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(54) **SHOE BOTTOM CLEANSING APPARATUS**

(57) A shoe bottom cleansing apparatus (10) is configured to be carried by a first shoe (1). The shoe bottom cleansing apparatus (10) includes a main body (12) and an attachment strap (14, 16). The main body (12) is configured to clean a bottom of a second shoe. The attachment strap (14, 16) is configured to detachably secure

the shoe bottom cleansing apparatus (10) to the first shoe (1). The attachment strap (14, 16) includes a guide (38) configured to facilitate consistently positioning the shoe bottom cleansing apparatus (10) relative to the first shoe (1).

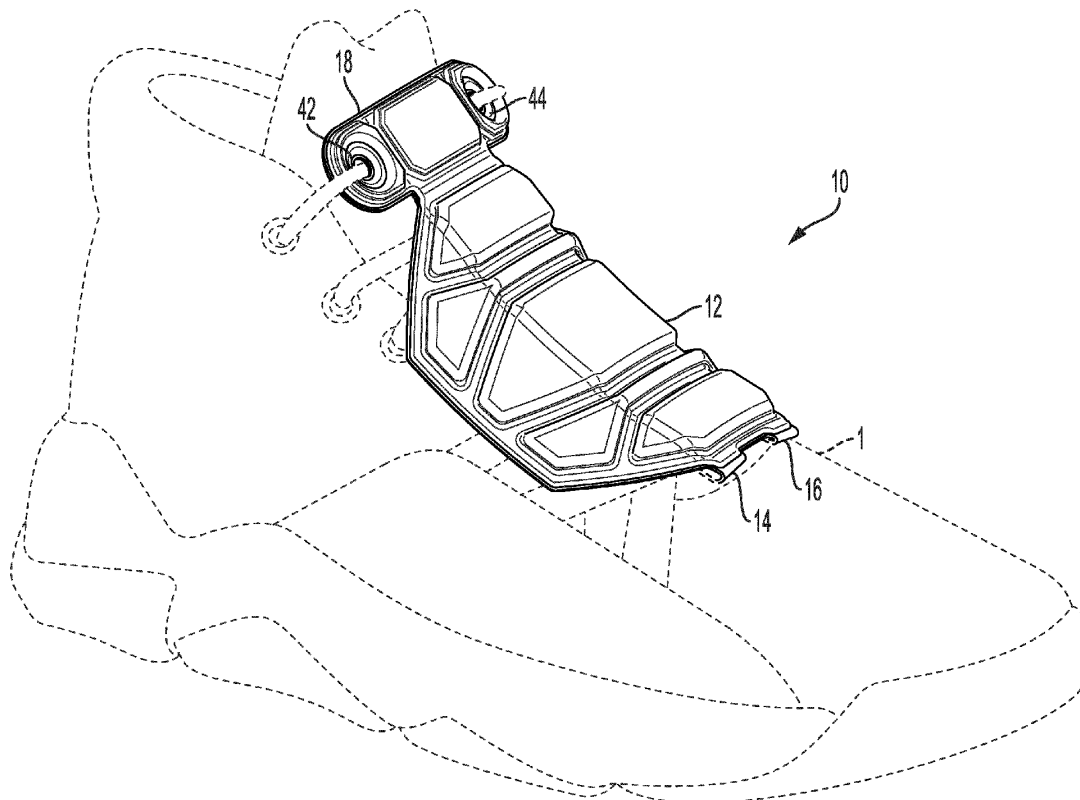


FIG. 7

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Description**CROSS REFERENCE TO RELATED APPLICATION**

[0001] None.

FIELD OF THE DISCLOSURE

[0002] The apparatus, system and method described herein generally relate to efficiently and rapidly cleaning the bottom of a shoe, such as a cleansing portion and attachment member for affixing the cleansing portion to the shoe.

BACKGROUND

[0003] The bottom of basketball shoes often become soiled during gameplay. Shoes lose their grip to the court's surface over time due to the accumulation of dust, dirt and other contaminants collected from the court onto the bottom surface of a shoe. Resultantly, shoes and subsequently slide on the court's surface, potentially causing decreased performance and increased risk of injury.

[0004] Players often wipe their hands on the bottom of a basketball shoe to cleanse it, which leaves their hands dirty and slick when handling the ball. Often a player's hands will become sweaty from playing basketball. Resultantly, a player will often spit on his or her hand prior to wiping the bottom of the shoes. The associated saliva often contaminates the playing surface that the bottom of the shoe comes into contact with, resulting in an unsanitary playing environment.

[0005] Cleaning products are not readily available on the court to clean shoes. Current materials on shoes are not designed for cleaning or wiping away debris. The cleaning material on the shoe will eventually become dirty from wiping bottoms of shoes. A commonly known prior art cleaning solution involves a traction mat placed on the side of the court configured to allow a player to step onto a mat having a sticky surface to remove debris from the bottom of an athletic shoes, however this and similar prior art solutions have the disadvantage of not being accessible on the court of play. Therefore, a player does not have such a solution available to clean the bottom of his or her shoe during the actual gameplay.

[0006] Other solutions involve applying a foreign substance to the bottom of a shoe. Such solutions, however, are also generally inaccessible on the field of play during gameplay. In some circumstances, such substances do not make a shoe cleaner, but rather add more foreign substances to the bottom of the shoe. Such substances are prone to wearing away during gameplay. In some situations, substances are damaging to the shoe, limiting the shoe's lifespan.

[0007] Some prior art solutions involve a shoe attachment to facilitate cleaning. Such attachments are typically carried on one shoe of a wearer, and the wearer drags

the bottom of the other shoe across the attachment to facilitate cleaning. However, such attachments are typically provide one or more discrete sizes upon attaching to a shoe. Accordingly, improved shoe attachments would be beneficial.

