

(11)

EP 4 741 312 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
13.05.2026 Bulletin 2026/20

(51) International Patent Classification (IPC):
B65D 73/00 (2006.01)

(21) Application number: **25215256.6**

(52) Cooperative Patent Classification (CPC):
B65D 73/0064; B65D 73/0035

(22) Date of filing: **12.11.2025**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
GE KH LA MA MD TN

(72) Inventors:
• **Rietdyk, Guido**
Reno, NV (US)
• **Barnes, Jason**
Los Angeles, CA (US)
• **Craig, Rory**
Los Angeles, CA (US)

(30) Priority: **12.11.2024 US 202418943923**

(74) Representative: **Hoffmann Eitle**
Patent- und Rechtsanwälte PartmbB
Arabellastraße 30
81925 München (DE)

(71) Applicant: **Fairway Import-Export, Inc. (dba Lift Safety)**
Carson City, NV 89706 (US)

(54) **HARDHAT RETAIL PACKAGING**

(57) The present invention discloses a retail packaging assembly (22) having a protective shell (24) sized and dimensioned to substantially cover an upper surface of a headwear while leaving an interior of the headwear accessible to potential consumers without removal of the protective shell. The protective shell couples to the headwear and thereby retains the headwear in the protective shell without another shell disposed under the headwear. Accordingly, the protective shell facilitates potential consumers evaluating fit of the headwear while simplifying packaging of the headwear.

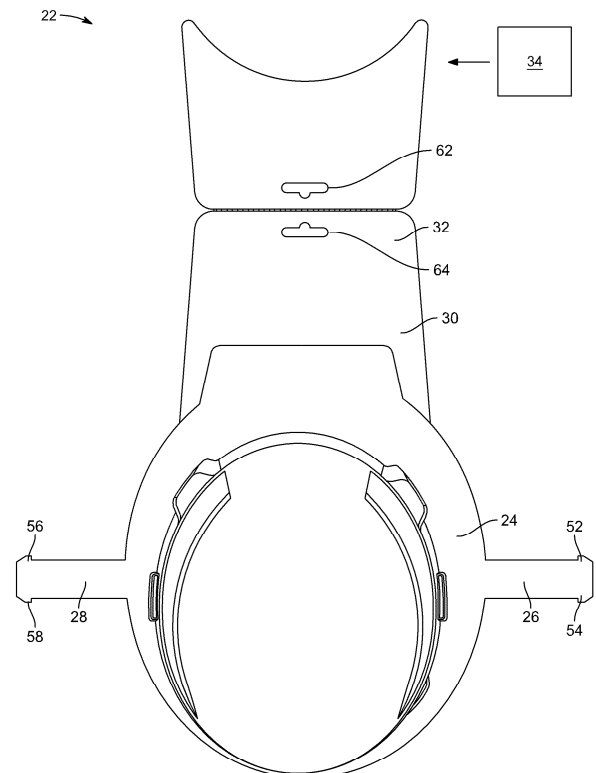


FIG. 1

Description

FIELD OF THE INVENTION

[0001] This application relates to retail packaging for headwear and more particularly, but not limited to, retail packaging for hardhats or helmets.

BACKGROUND OF THE INVENTION

[0002] Retail packaging for headwear often either (i) covers and protects the headwear or (ii) makes the headwear available for potential consumers to touch and try on without removing the packaging, but retail packaging for headwear rarely does both. For example, the approach taught in U.S. Patent No. 6,257,398 issued to Lindars allows potential consumers to touch and try on the bicycle helmet, but it fails to cover and protect the helmet. One approach to resolve this shortfall is taught in EP0401127 issued to Chollet Sa. Such approach involves welding two half shells together after insertion of a motorcycle helmet into one of the halves. Such approach requires special tools to friction weld the two halves together after inserting the helmet into the packaging and therefore requires the helmet to be located at the same location as the special tools. This approach therefore prevents packaging the helmet at a different location than where the retail packaging is manufactured. Moreover, it prevents the consumer from touching the outer material of the helmet without removing the packaging. It also is difficult for the consumer to remove the packaging because the packaging must be torn or cut before using the helmet.

[0003] For these reasons, there is a need for retail packaging for headwear that both covers and protects the headwear while making it available for potential consumers to touch and try on without removing the packaging. There is also a need for such packaging to make it simple to package the headwear. There is a further need for such packaging to make it simple for consumers to remove the packaging from the headwear.

SUMMARY OF THE INVENTION

[0004] It is therefore an object of the present invention to provide retail packaging assemblies that provide potential consumers the ability to touch headwear packaged therein without removing the packaging assembly.

[0005] It is also an object of the present invention to provide retail packaging assemblies that achieve the above object and that also make it simple for purchasers of the headwear to remove the packaging assembly.

[0006] It is another object of the present invention to provide retail packaging assemblies that achieve the above objects and that also enable packaging the headwear at a different location than where the packaging is manufactured.

[0007] The invention achieves the above objects, as

well as other objects and advantages that will become apparent from the description that follows, by providing retail packaging assemblies that have a protective shell sized and dimensioned to substantially cover a portion of or an entire upper surface of a headwear while leaving an interior of the headwear accessible to potential consumers without removal of the protective shell. The protective shell is sized and dimensioned to couple to the headwear and thereby retain the headwear in the protective shell and, in some embodiments, without another shell disposed under the headwear or opposite the headwear from the protective shell. Accordingly, the protective shell facilitates potential consumers evaluating fit of the headwear while simplifying packaging of the headwear.

[0008] The protective shell preferably conforms to the shape of the upper surface of the headwear. In some embodiments, the protective shell is transparent or translucent, thereby enabling the potential consumers to view the upper surface of the headwear. The headwear preferably includes a hardhat or helmet.

[0009] In some embodiments, the assembly has a panel holder that extends away from the headwear when packaged in the protective shell. The panel holder couples to an information panel that extends from the protective shell. In some embodiments, the information panel or the panel holder defines a hanger.

[0010] In some embodiments, the assembly has a coupler that extends away from the protective shell, around an outer perimeter of the headwear, and to a portion of the headwear disposed inward of the outer perimeter, thereby coupling the protective shell to the headwear. In some embodiments, the headwear has an accessory port, and the coupler includes a tab that extends into the accessory port, thereby coupling the protective shell to the headwear. In some embodiments, the coupler has a retainer that secures the coupler to the portion of the headwear and thereby couples the protective shell to the headwear.

[0011] In some embodiments, the retail packaging assembly is devoid of a clamshell joint or a weld.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] The preferred embodiment of the present invention is described in detail below with reference to the following drawings:

Figure 1 is a top perspective view of a retail packaging assembly.

