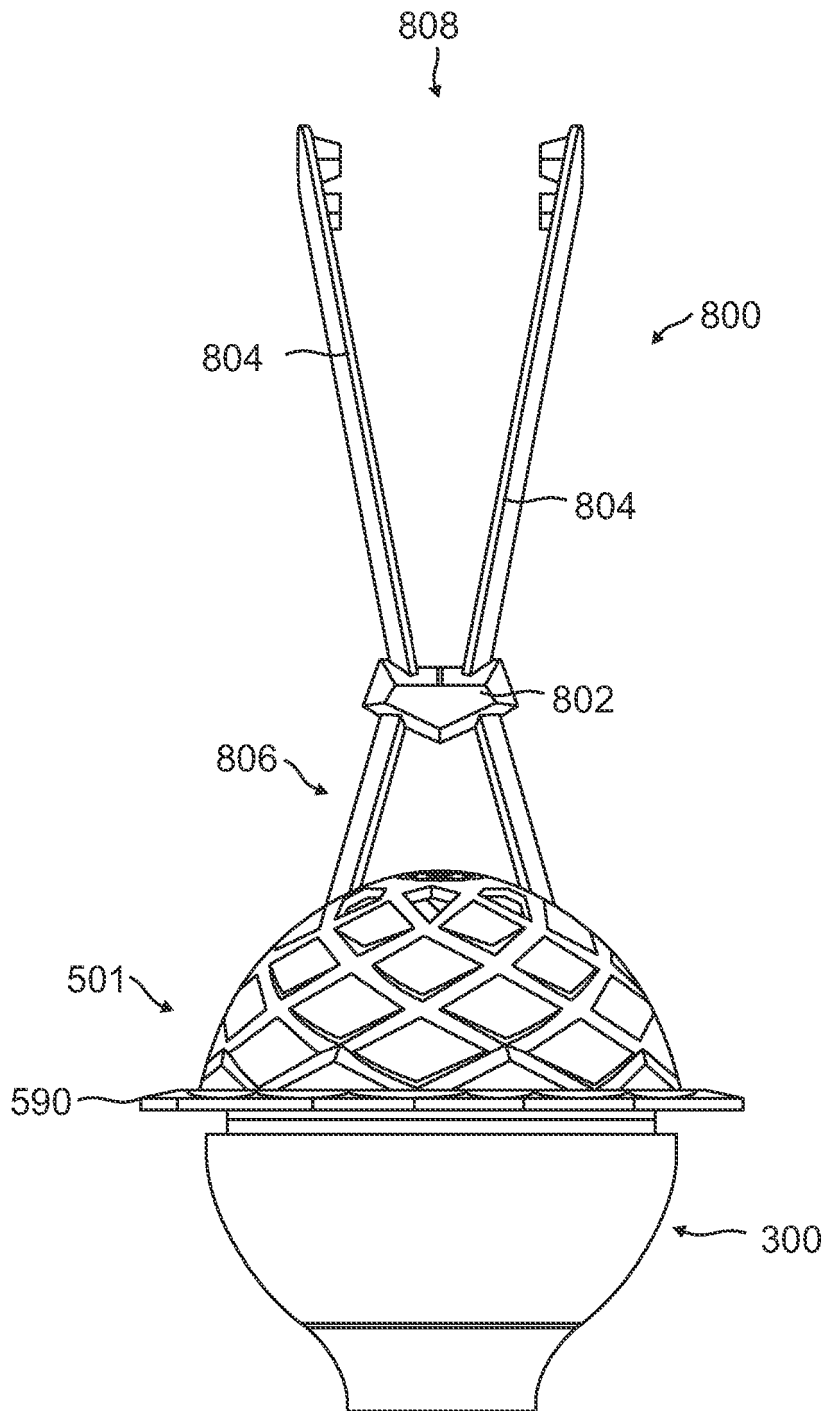