SUMMARY

[0008] In an Example 1, a shoe bottom cleansing apparatus configured to be carried by a first shoe, the shoe bottom cleansing apparatus comprising: a main body configured to clean a bottom of a second shoe; and an attachment strap coupled to the main body and configured to detachably secure the shoe bottom cleansing apparatus to the first shoe, the attachment strap comprising a guide configured to facilitate consistently positioning the shoe bottom cleansing apparatus relative to the first shoe.

[0009] In an Example 2, the shoe bottom cleansing apparatus of Example 1, wherein the attachment strap is infinitely adjustably coupleable to at least one of the main body and the attachment strap itself to detachably secure the shoe bottom cleansing apparatus to the first shoe.

[0010] In an Example 3, the shoe bottom cleansing apparatus of Example 2, wherein the attachment strap comprises a coupler configured to infinitely adjustably couple to the at least one of the main body and the attachment strap.

[0011] In an Example 4, the shoe bottom cleansing apparatus of Example 3, wherein the coupler comprises a plurality of hooks configured to detachably couple to the at least one of the main body and the attachment strap.

[0012] In an Example 5, the shoe bottom cleansing apparatus of Example 1, wherein the attachment strap comprises a first end coupled to the main body and a second free end.

[0013] In an Example 6, the shoe bottom cleansing apparatus of Example 1, wherein the guide comprises a plurality of indicators.

[0014] In an Example 7, the shoe bottom cleansing apparatus of Example 6, wherein the plurality of indicators comprises a plurality of protrusions.

[0015] In an Example 8, the shoe bottom cleansing apparatus of Example 7, wherein the plurality of protrusions are constructed of a compression molded material.

[0016] In an Example 9, the shoe bottom cleansing apparatus of Example 8, further comprising a fabric covering the compression molded material.

[0017] In an Example 10, the shoe bottom cleansing apparatus of Example 9, wherein the main body is constructed of the compression molded material.

[0018] In an Example 11, the shoe bottom cleansing apparatus of Example 6, wherein the plurality of indicators comprise rectangular shapes.

[0019] In an Example 12, the shoe bottom cleansing apparatus of Example 1, wherein the attachment strap is a first attachment strap, and further comprising a second attachment strap coupled to the main body and con-

figured to detachably secure the shoe bottom cleansing apparatus to the first shoe.

[0020] In an Example 13, the shoe bottom cleansing apparatus of Example 12, wherein the guide is a first guide, and the second attachment strap comprises a second guide configured to facilitate consistently positioning the shoe bottom cleansing apparatus relative to the first shoe.

[0021] In an Example 14, the shoe bottom cleansing apparatus of Example 1, further comprising an attachment device coupled to the main body opposite the attachment strap, the attachment device configured to detachably secure the shoe bottom cleansing apparatus to the first shoe.

[0022] In an Example 15, the shoe bottom cleansing apparatus of Example 14, wherein the attachment device comprises an eyelet configured to receive a lace of the first shoe.

[0023] In an Example 16, a shoe bottom cleansing apparatus configured to be carried by a first shoe, the shoe bottom cleansing apparatus comprising: a main body configured to clean a bottom of a second shoe; and an attachment strap coupled to the main body and configured to infinitely adjustably couplable to at least one of the main body and the attachment strap itself to detachably secure the shoe bottom cleansing apparatus to the first shoe, the attachment strap comprising an indicator configured to facilitate consistently positioning the shoe bottom cleansing apparatus relative to the first shoe.

[0024] In an Example 17, the shoe bottom cleansing apparatus of Example 16, wherein the indicator comprises a protrusion.

[0025] In an Example 18, the shoe bottom cleansing apparatus of Example 17, wherein the protrusion is constructed of a compression molded material.

[0026] In an Example 19, the shoe bottom cleansing apparatus of Example 18, further comprising a fabric covering the compression molded material.

[0027] In an Example 20, the shoe bottom cleansing apparatus of Example 18, wherein the main body is constructed of the compression molded material.

[0028] While multiple embodiments are disclosed, still other embodiments of the present invention will become apparent to those skilled in the art from the following detailed description, which shows and describes illustrative embodiments of the invention. Accordingly, the drawings and detailed description are to be regarded as illustrative in nature and not restrictive.

BRIEF DESCRIPTION OF THE DRAWINGS

[0029]

FIG. 1 illustrates a perspective view of an exemplary embodiment of a shoe bottom cleansing apparatus in accordance with the present disclosure.

FIG. 2 illustrates a top view of the shoe bottom cleansing apparatus of FIG. 1.

FIG. 3 illustrates a transverse sectional view of the shoe bottom cleansing apparatus along line 3-3 of FIG. 2.

FIG. 4 illustrates a detail view of the portion of the shoe bottom cleansing apparatus within line 4-4 of FIG. 2.

FIG. 5 illustrates a bottom view of the shoe bottom cleansing apparatus of FIG. 1.

FIG. 6 illustrates a side view of the shoe bottom cleansing apparatus of FIG. 1.

FIG. 7 illustrates a perspective view of the shoe bottom cleansing apparatus of FIG. 1 secured to a shoe (illustrated in phantom lines).

[0030] It should be understood that the drawings are intended facilitate understanding of exemplary embodiments of the present invention are not necessarily to scale.

DETAILED DESCRIPTION

[0031] The following description refers to the accompanying drawings which show specific embodiments. Although specific embodiments are shown and described, it is to be understood that additional and/or alternative features are employed in other embodiments. The following detailed description is not to be taken in a limiting sense, and the scope of the claimed invention is defined by the appended claims and their equivalents.

[0032] It should be understood that like reference numerals are intended to identify the same structural components, elements, portions, or surfaces consistently throughout the several drawing figures, as such components, elements, portions, or surfaces may be further described or explained by the entire written specification, of which this detailed description is an integral part. Unless otherwise indicated, the drawings are intended to be read (for example, cross-hatching, arrangement of parts, proportion, degree, etc.) together with the specification, and are to be considered a portion of the written description.