Figure 2 is an overhead view of the retail packaging assembly of Figure 1 with headwear disposed therein.

Figure 3 is a bottom view of the retail packaging assembly of Figure 1 with the headwear disposed therein and tabs of the assembly in an unlocked configuration.

Figure 4 is a bottom view of the retail packaging assembly of Figure 1 with the headwear disposed

therein and the tabs of the assembly in a locked configuration.

Figure 5 is a side isometric view of the retail packaging assembly of Figure 1 with the headwear disposed therein and the assembly coupled to the headwear by the tabs in the locked configuration.

Figure 6 is a perspective view of the retail packaging assembly of Figure 1 with the headwear disposed therein with the tabs in the locked configuration.

Figure 7 is a top, exploded view of a second embodiment of a retail packaging assembly.

Figure 8 is an overhead view of the retail packaging assembly of Figure 5 with headwear disposed therein and the assembly coupled to the headwear.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0013] A retail packaging assembly in accordance with the principles of the invention is generally indicated at reference number 22 in the Figures of the attached drawings, wherein numbered elements in the Figures correspond to like numbered elements herein.

[0014] As shown in Figure 1, the retail packaging assembly 22 preferably includes a protective shell 24, couplers 26, 28, panel holder 30, information panel 32, and accessory 34. As shown in Figures 2 and 3, the retail packaging assembly 22 facilitates protecting the outer surface of headwear such as a helmet 36 (see Figure 2) while enabling potential consumers to evaluate fit of the headwear 36 (see Figure 3). In particular, the protective shell 24 includes, in some embodiments, only a single half shell that covers substantially the entirety of the upper surface of the headwear 36 (see Figure 2), and the assembly 22 lacks another shell opposite the headwear from the protective half shell 24 (see Figure 3), thereby leaving substantially the entirety of the underside of the headwear 36 exposed. Accordingly, the assembly 22 enables potential consumers to also touch and see the components and materials of the headwear 36 without removing the headwear 36 from the packaging assembly 22 (see Figure 4).

[0015] As shown in Figure 2, the couplers 26, 28 preferably facilitate coupling the protective shell 24 to the headwear 36. In particular, the couplers 26, 28 preferably include tabs that extend away from the protective half shell 24 and are configured to wrap around the outer perimeter of the headwear 36 and insert into accessory ports 38, 40 defined by the headwear 36 (contrast Figures 3 and 4). In some embodiments, the couplers 26, 28 each have at least one retainer that secure the couplers 26, 28 to respective portions of the headwear 36, such as barbs 52, 54, 56, 58. As shown in Figures 4 and 5, the barbs 52, 54, 56, 58 secure the couplers 26, 28 to the upper perimeter of the accessory ports 38, 40 after the couplers 26, 28 are inserted through the accessory ports 38, 40 (see Figure 4), thereby preventing the couplers 26, 28 from being inadvertently sliding out of the excess

reports 38, 40. Contrasting Figures 1 and 2, the accessory ports 38, 40 of the headwear 36 are preferably covered by the shell 24. Accordingly, after the couplers 26, 28 extend through the accessory portions 38, 40 as shown in Figure 5, the couplers 26, 28 are disposed between the shell 24 and the headwear 36 such that the shell 24 covers the couplers 26, 28, thereby preventing accidental dislodging of the couplers 26, 28 from the headwear 36. In other embodiments, the retainers include hooks or hook and loop fasteners (not shown) that retain a strap or another portion of a suspension assembly 60 in the headwear 36. In other embodiments, the couplers 26, 28 extend around the perimeter or brim of the headwear 36 and back to the shell 24 where they couple to the shell 24, such as with a hook, tape, or other fastener. The couplers 26, 28 may have score lines or fold lines pressed or cut therein for ease of folding the couplers around the brim or perimeter of the headwear 36. Accordingly, the couplers 26, 28 facilitate packaging the headwear 36 at a location different than where the packaging assembly 22 or at least the protective shell 24 is manufactured. As shown in Figure 3, the couplers 26, 28 are preferably the only portion of the retail packaging assembly 22 that covers any portion of the underside of the headwear 36. The couplers 26, 28 therefore also facilitate simple removal of the packaging assembly 22 from the headwear 36 after purchase.

[0016] As shown in Figure 1, the panel holder 30 extends away from the protective shell and is arranged to be coupled to the information panel 32. In some embodiments, the information panel 32 has a fold such that a portion of the panel 32 is disposed below the holder 30 while the other portion is disposed above the holder 30, as shown in Figures 2 and 3. The panel 32 is preferably glued or stapled to the holder 30 (see staples in Figure 2). In some embodiments, accessories for the headwear 36 such as user instructions 34 for the headwear 36 are stored or contained in the panel before folding it and coupling it to the holder 30. At least one of the holder 30 or the panel 32 preferably defines a hanger by providing a hanger opening, such as the openings 62, 64, that facilitate hanging the assembly 22 while it contains the headwear 36 from a retail hanger or post (not shown). The information panel 32 preferably includes branding information and other information that is useful to potential consumers or retailers, such as our codes, pricing, or other information about the headwear 36.

[0017] The protective shell 24 is preferably transparent or translucent, as shown in Figures 2 and 4, and preferably conforms to the shape of the upper surface of the headwear 36 to enable potential consumers to easily view the shape, color, and materials of the headwear 36 while the assembly 22 and headwear 36 are suspended from the retail hanger or post. In some embodiments, two or more of the shell 24, the couplers 26, 28, or the panel holder 30 are unitary structures with each other. The shell 24, the couplers 26, 28, and the holder 30 are preferably plastic material. The panel 32 is preferably a

paper-based product such as cardboard. Accordingly, the assembly 22 is similar to blister packaging, but the assembly 22 is devoid of a clamshell joint, weld, or another shell joint to the protective shell 24 opposite the headwear 36 from the protective shell 24.

[0018] Figures 7 and 8 show a second embodiment of a retail packaging assembly 82 that is substantially the same as the assembly 22, but the protective half shell 84 of the assembly 82 does not extend to the perimeter of the headwear 86, thereby leaving a portion of the brim of the headwear 86 available for potential consumers to touch. As a result, the panel holder 88 and the informational panel 90 coupled to the holder 88 are disposed at least partially above the brim of the headwear 86.