FIG. 8C

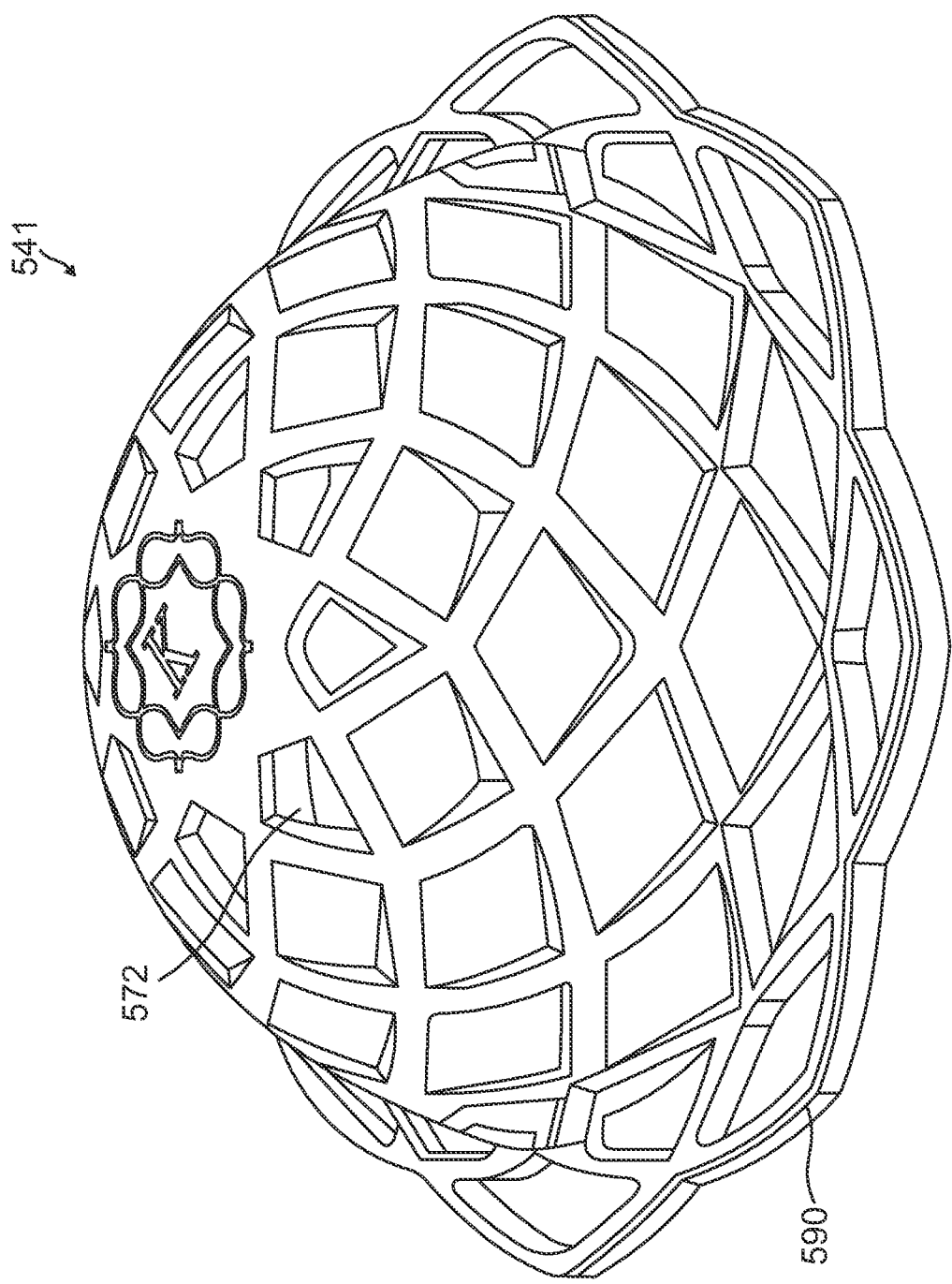