[0033] FIGS. 1-6 illustrate an exemplary embodiment of a shoe bottom cleansing apparatus 10 in accordance with the present disclosure, and FIG. 7 illustrates the shoe bottom cleansing apparatus 10 secured to a first shoe 1 (illustrated in phantom lines). During the intended method of use of the shoe bottom cleansing apparatus 10, the apparatus 10 is secure to the first shoe 1, and the wearer drags the bottom of a second shoe (not shown) across the apparatus 10 to facilitate cleaning. More specifically, the shoe bottom cleansing apparatus 10 facilitates removal of debris, such as dirt and dust, from the bottom of the second shoe. The apparatus 10 facilitates cleaning without dirtying the hands of the wearer, and without stoppage of athletic gameplay.

[0034] Referring specifically to FIGS. 1 and 2, the shoe bottom cleansing apparatus 10 generally includes a relatively large main body 12 that facilitates cleaning. At a

first or lower side, the main body 12 couples to a first attachment strap 14 and a second attachment strap 16. As described in further detail below, the attachment straps 14, 16 are configured to detachably secure the shoe bottom cleansing apparatus 10 to the first shoe 1. At an opposite second or upper side, the main body 12 couples to an attachment device 18. The attachment device 18 is also configured to detachably secure the shoe bottom cleansing apparatus 10 to the first shoe 1.

[0035] The shoe bottom cleansing apparatus 10 may be constructed of one or more materials that provide the apparatus 10 with one or more advantageous characteristics, such as being light weight, durable, resilient, washable, capable of holding a specific form thereby allowing the apparatus to conform to a shoe profile, and capable of flexing without breaking or tearing. More specifically and with reference to FIG. 3, in some embodiments the shoe bottom cleansing apparatus 10 may be constructed from one or more compression molded materials 20, such as ethylene vinyl acetate (EVA) foams, cross-linked foams, polyvinyl chloride (PVC) foams, open cell urethanes, and thermoplastic urethane films, covered or surrounded by one or more fabrics 22, such as a microfiber. The fabric(s) may be coupled to the compression molded material(s) via one or more adhesives and/or stitching. Other details of constructions including compression molded materials and fabrics are generally provided in US Patent Application Publication No. 2021/0022453, the disclosure of which is incorporated by reference in its entirety.

[0036] Referring again to FIGS. 1 and 2, in some embodiments and as illustrated the main body 12, the first attachment strap 14, and the attachment device 18 are integrally constructed, or continuously constructed, from the compression molded material(s) and the fabric(s). In other embodiments, the main body 12, the first attachment strap 14, and the attachment device 18 are together constructed separately and coupled in other manners, such as via fasteners, adhesives, stitching, or the like.

[0037] In some embodiments and as illustrated, the main body 12 includes a relatively thin base 24 and a plurality of cleansing portions 26 extending from the base 24. The cleansing portions 26 facilitates removal of debris from the bottom of the second shoe (not shown). Illustratively, the main body 12 includes five cleansing portions 26. Alternatively, the main body 12 may include a different number of cleansing portions 26 or lack cleansing portions 26.

[0038] Referring now to FIGS. 4-7, the first attachment strap 14 and the second attachment strap 16 may include similar or the same features. As such, only the first attachment strap 14 is described in detail, although it is understood that the second attachment strap 16 may include similar or the same features. The first attachment strap 14 includes a first end 28 that is coupled to the main body 12 and an opposite or free second end 30. The second end 30 is configured to be positioned under the main body 12 to facilitate detachably securing the appa-

ratus 10 to the shoe 1. More specifically, the first attachment strap 14 is configured to wrap under a portion of the shoe 1, such as the lace of the shoe 1, and detachably couple to the main body 12 to detachably securing the apparatus 10 to the shoe 1.

[0039] Referring specifically to FIG. 5, in some embodiments and as illustrated a lower surface 32 of the first attachment strap 14 includes a coupler 34 at or near the free second end 30. The coupler 34 facilitates infinitely adjustably coupling the first attachment strap 14 to the main body 12. Stated another way, the coupler 34 facilitates coupling the first attachment strap 14 to the main body 12 in an infinite number of positions. Such a coupler 34 stands in contrast to a device that facilitates coupling two components in a discrete number of positions, such as a buckle and openings on opposite ends of a belt. Advantageously, the coupler 34 facilitates configuring the apparatus 10 in various sizes for coupling to shoes of various sizes or different constructions (for example, having various lace arrangements).

[0040] The coupler 34 may take various specific forms. For example, the coupler 34 may include a plurality of hooks that are configured to detachably couple to the main body 12. As another example, the coupler 34 may include a plurality of hooks or a plurality of loops, and the main body 12 may include fastener (not shown) having a plurality of loops or a plurality of hooks for detachably coupling to the coupler 34. As yet another example, the coupler 34 may include one or more materials or features that otherwise facilitate detachably coupling to the main body 12.

[0041] Referring again to FIGS. 4-6, an upper surface 36 of the first attachment strap 14 also includes a guide 38 to facilitate consistently positioning the shoe bottom cleansing apparatus 10 relative to the shoe 1. More specifically, one or more portions of the guide 38 may be consistently positioned relative to, or aligned with, one or more features of the shoe 1, such as the lace, to facilitate consistently positioning the apparatus 10 relative to the shoe 1. The guide 38 may take various specific forms. For example, the guide 38 may include one or more indicators, and each indicator may be, as illustrated, a rectangular-shaped protrusion 40. Alternatively, an indicator may be a different geometric shape, symbol, alphanumeric character, and/or demarcation. Similarly, an indicator may be a different three-dimensional shape (for example, a recess) or a two-dimensional feature (that is, a flat feature).

[0042] In some embodiments, including embodiments in which the indicators are constructed as protrusions, each indicator may be constructed of the compression molded material(s) 20 and/or the fabric(s) 22 (see FIG. 3). In some embodiments, including embodiments in which the indicators are formed as one or more protrusions, the indicators facilitate cleaning a second shoe (not shown).