[0019] As used herein, the following terms take the meanings explicitly associated herein, unless the context clearly dictates otherwise. The terms "front," "forward," "rear," and "rearward" are defined relative to the headwear 36 when it is retained in the packaging assembly 22. The terms "front" and "forward" indicate the direction toward the top of the page in Figures 1 - 3. The terms "rear" and "rearward" indicate the direction toward the bottom of the page in Figures 1 - 3. The terms "height," "vertical," "upper," "lower," "above," "below," "top," "bottom," "topmost," and "bottom-most" are defined relative to vertical axis of the headwear 36 in the assembly 22. The vertical axis is non-parallel to the longitudinal axis of the headwear 36 and is defined as perpendicular to the direction of the earth's gravity force on the headwear 36 when it is retained in the assembly 22 while the assembly 22 is suspended at the hanger opening 62, 64 from the retail hanger or post. The term "lateral" is defined relative to the lateral axis of the headwear 36 when it is retained in the assembly 22. The lateral axis is non-parallel to the longitudinal and vertical axes. The longitudinal axis is the headwear 36 when it is retained in the assembly 22.

[0020] The term "configured" as used herein means an element being one or more of sized, dimensioned, positioned, or oriented to achieve or provide the recited function or result. The term "directly coupled" as used herein means that a component contacts (for example, when bolted) or is welded to another component. The term "indirectly coupled" as used herein means that a first component is coupled to a second component by way of one or more intervening components that are directly coupled to the first and second components. A first component that is indirectly coupled to a second component is directly coupled to a third component, which may be directly coupled to the second component or to a fourth component that is directly coupled to the second component. The term "coupled" should therefore be understood to disclose both direct and indirect coupling of components or elements that are described as being coupled to each other.

[0021] The term "substantially parallel" refers to parallel or within 5, 10, 15, 20, or 25 degrees of parallel. The term "substantially orthogonal" refers to orthogonal or within 5, 10, 15, 20, or 25 degrees of orthogonal. The term

"substantially horizontal" or "substantially horizontally" refers to horizontal or within 5, 10, 15, 20, or 25 degrees of horizontal. The term "substantially vertical" or "substantially vertically" refers to vertical or within 5, 10, 15, 20, or 25 degrees of vertical. The term "approximately" or "substantially" refers to within 1, 5, 10, 15, 20, or 25 percent of the identified value or range.

[0022] The term "or" is an inclusive grammatical conjunction to indicate that one or more of the connected terms may be employed. For example, the phrase "one or more A, B, or C" or the phrase "one or more As, Bs, or Cs" is employed to discretely disclose each of the following: i) one or more As, ii) one or more Bs, iii) one or more Cs, iv) one or more As and one or more Bs, v) one or more As and one or more Cs, vi) one or more Bs and one or more Cs, and vii) one or more As, one or more Bs, and one or more Cs. The term "based on" as used herein is not exclusive and allows for being based on additional factors not described. The articles "a," "an," and "the" include plural references. Plural references are intended to also disclose the singular.

[0023] While the preferred embodiments of the invention have been illustrated and described, as noted above, many changes can be made without departing from the spirit and scope of the invention. Each disclosure of a component preferably having a feature or characteristic is intended to also disclose the component as being devoid of that feature or characteristic, unless the principles of the invention clearly dictate otherwise. Accordingly, the scope of the invention is not limited by the disclosure of the preferred embodiment. Instead, the invention should be determined entirely by reference to the claims that follow. It should also be noted that the claim dependencies or combinations of elements recited in the claims do not reflect an intention to forgo claiming other subject matter disclosed herein. Instead, this disclosure is intended to also disclose the subject matter of any combination of any two or more of the claims, such that subsequent claim sets may recite that any one of the dependent claims depends from any other one or more claims, up to and including all other claims in the alternative (such as "The apparatus or method of any one of the preceding or subsequent claims...."). This disclosure is also intended to disclose the subject matter of any one of the dependent claims, as if it were an independent claim, with or without all or a portion of the subject matter of the original independent claim(s) or any other subject matter disclosed herein.

[0024] Those of ordinary skill in the art will conceive of other alternate embodiments of the invention upon reviewing this disclosure. Thus, the invention is not to be limited to the above description but is to be determined in scope by the claims that follow.

Claims

1. A retail packaging assembly, comprising:

- a protective shell sized and dimensioned to cover at least a portion of an upper surface of a headwear while leaving an interior of the headwear accessible to potential consumers without removal of the protective shell; and
 a coupler that is sized and dimensioned to extend under the headwear and thereby selectively couple the protective shell to the headwear and retain the headwear in the protective shell, whereby the protective shell facilitates potential consumers evaluating fit of the headwear while simplifying packaging of the headwear.
2. The retail packaging assembly of claim 1, wherein the protective shell is sized and dimensioned to couple to the headwear and thereby retain the headwear in the protective shell without another shell disposed under the headwear opposite the headwear from the protective shell.
 3. The retail packaging assembly of claim 1, wherein the protective shell conforms to the shape of the upper surface of the headwear, and preferably wherein the headwear includes a hardhat or helmet.
 4. The retail packaging assembly of claim 1, further comprising a panel holder sized and dimensioned to extend away from the headwear when the protective shell is coupled to the headwear, the panel holder being sized and dimensioned to couple to an information panel that extends from the protective shell when the information panel is coupled to the panel holder, and preferably wherein the information panel or the panel holder define a hanger opening to enable hanging the shell and headwear from a retail hanger or post.
 5. The retail packaging assembly of claim 1, wherein the coupler is sized and dimensioned to extend away from the protective shell, around an outer perimeter of the headwear, and to a portion of the headwear disposed inward of the outer perimeter or to the protective shell while the protective shell covers the upper surface of the headwear, thereby coupling the protective shell to the headwear.
 6. The retail packaging assembly of claim 1, wherein the headwear has an accessory port, and the coupler includes a tab that is sized and dimensioned to extend away from the protective shell, around the outer perimeter of the headwear, and into the accessory port, thereby coupling the protective shell to the headwear.
 7. The retail packaging assembly of claim 1, wherein the coupler has a retainer and is sized and dimensioned to extend away from the protective shell, around the outer perimeter of the headwear, and toward a portion of the headwear inward of the outer perimeter with the retainer securing the coupler to the portion of the headwear and thereby coupling the protective shell to the headwear.
 8. The retail packaging assembly of claim 1, wherein the protective shell is transparent or translucent, thereby enabling the potential consumers to view the upper surface of the headwear.
 9. A method of packaging headwear, comprising:
 - covering a portion of an upper surface of a headwear with the retail packaging assembly of claim 1; and
 - coupling the protective shell to the headwear, whereby the protective shell facilitates potential consumers evaluating fit of the headwear while simplifying packaging of the headwear.
 10. The method of claim 9, wherein the retail packaging assembly is devoid of a clamshell joint, and/or devoid of a weld.
 11. The method of claim 9, wherein the headwear includes a hardhat or helmet, and the protective shell conforms to the shape of the upper surface of the headwear.
 12. The method of claim 9, further comprising coupling an information panel to a panel holder of the retail packaging assembly, the panel holder extending away from the protective shell, and preferably wherein the information panel or the panel holder defines a hanger.
 13. The method of claim 9, further comprising:
 - wrapping a coupler of the retail packaging assembly around an outer perimeter of the headwear;
 - coupling the coupler to a portion of the headwear disposed inward of the outer perimeter, thereby coupling the protective shell to the headwear.
 14. The method of claim 13, wherein either coupling the coupler to the portion of the headwear disposed inward of the outer perimeter includes inserting a tab into an accessory port of the headwear, or the coupler has a retainer and coupling the coupler to the portion of the headwear disposed inward of the outer perimeter includes securing the retainer to the portion of the headwear.
 15. The method of claim 9, wherein only one or more couplers of the retail packaging assembly cover any portion of a lower surface of the headwear.