FIG. 9A

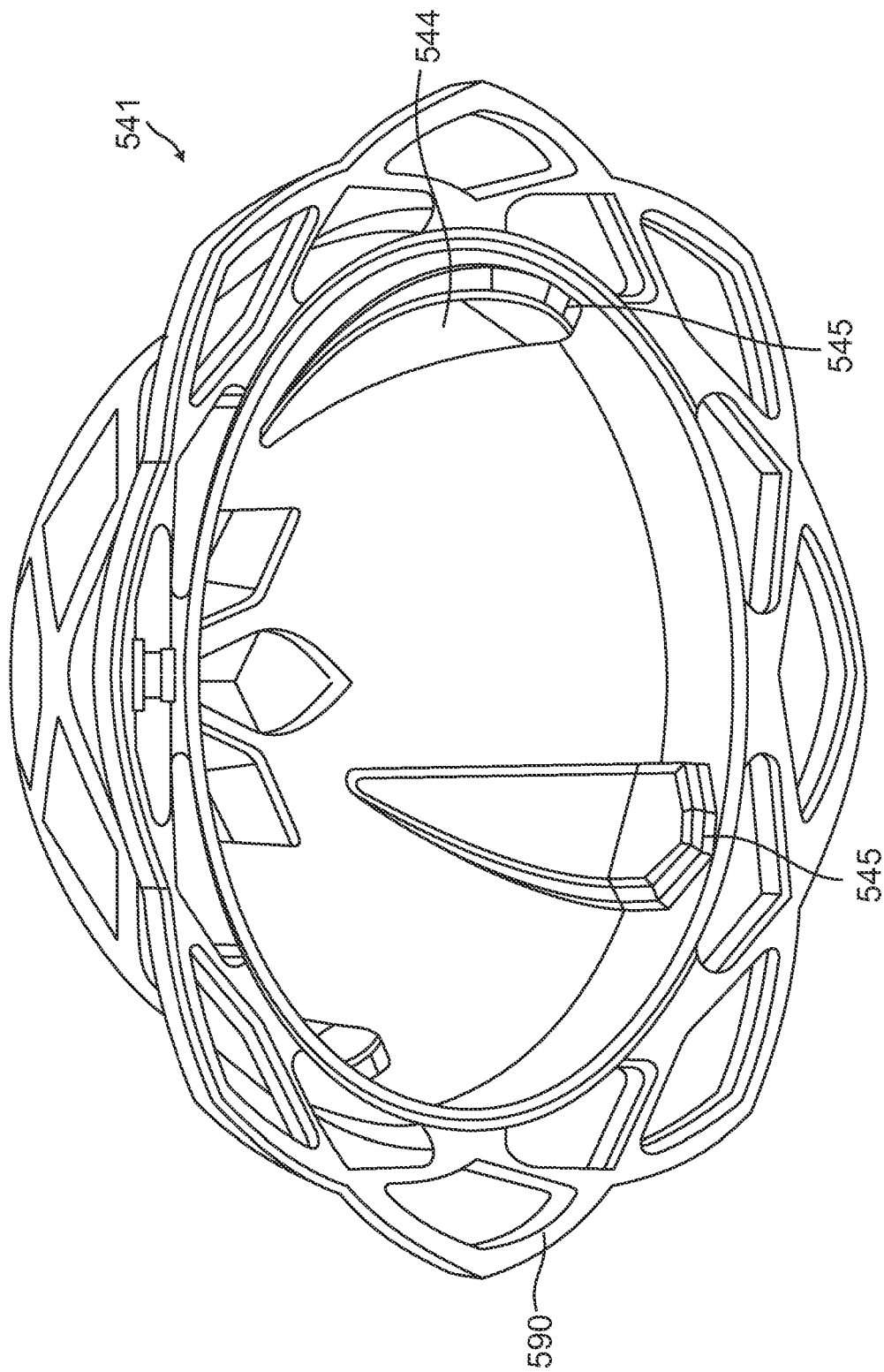
