



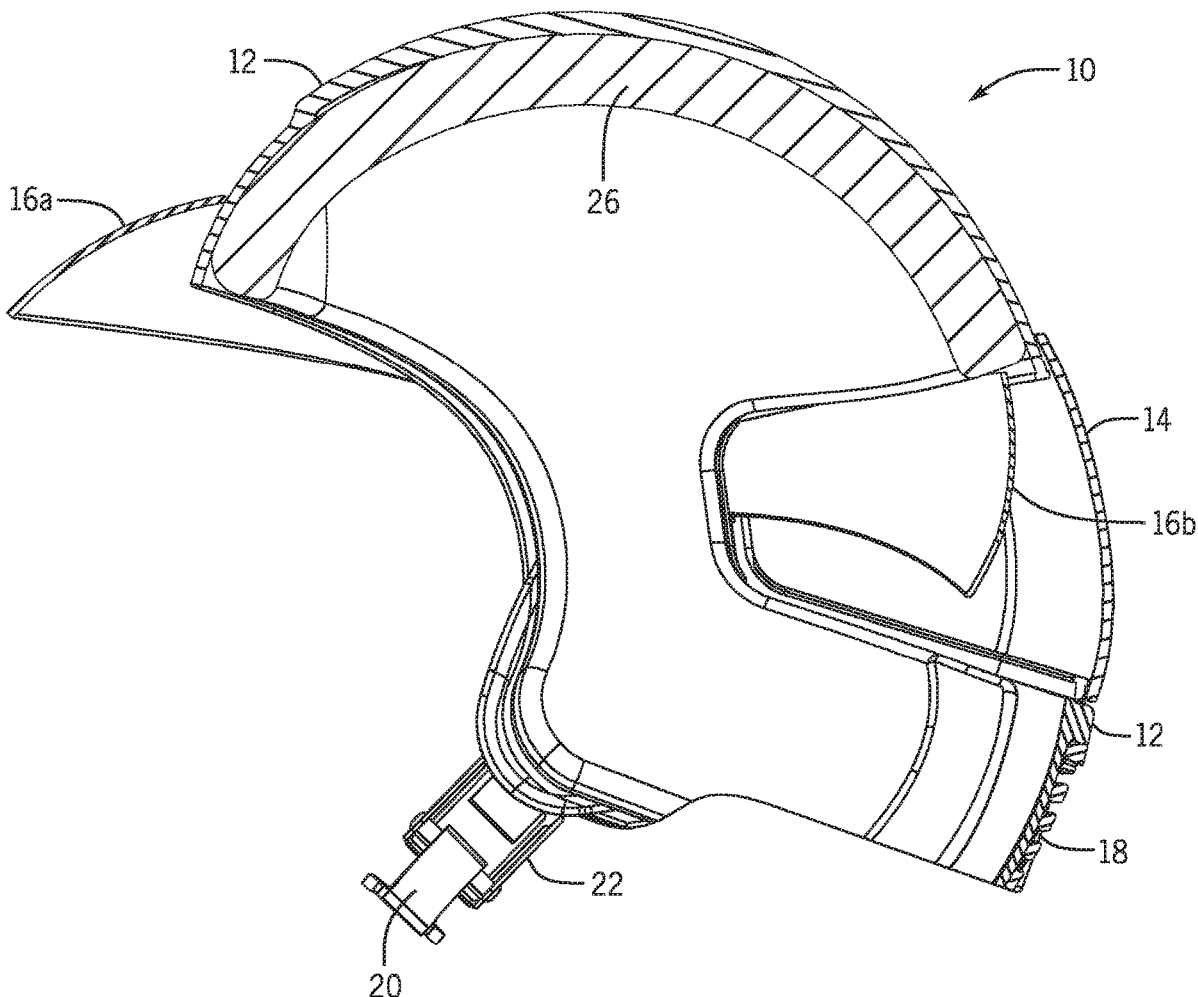
US 20200323300A1

(19) **United States**(12) **Patent Application Publication**
Miceli(10) **Pub. No.: US 2020/0323300 A1**(43) **Pub. Date: Oct. 15, 2020**(54) **TWO SIDED MOTORCYCLE HELMET****Publication Classification**(71) Applicant: **John L. Miceli**, New Rochelle, NY
(US)(51) **Int. Cl.**
A42B 3/22 (2006.01)
A42B 3/06 (2006.01)(72) Inventor: **John L. Miceli**, New Rochelle, NY
(US)(52) **U.S. Cl.**
CPC *A42B 3/221* (2013.01); *A42B 3/066*
(2013.01)(21) Appl. No.: **16/551,916**(57) **ABSTRACT**(22) Filed: **Aug. 27, 2019**