[0043] With general reference to FIGS. 1, 2, and 5-7, the attachment device 18 illustratively includes a first eye-

let 42 and second eyelet 44. As shown in FIG. 7, the eyelets 42 and 44 are configured to receive a lace of the shoe 1 to facilitate securing the apparatus 10 to the shoe 1. In other embodiments, the attachment device 18 may take other forms. For example, the attachment device 18

[0044] The shoe bottom cleansing apparatus 10 may be modified in various other manners. For example, in some embodiments one of the attachment straps 14 or 16 lacks a guide, or the apparatus 10 only includes a single attachment strap 14 or 16. As another example, in some embodiments one or both of the attachment straps 14 and 16 detachably couple to themselves in addition to or instead of the main body 12. More specifically and for example, the coupler 34 could detachably couple to the lower surface 32 of the first attachment strap 14 or a fastener (not shown) of the first attachment strap 14 to secure the apparatus 10 to the shoe 1.

[0045] Various other modifications and additions can be made to the exemplary embodiments discussed without departing from the scope of the present invention. For example, while the embodiments described above refer to particular features, the scope of this invention also includes embodiments having different combinations of features and embodiments that do not include all of the above described features.

Claims

1. A shoe bottom cleansing apparatus (1) configured to be carried by a first shoe (1), the shoe bottom cleansing apparatus (1) comprising:

a main body (12) configured to clean a bottom of a second shoe; and
an attachment strap (14, 16) coupled to the main body (12) and configured to detachably secure the shoe bottom cleansing apparatus (10) to the first shoe (1), the attachment strap (14, 16) comprising a guide (38) configured to facilitate consistently positioning the shoe bottom cleansing apparatus (10) relative to the first shoe (1).

2. The shoe bottom cleansing apparatus (10) of claim 1, wherein the attachment strap (14, 16) is infinitely adjustably couplable to at least one of the main body (12) and the attachment strap (14, 16) itself to detachably secure the shoe bottom cleansing apparatus (10) to the first shoe (1).
3. The shoe bottom cleansing apparatus (10) of claim 2, wherein the attachment strap (14, 16) comprises a coupler (34) configured to infinitely adjustably couple to the at least one of the main body (12) and the

attachment strap (14, 16), wherein the coupler (34) preferably comprises a plurality of hooks configured to detachably couple to the at least one of the main body (12) and the attachment strap (14, 16).

4. The shoe bottom cleansing apparatus (10) of claim 1, wherein the attachment strap (14, 16) comprises a first end (28) coupled to the main body (12) and a second free end (30).
5. The shoe bottom cleansing apparatus (10) of claim 1, wherein the guide (38) comprises one or more indicator(s).
6. The shoe bottom cleansing apparatus (10) of claim 5, wherein the one or more indicator(s) comprise rectangular shapes.
7. The shoe bottom cleansing apparatus (10) of claim 1, wherein the attachment strap (14, 16) is a first attachment strap (14), and further comprising a second attachment strap (16) coupled to the main body (12) and configured to detachably secure the shoe bottom cleansing apparatus (10) to the first shoe (1).
8. The shoe bottom cleansing apparatus (10) of claim 7, wherein the guide (38) is a first guide, and the second attachment strap (16) comprises a second guide configured to facilitate consistently positioning the shoe bottom cleansing apparatus (10) relative to the first shoe (1).
9. The shoe bottom cleansing apparatus (10) of claim 1, further comprising an attachment device (18) coupled to the main body (12) opposite the attachment strap (14, 16), the attachment device (18) configured to detachably secure the shoe bottom cleansing apparatus (10) to the first shoe (1).
10. The shoe bottom cleansing apparatus (10) of claim 9, wherein the attachment device (18) comprises an eyelet (42, 44) configured to receive a lace of the first shoe (1).
11. A shoe bottom cleansing apparatus (10) configured to be carried by a first shoe (1), the shoe bottom cleansing apparatus (10) comprising:

a main body (12) configured to clean a bottom of a second shoe; and
an attachment strap (14, 16) coupled to the main body (12) and configured to infinitely adjustably couple to at least one of the main body (12) and the attachment strap (14, 16) itself to detachably secure the shoe bottom cleansing apparatus (10) to the first shoe (1), the attachment strap (14, 16) comprising an indicator configured to facilitate consistently positioning the shoe bot-

tom cleansing apparatus (10) relative to the first shoe (1).

- 12.** The shoe bottom cleansing apparatus (10) of claim 5 or 11, wherein one or more indicator(s) comprises one or more protrusion(s) (40). 5
- 13.** The shoe bottom cleansing apparatus (10) of claim 12, wherein the protrusion (40) is constructed of a compression molded material (20). 10
- 14.** The shoe bottom cleansing apparatus (10) of claim 13, further comprising a fabric (22) covering the compression molded material (20). 15
- 15.** The shoe bottom cleansing apparatus (10) of claim 1 or 11, wherein the main body (12) is constructed of the compression molded material (20). 20