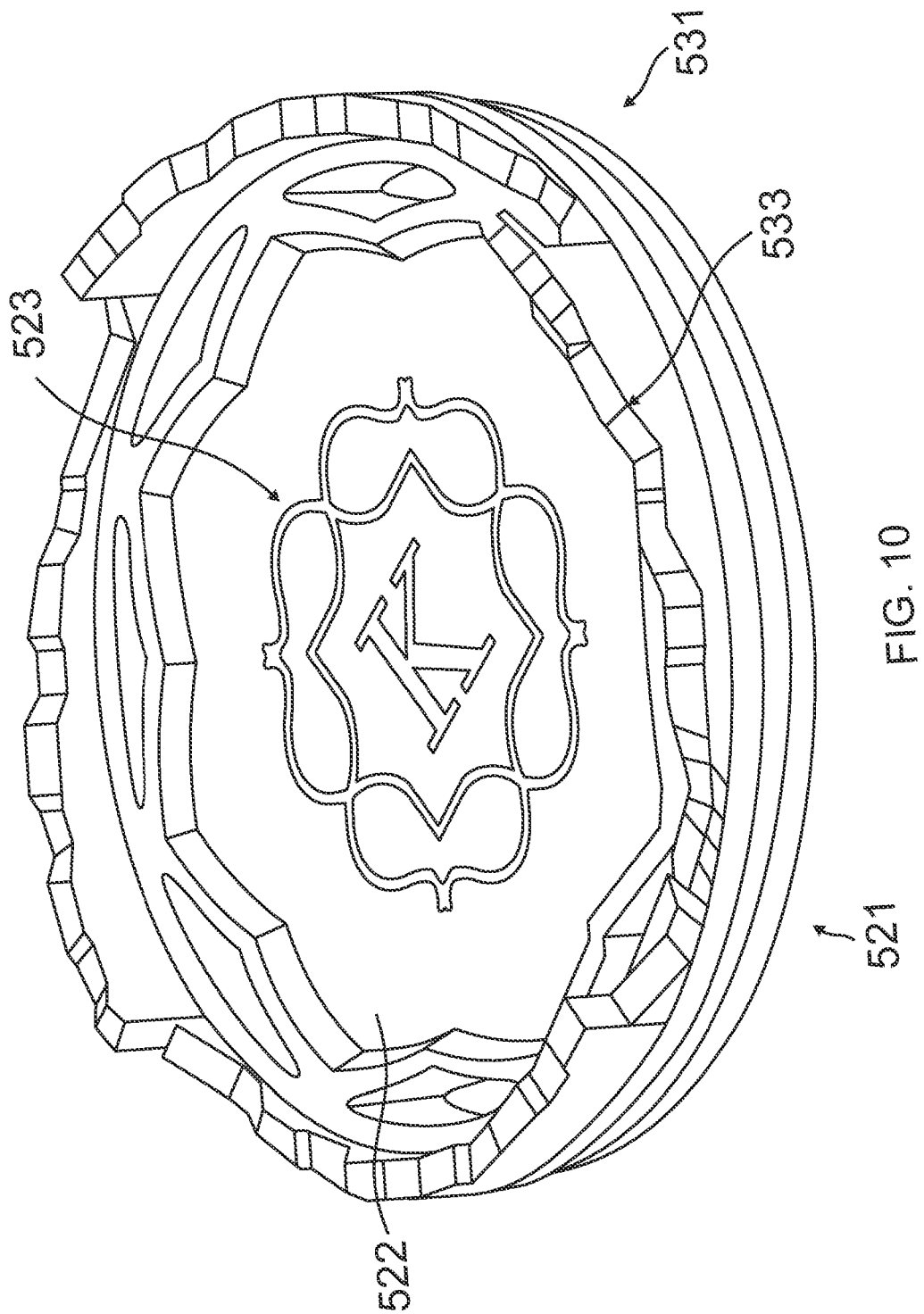