A two sided motorcycle helmet that allows the operator to select between a full open face helmet and a fully enclosed face helmet. With the fully enclosed face orientation, a face shield protects the face of the wearer. With the full open face orientation, the wearer's face is open to the elements. A padding layer is provided on an interior surface of a shell of the helmet. A chin strap is operable to secure the helmet to the wearer's head in either orientation.

Related U.S. Application Data

(60) Provisional application No. 62/834,010, filed on Apr. 15, 2019.



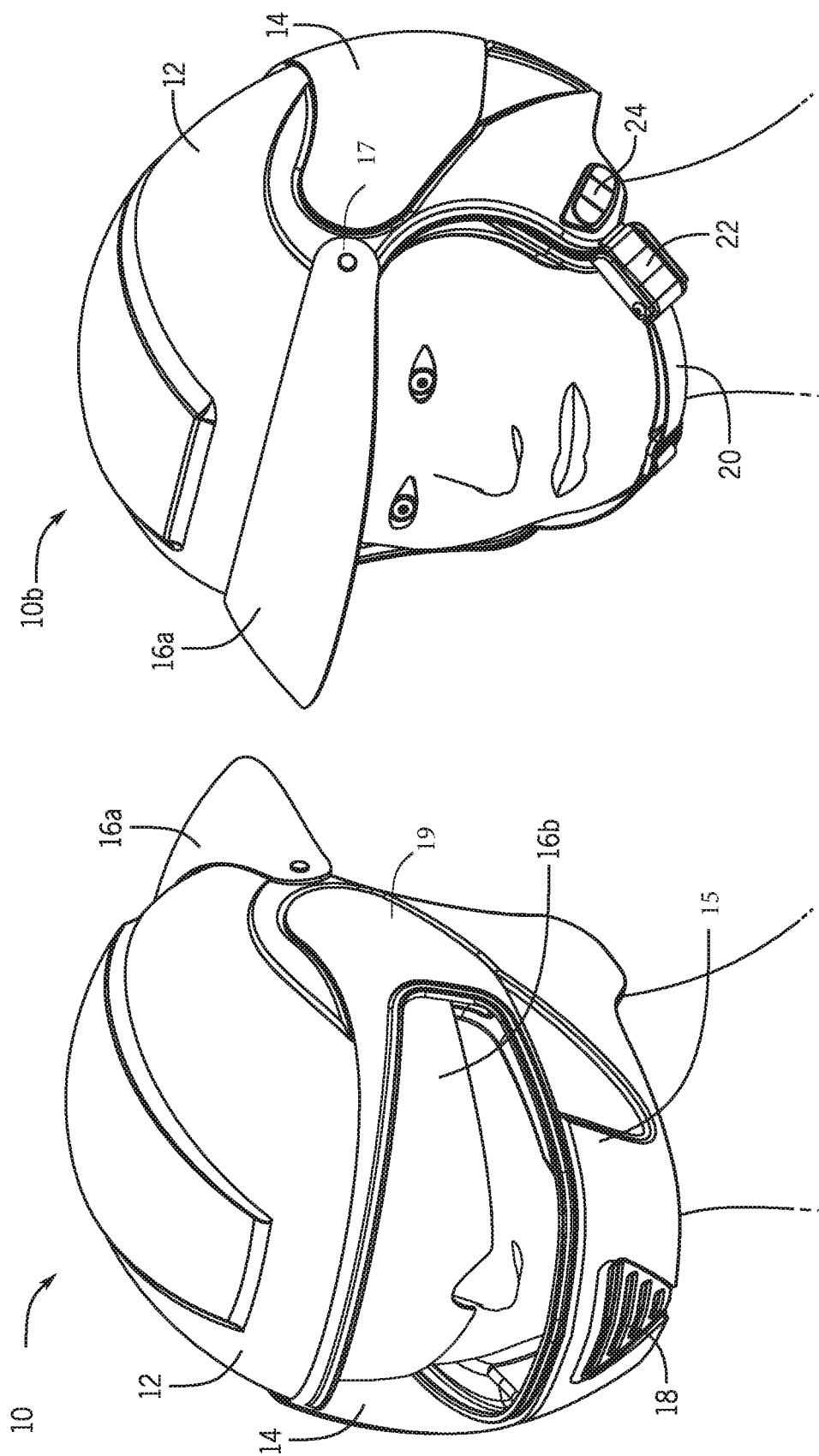