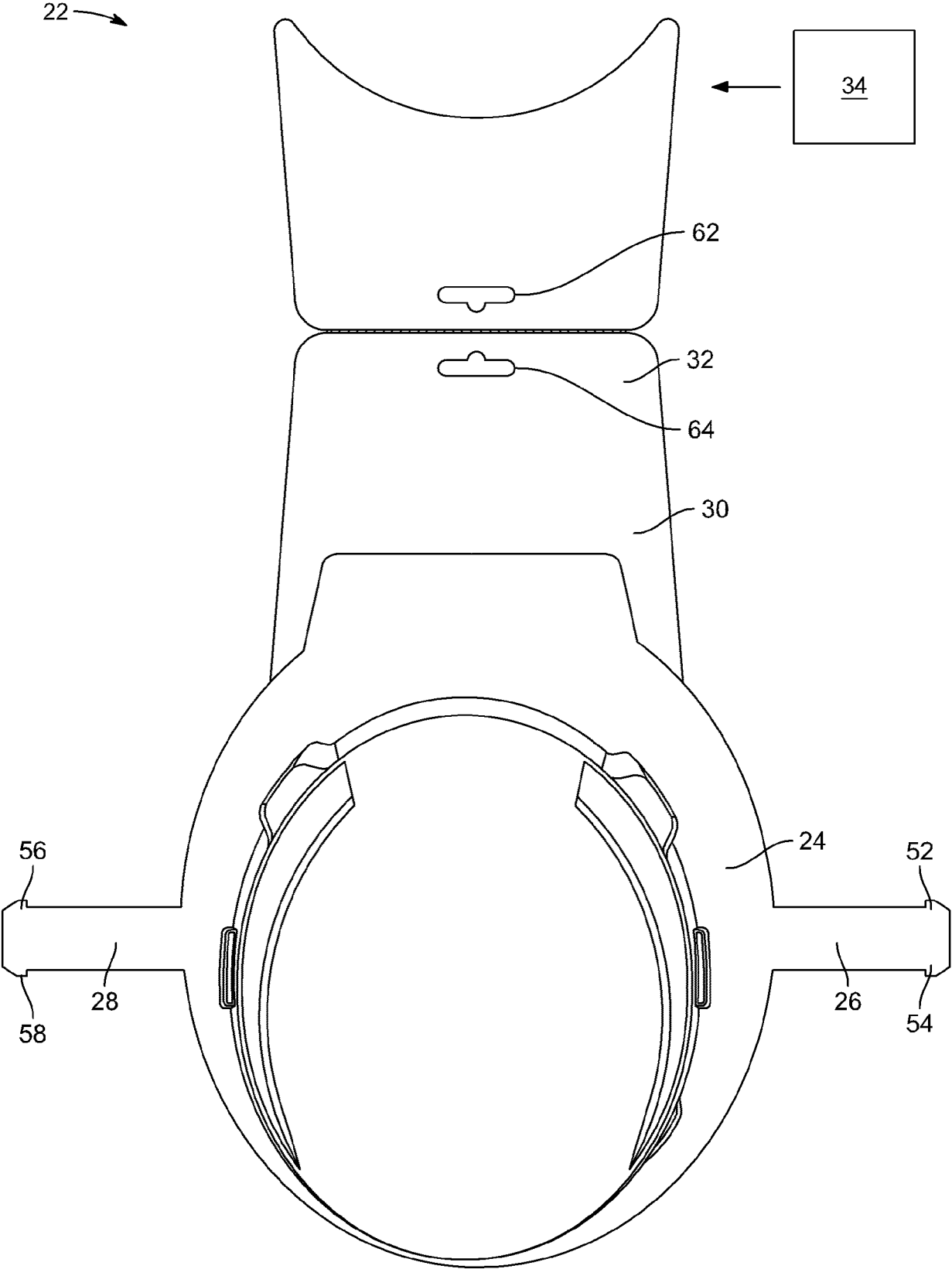


FIG. 1

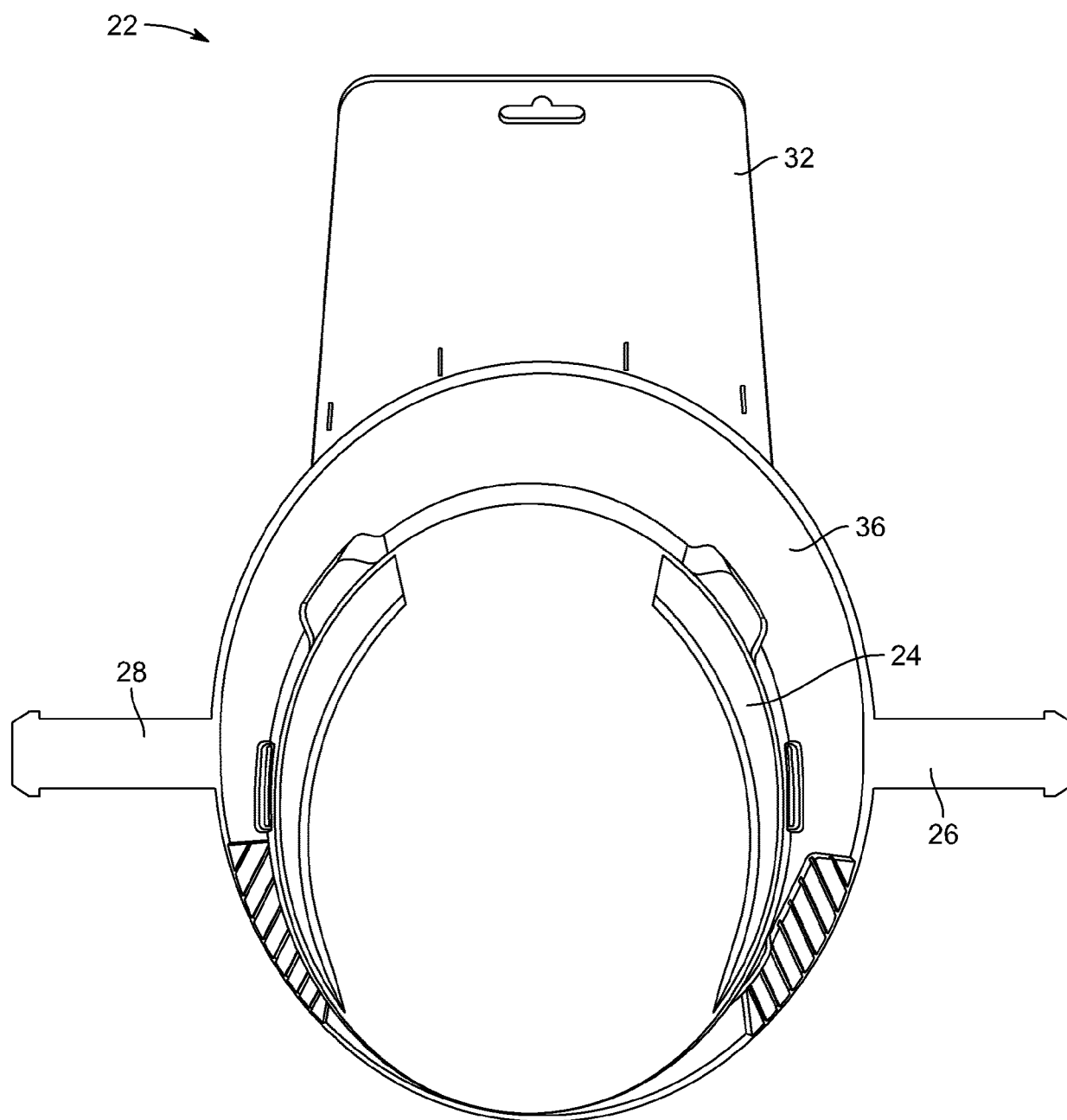


FIG. 2

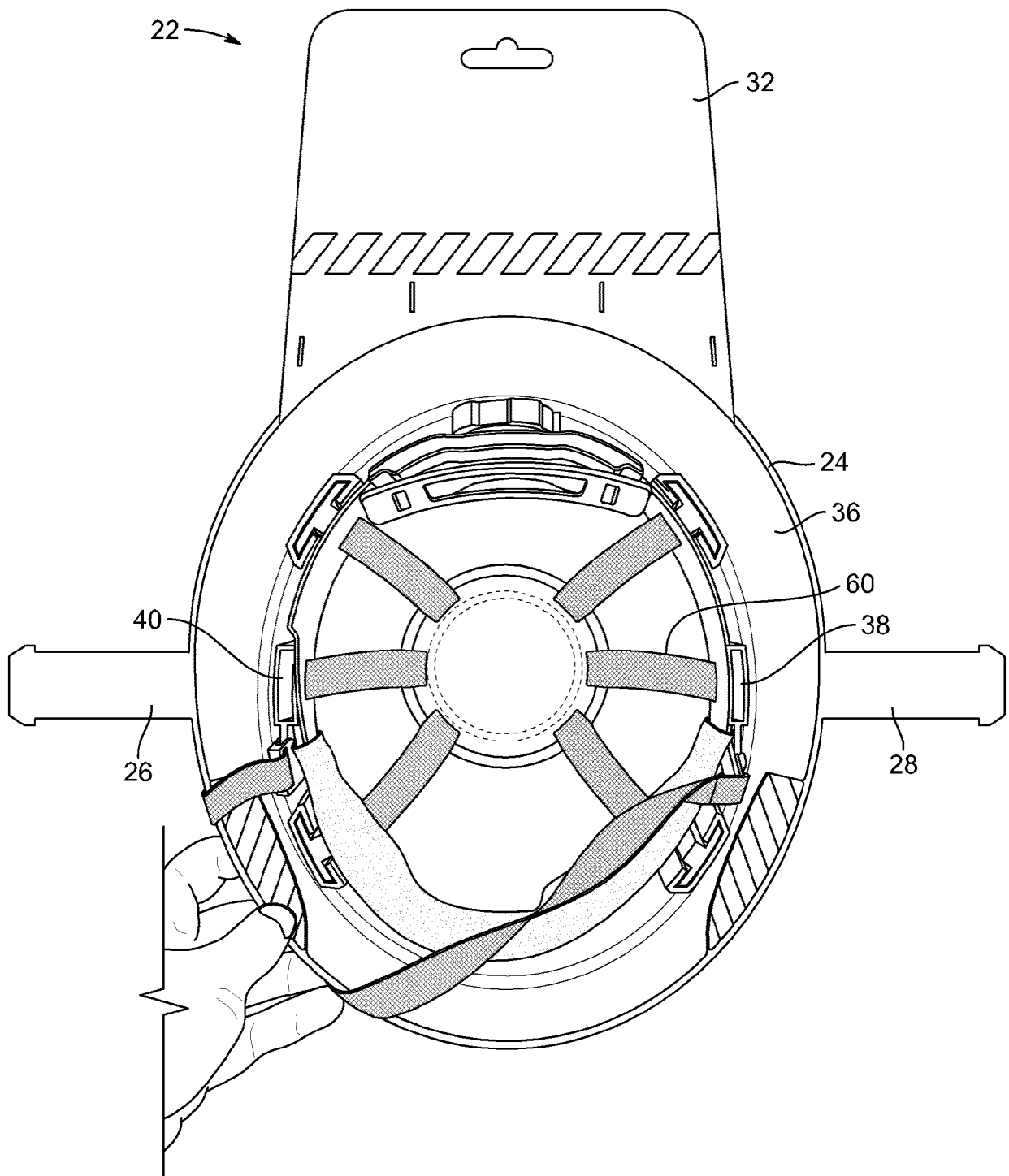


FIG. 3

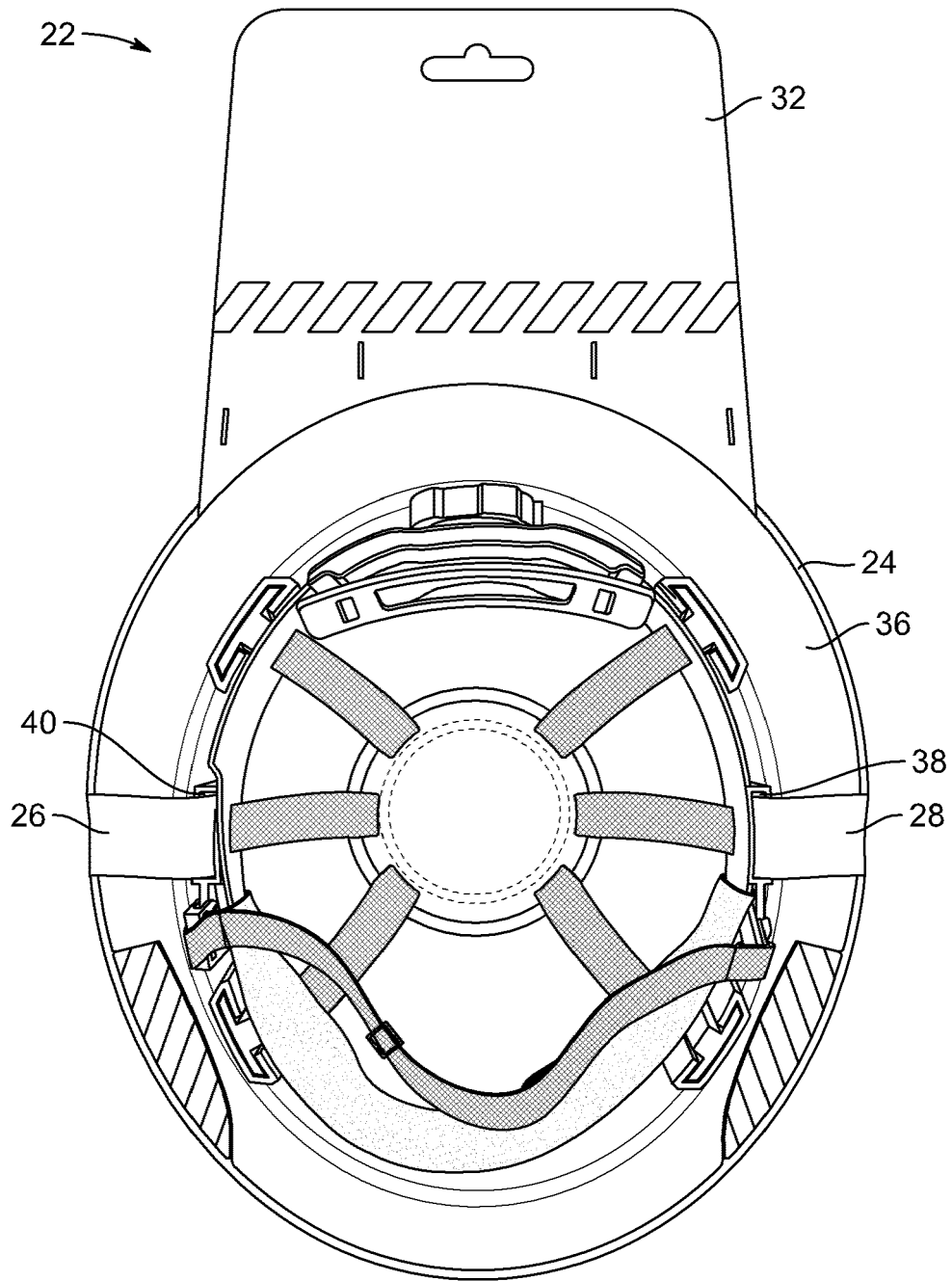


FIG. 4

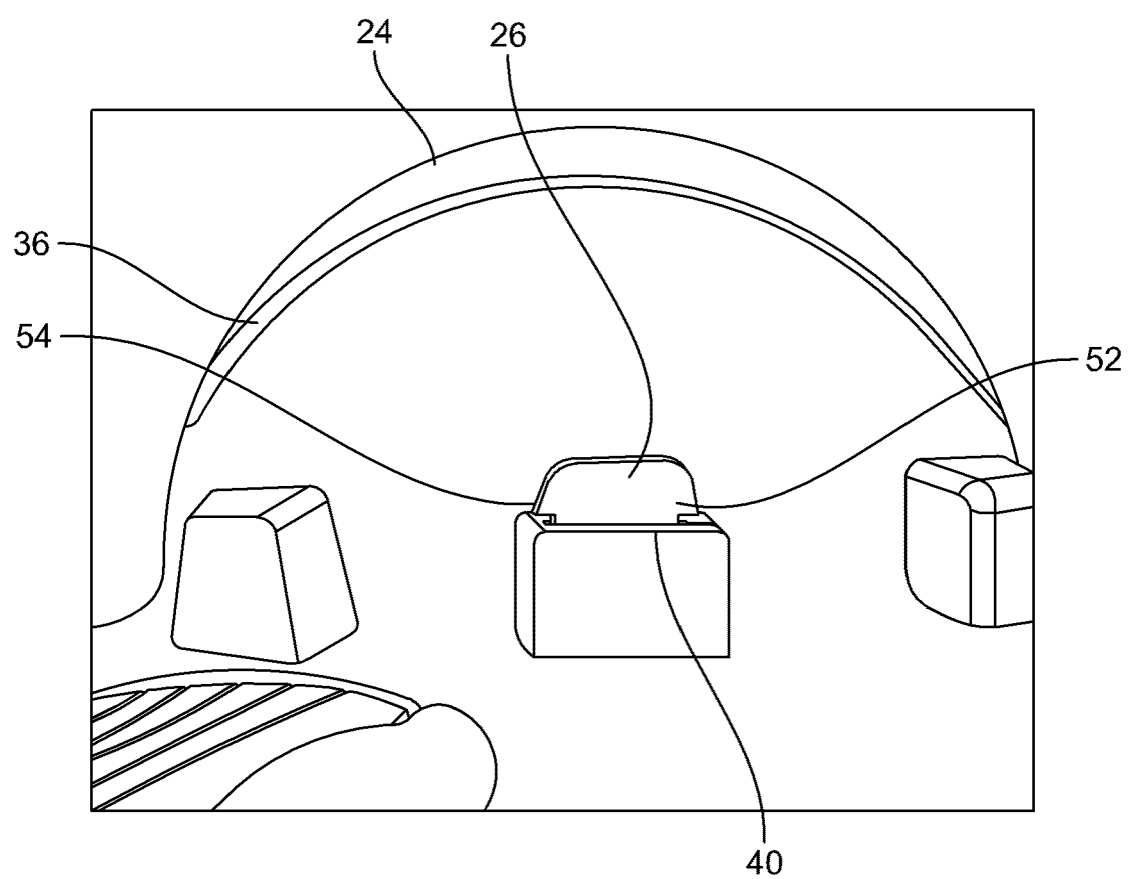


FIG. 5

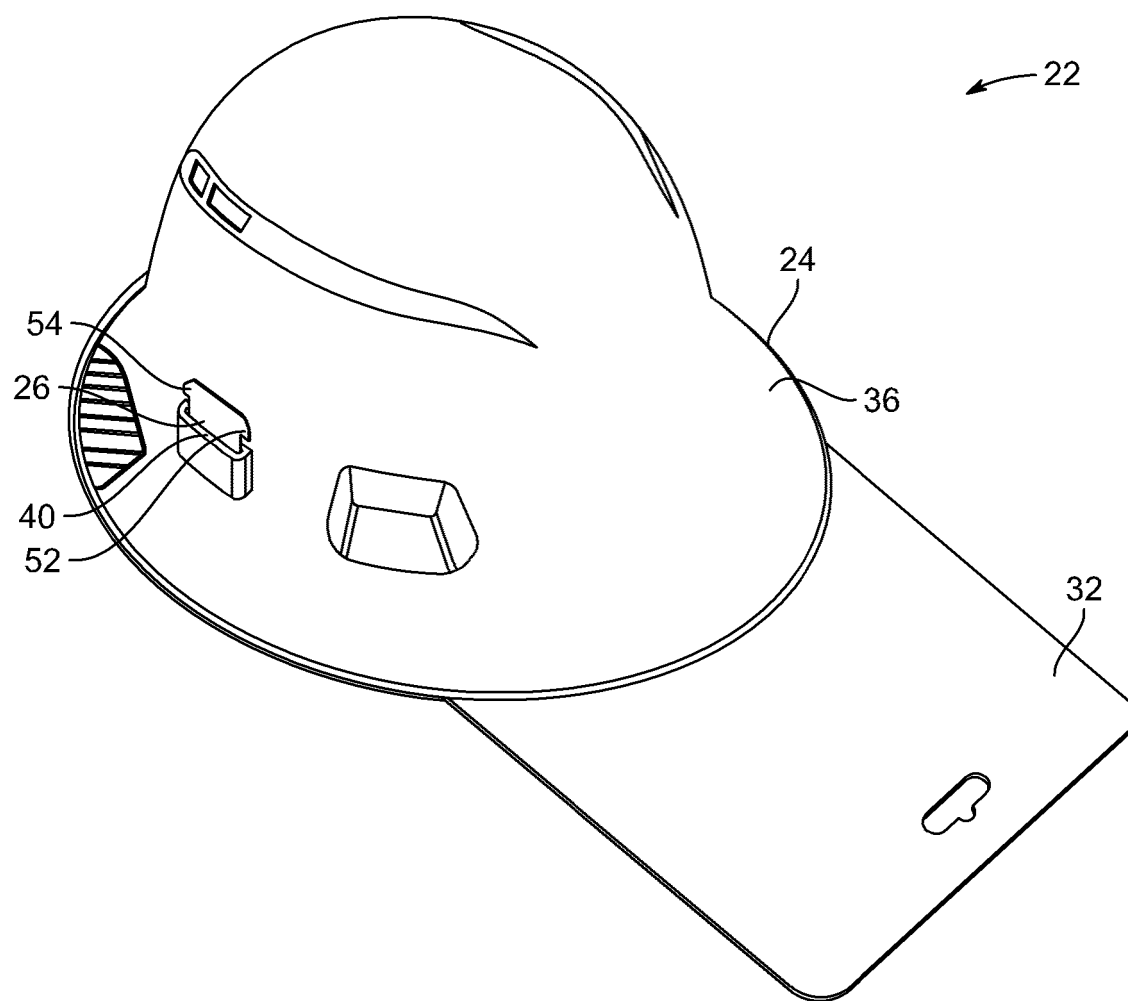


FIG. 6