FIG. 9B



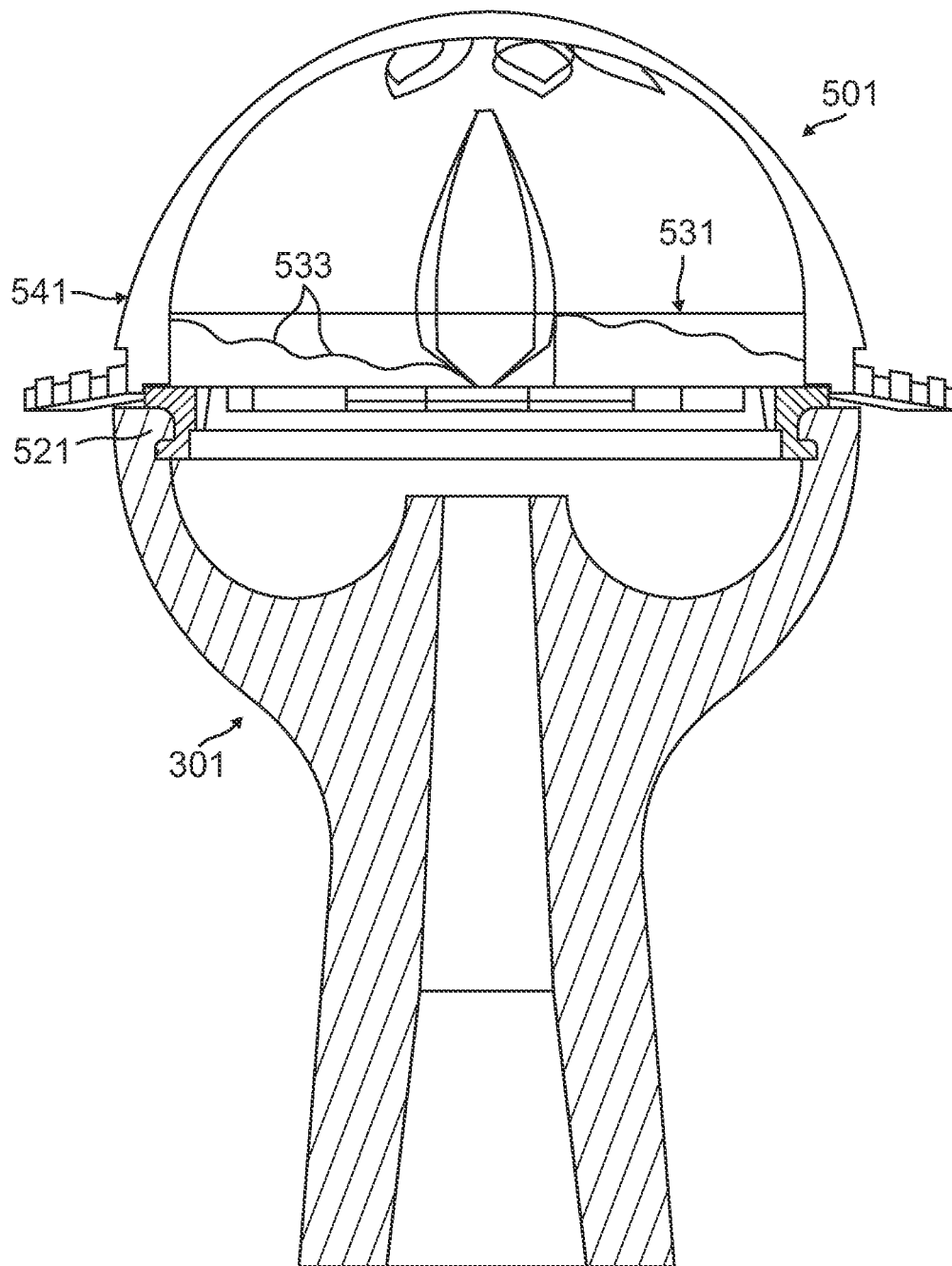


FIG. 11A

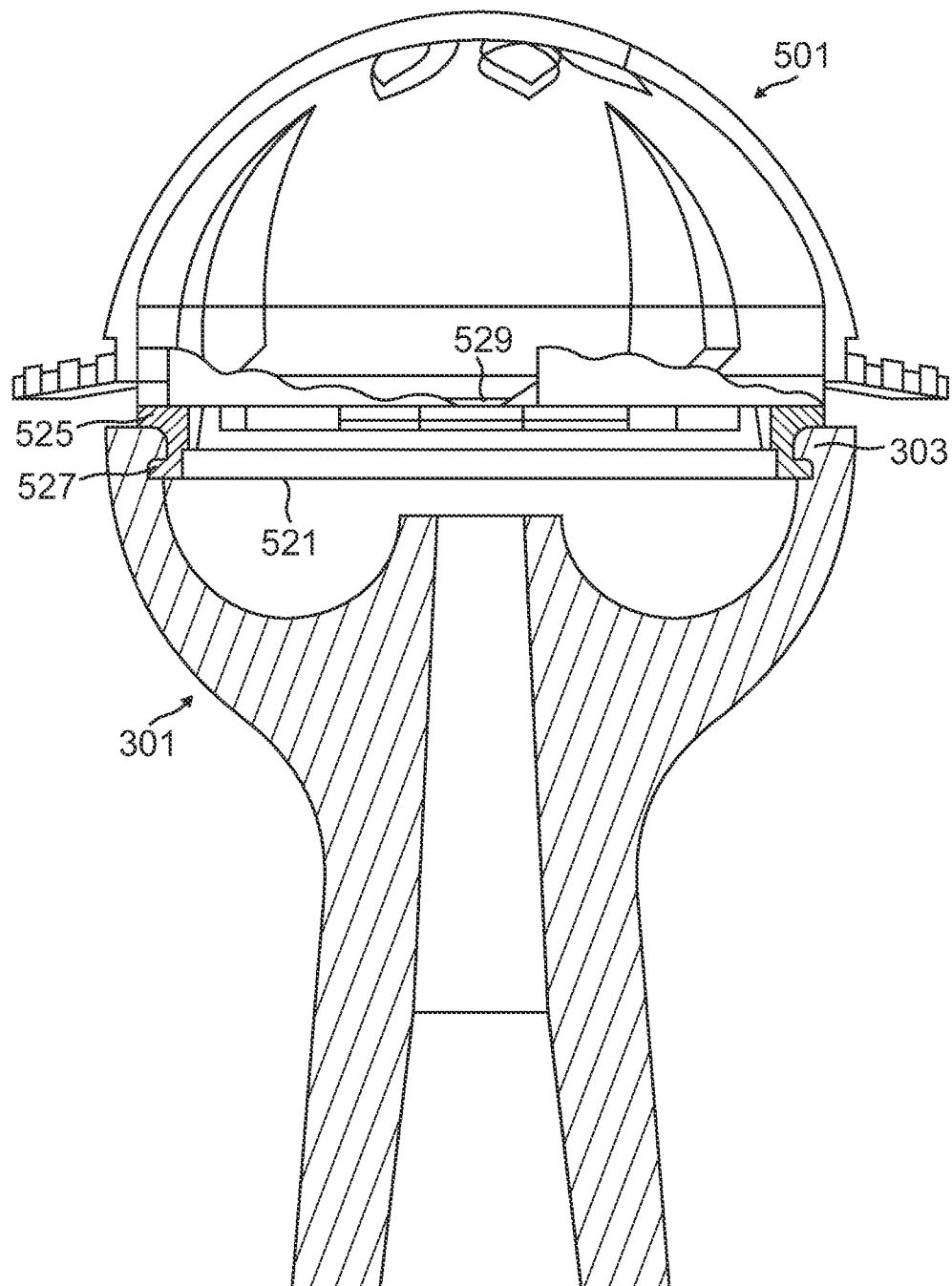