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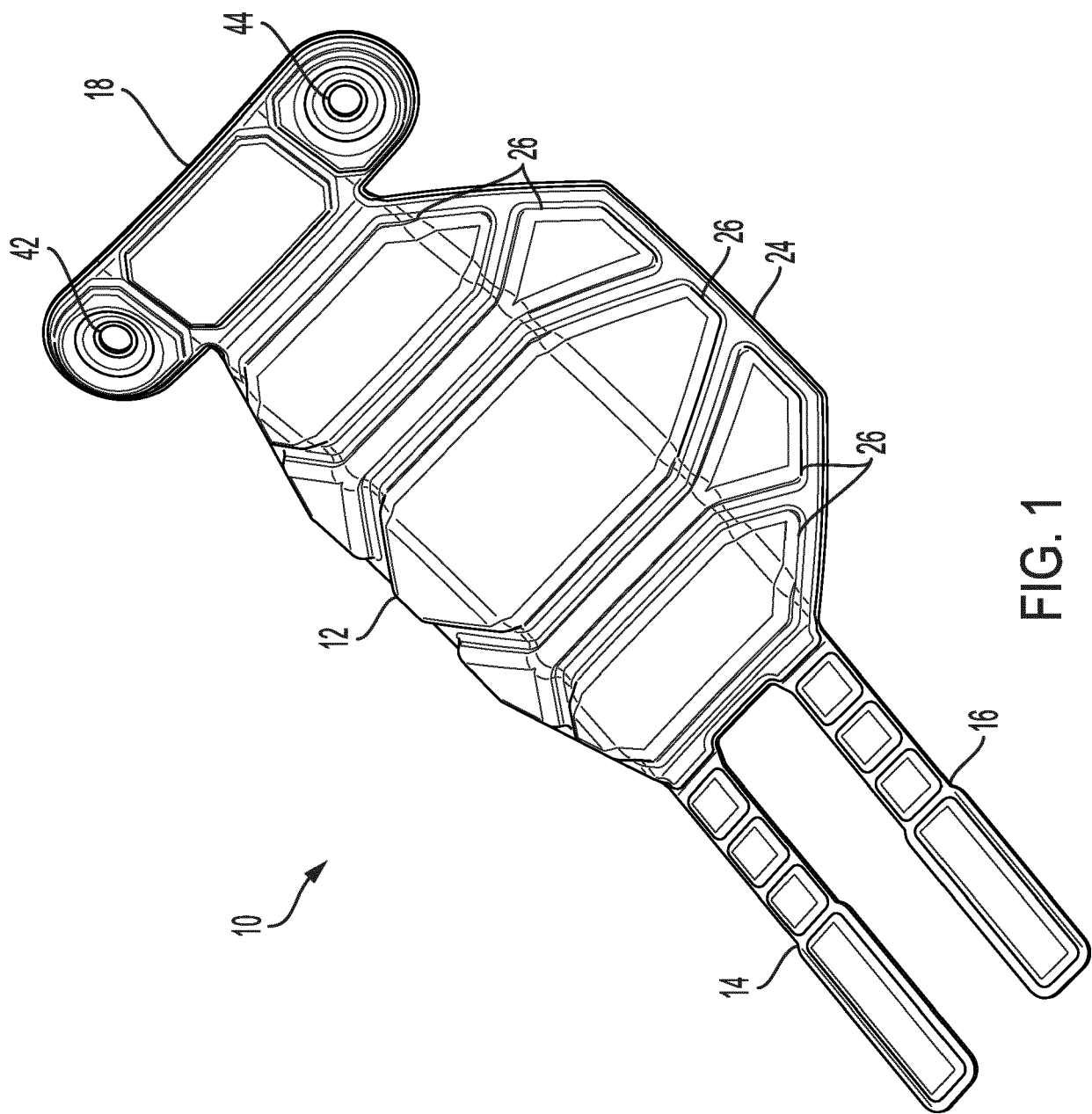