FIG. 1

FIG. 2

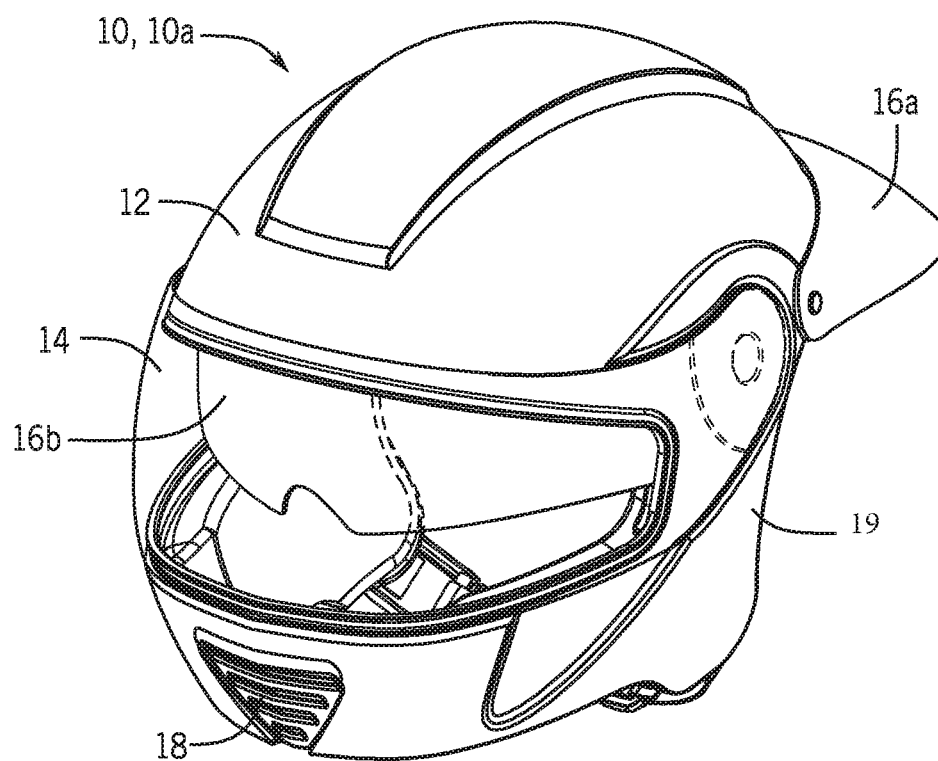


FIG. 3

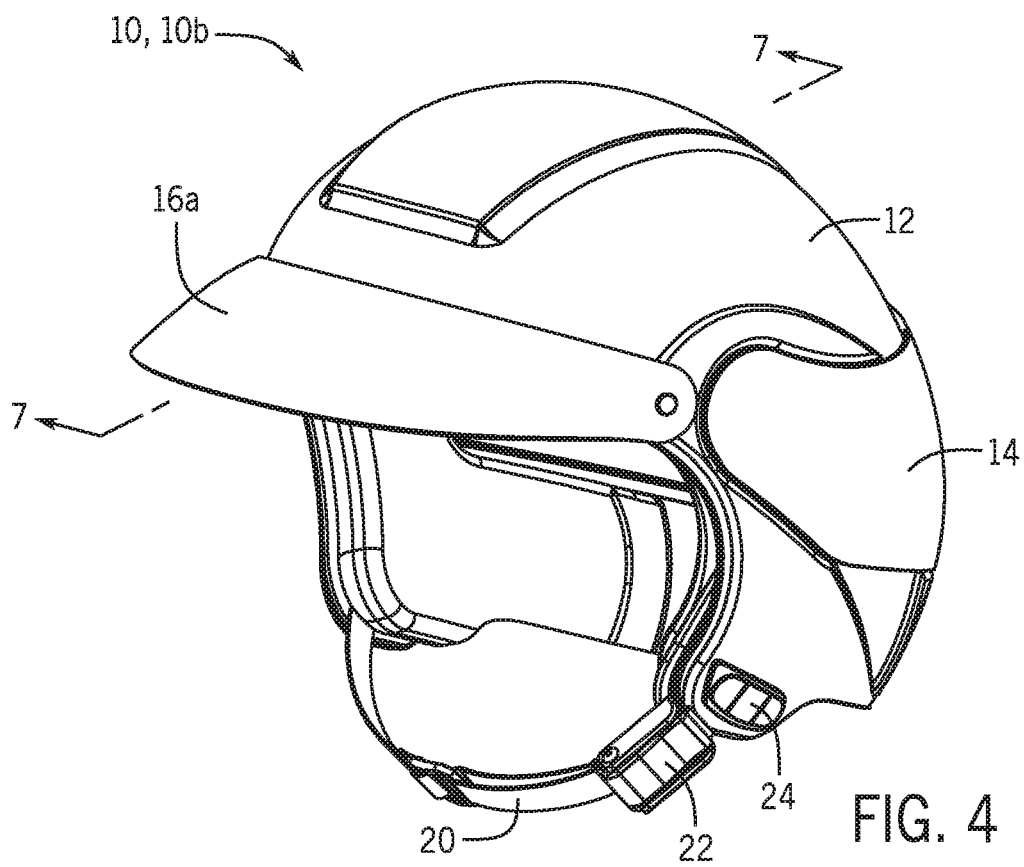
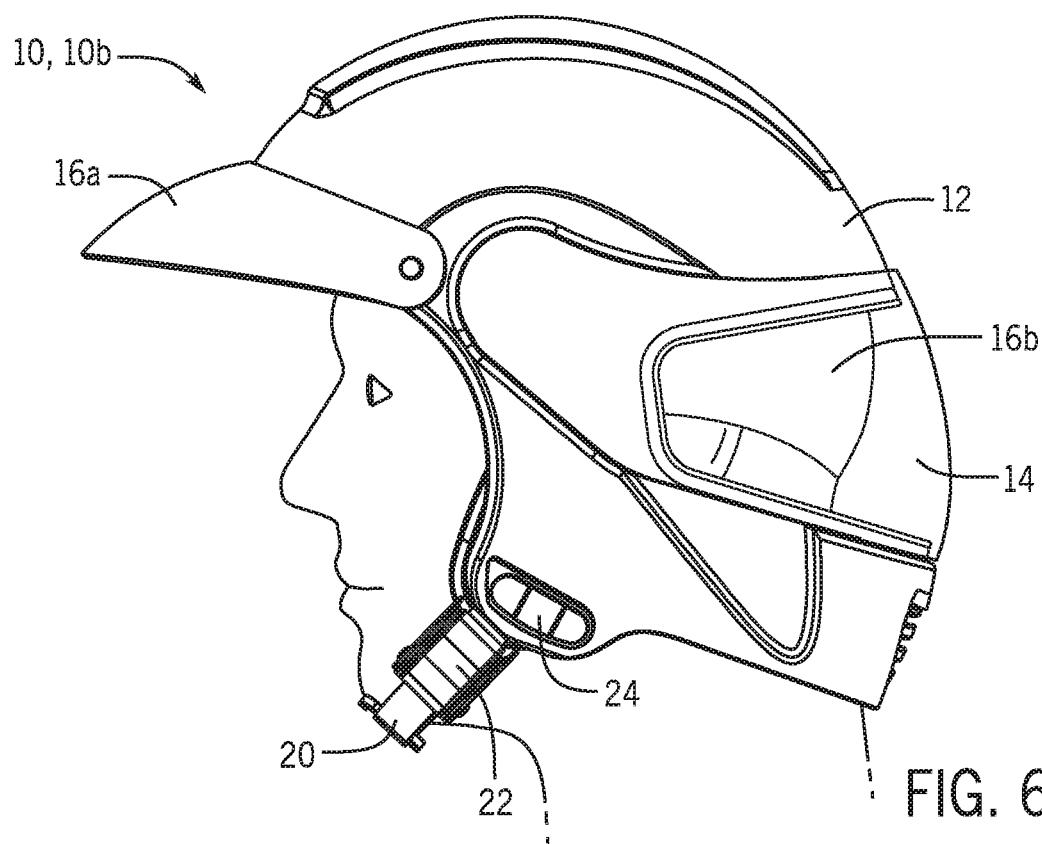
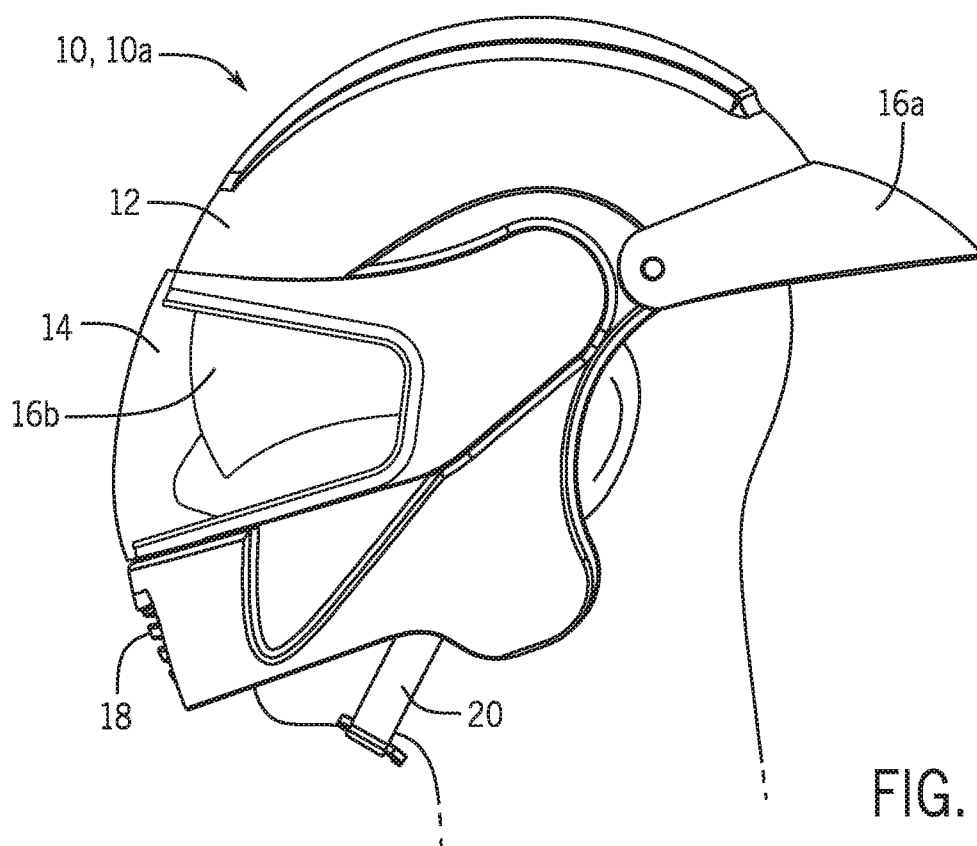