FIG. 11B

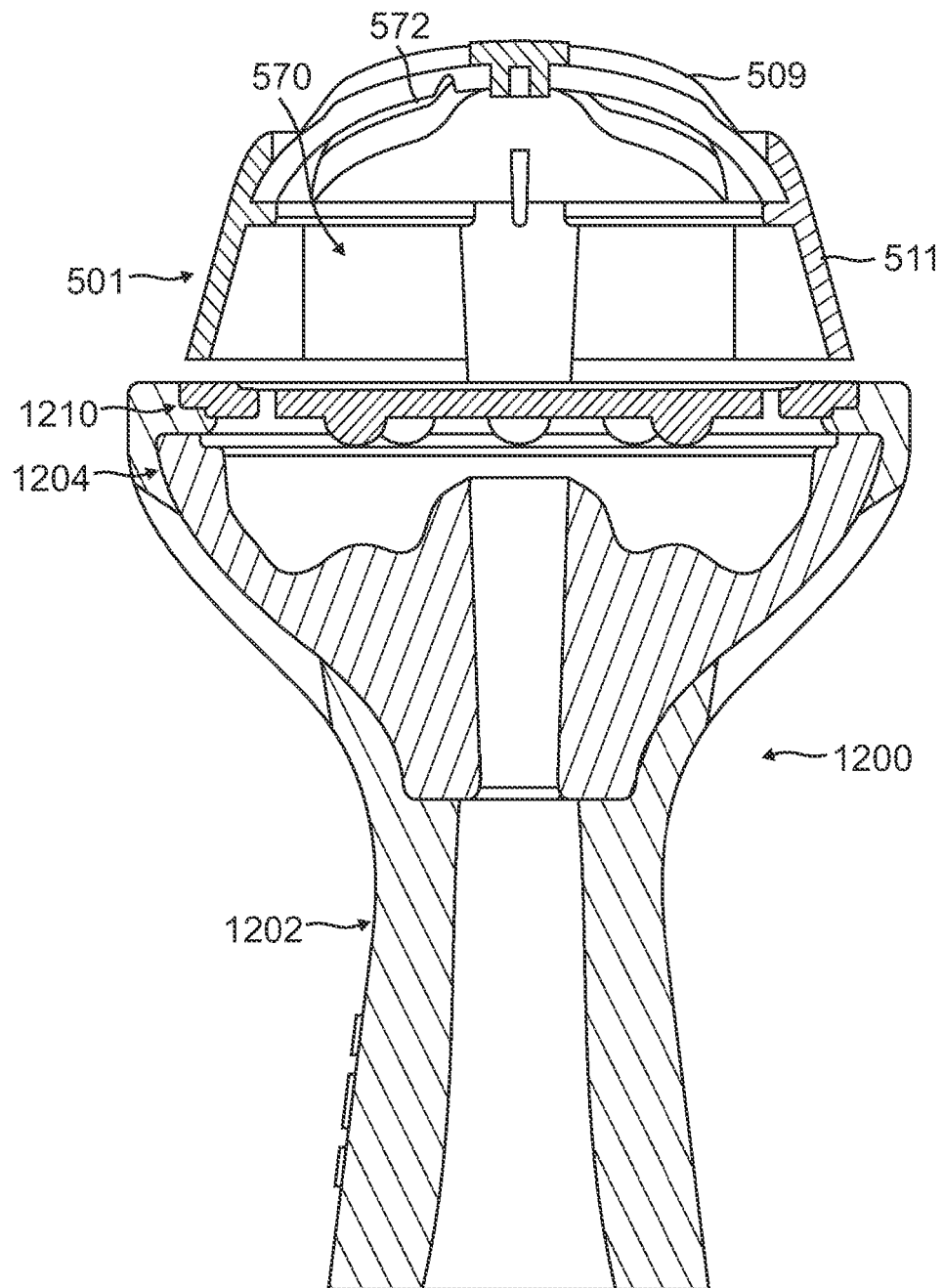


FIG. 11C

REFERENCES CITED IN THE DESCRIPTION

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