FIG. 1

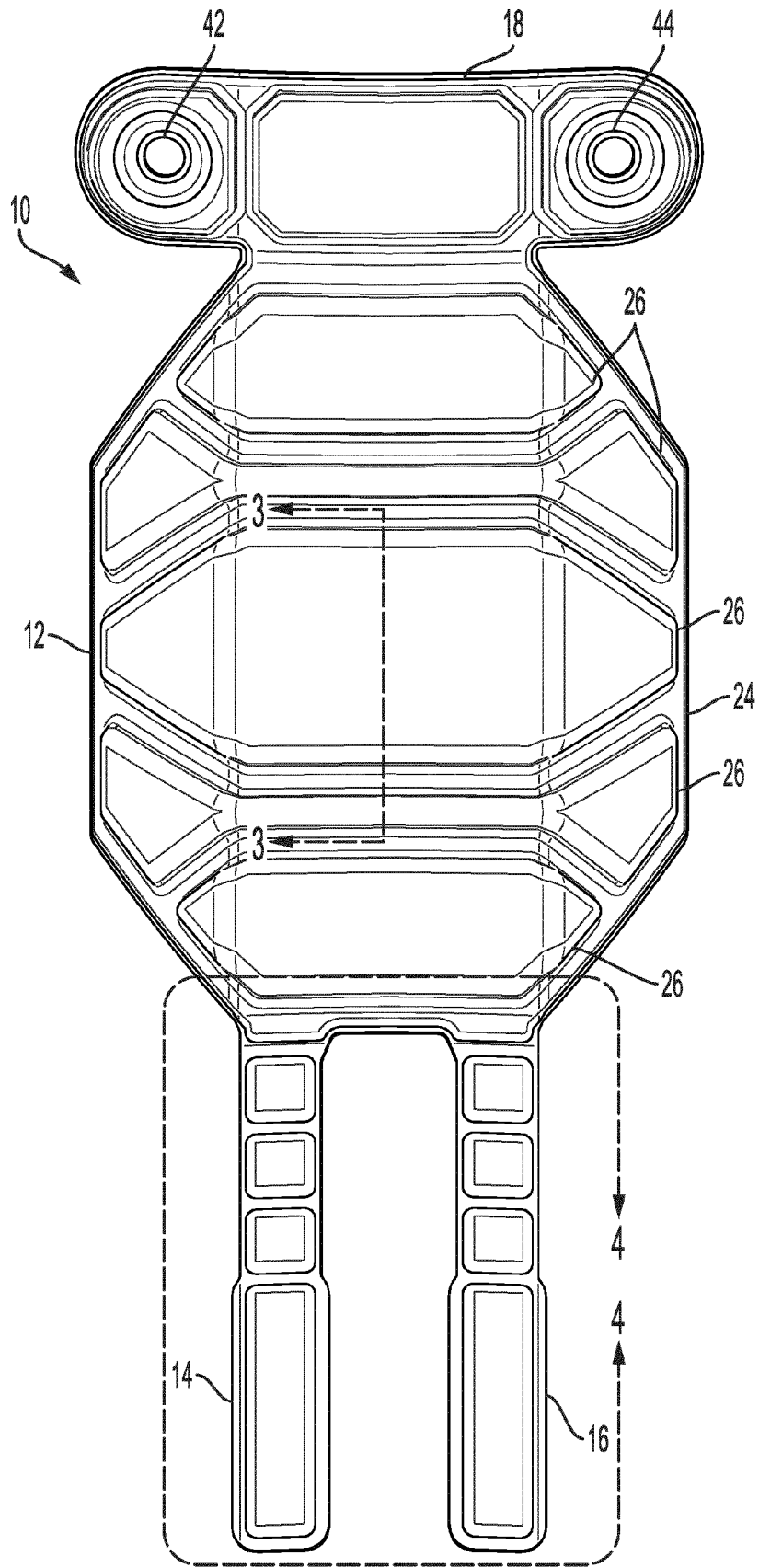


FIG. 2

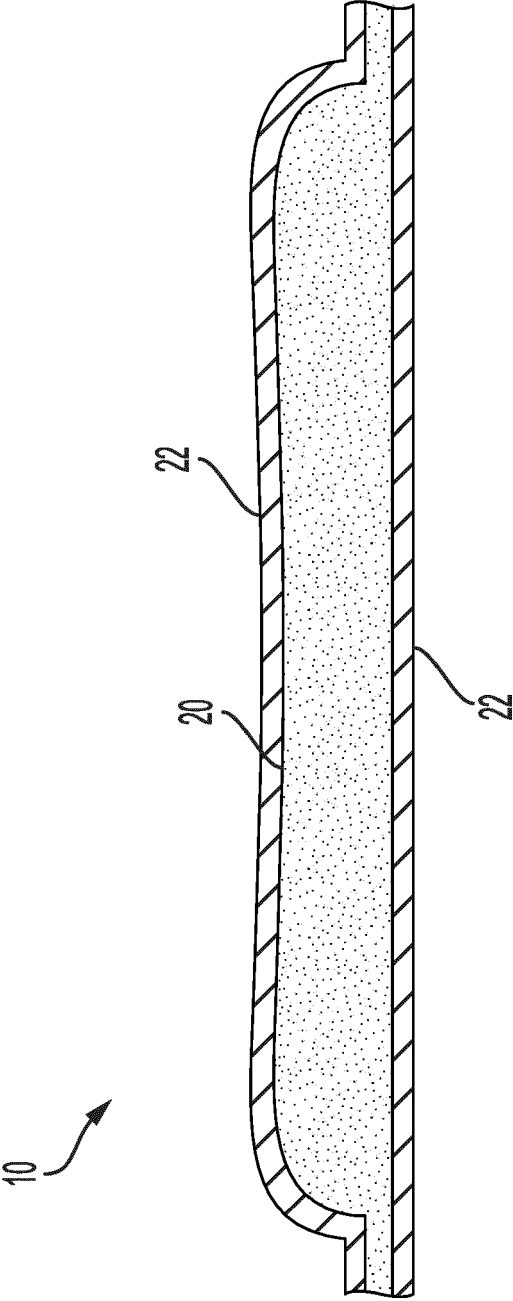


FIG. 3