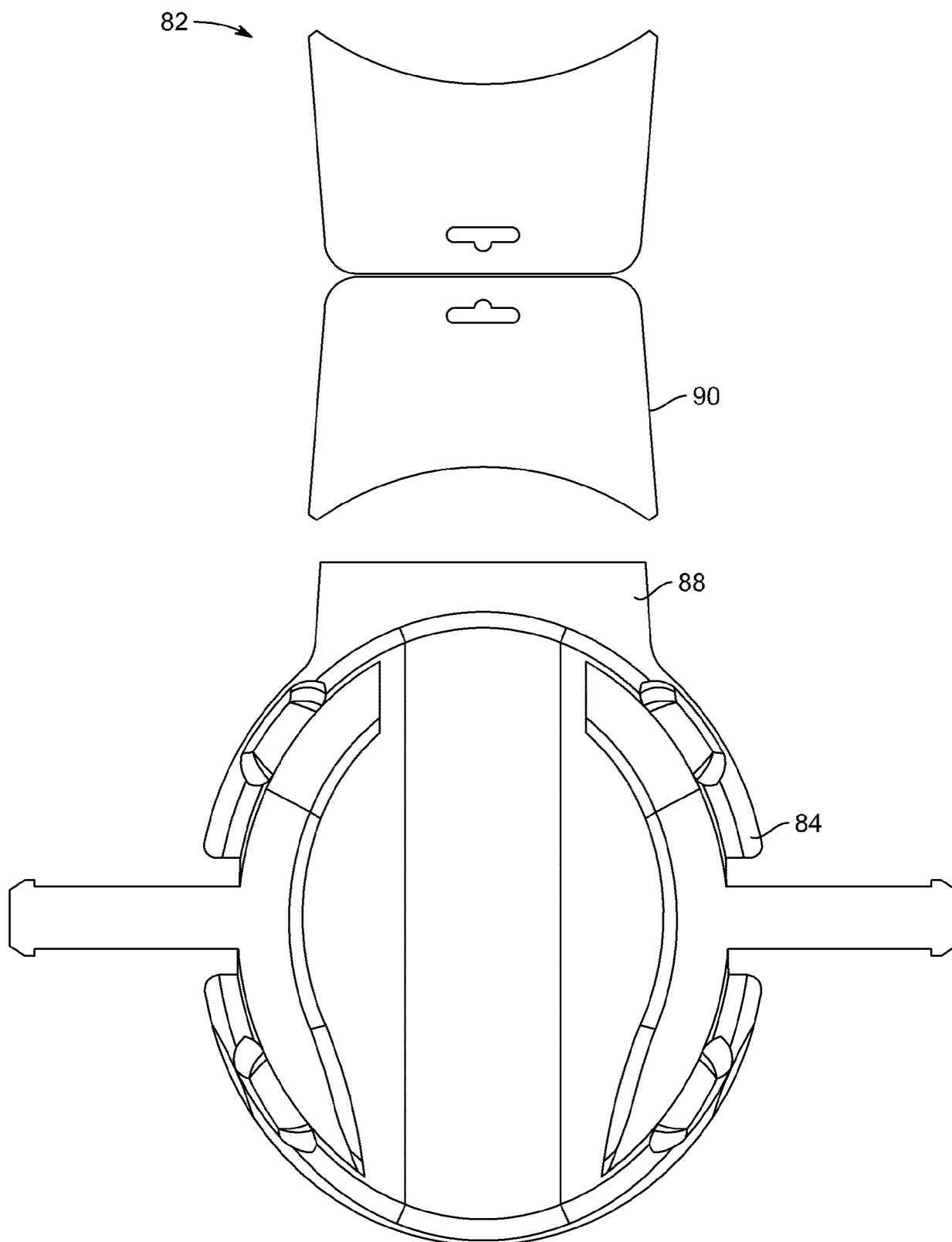


FIG. 7

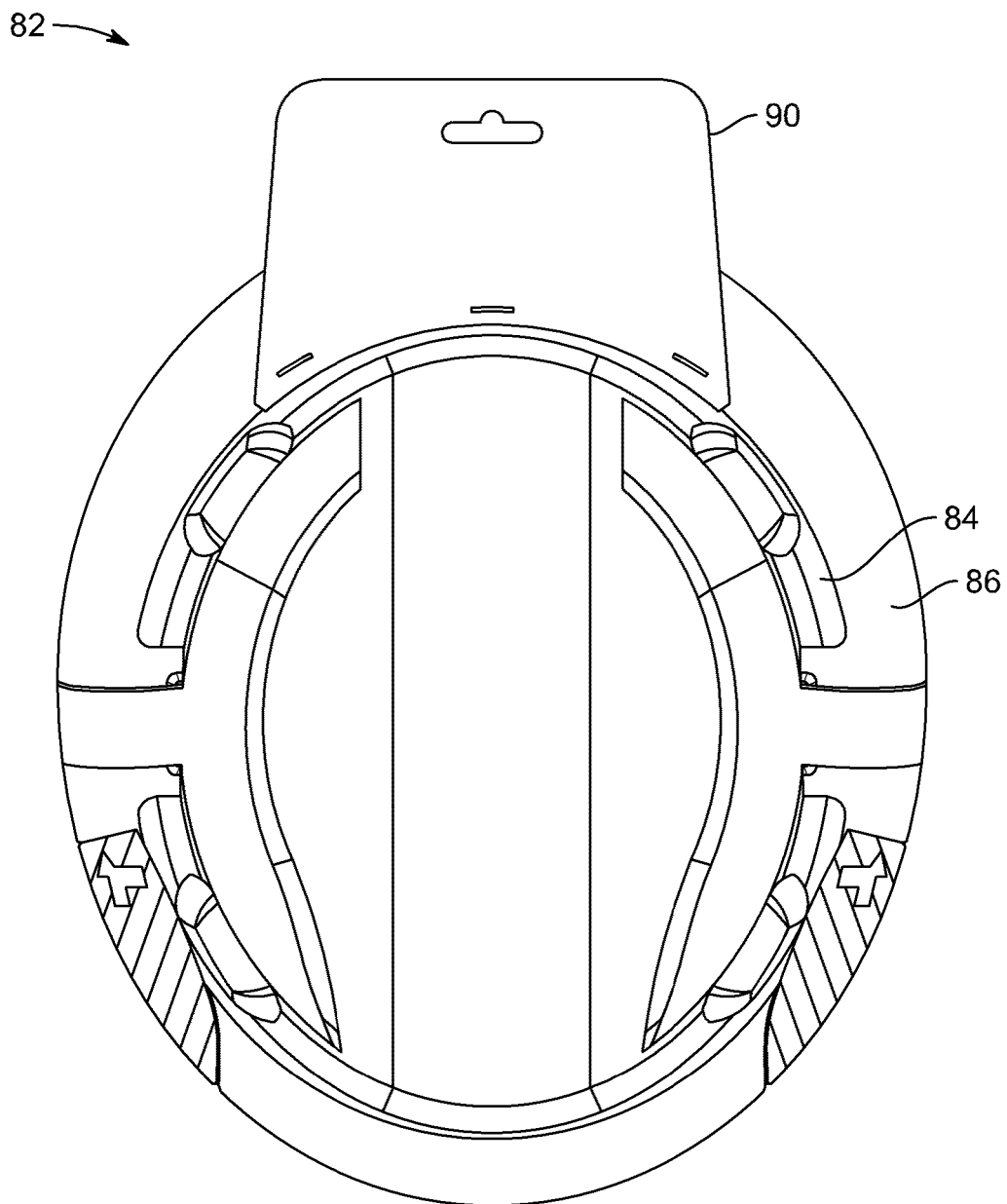


FIG. 8



EUROPEAN SEARCH REPORT

Application Number

EP 25 21 5256

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 6 257 398 B1 (LINDARS MICHAEL T [US]) 10 July 2001 (2001-07-10) * column 2, line 54 - column 5, line 30; figures 1-3 *	1-15	INV. B65D73/00
A	US 6 196 386 B1 (YATES PAUL M [US]) 6 March 2001 (2001-03-06) * the whole document *	1	
A	FR 2 764 867 A1 (EDC [FR]) 24 December 1998 (1998-12-24) * page 1, line 3 - line 16; figures 1, 2 *	1,9	
A	DE 196 51 421 A1 (DUEWI HANDELS UND PRODUKTIONSG [DE]) 2 July 1998 (1998-07-02) * the whole document *	1,5-7	
			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		4 March 2026	Mans-Kamerbeek, M
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P34C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 25 21 5256

5

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-03-2026

10

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6257398	B1	10-07-2001	NONE

US 6196386	B1	06-03-2001	US 6196386 B1 06-03-2001
		US 6450335 B1	17-09-2002

FR 2764867	A1	24-12-1998	NONE

DE 19651421	A1	02-07-1998	NONE

15

20

25

30

35

40

45

50

55

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- US 6257398 B, Lindars **[0002]**
- EP 0401127 A, Chollet Sa **[0002]**