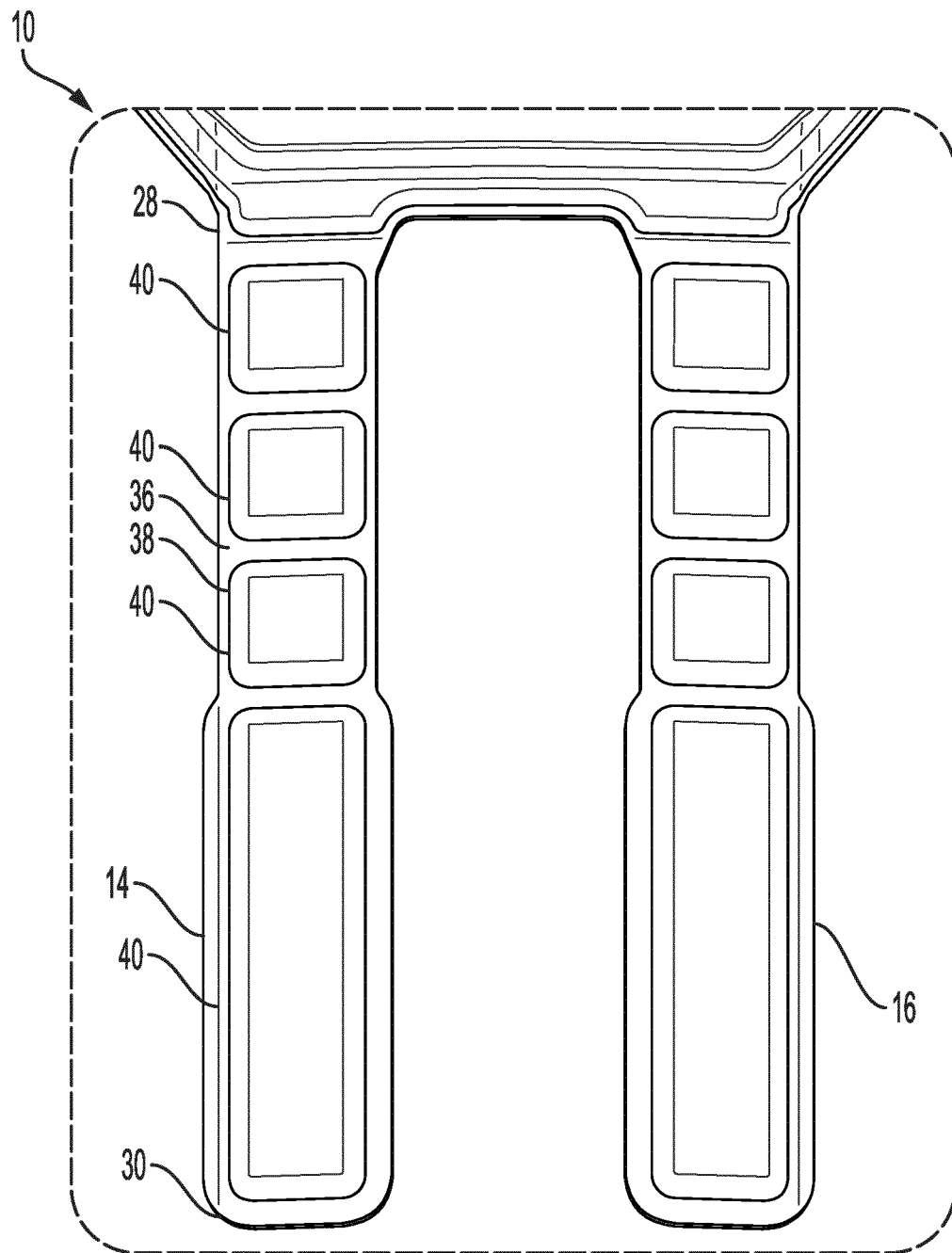


FIG. 4

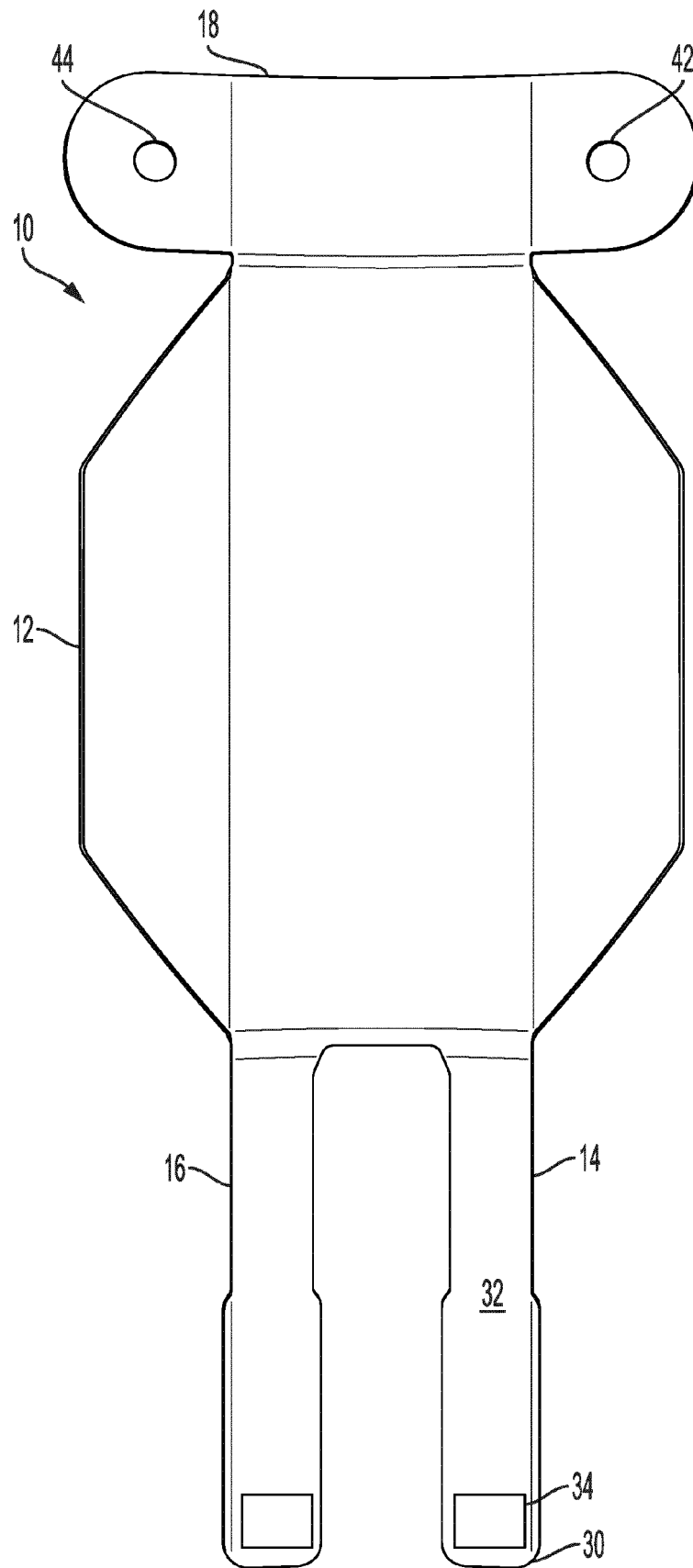


FIG. 5

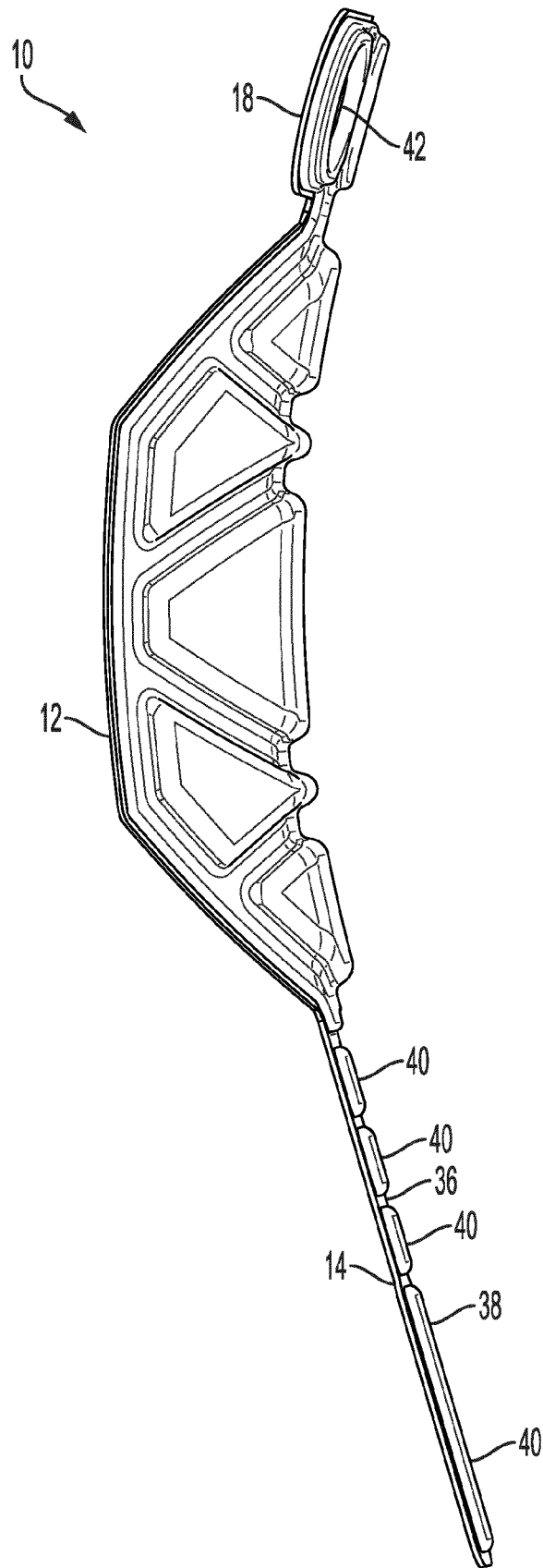


FIG. 6

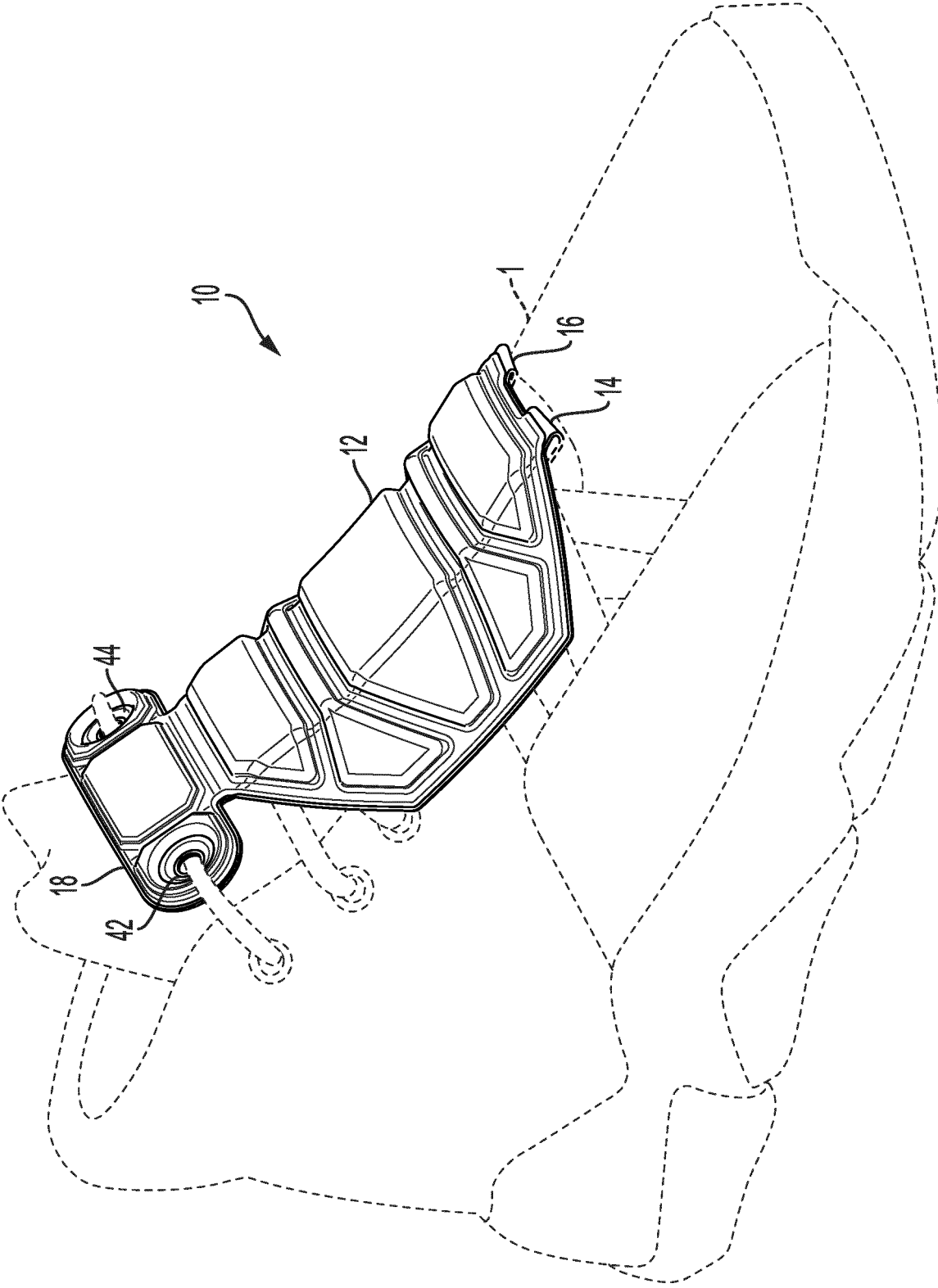


FIG. 7



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