FIG. 4



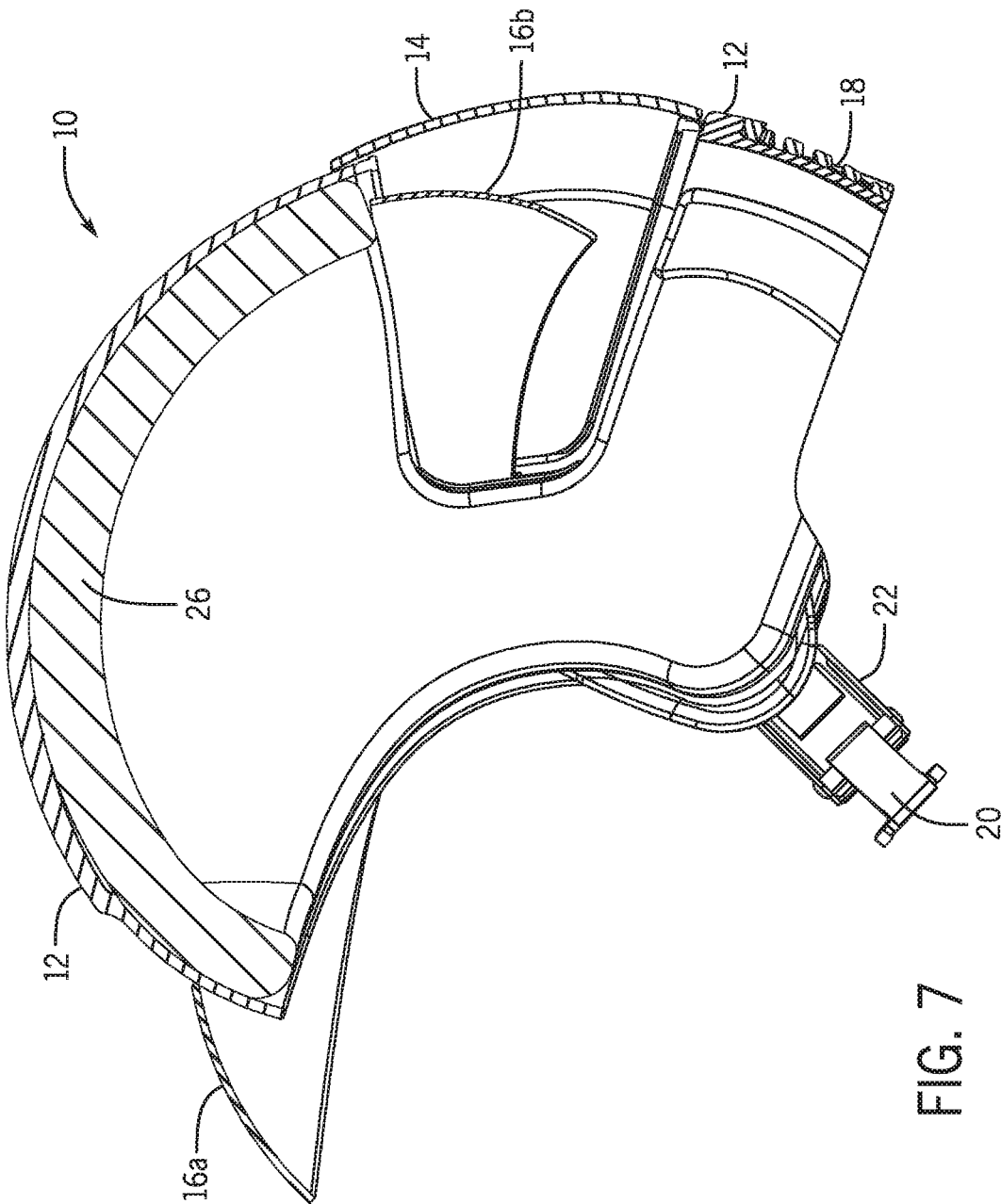


FIG. 7

TWO SIDED MOTORCYCLE HELMET

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of priority of U.S. provisional application No. 62/834,010, filed Apr. 15, 2019, the contents of which are herein incorporated by reference.

BACKGROUND OF THE INVENTION

[0002] The present invention relates to protective head gear and, more particularly, to protective headgear for motor sports.

[0003] When selecting protective head gear for motor sports activities, such as motorcycle helmets, the user confronted with a variety of helmet designs, shapes, and styles. Each choice provides a desired level of protection, a comfort level, or adaptation to a particular weather condition or type of riding.

[0004] For riders that have more than one helmet, they may need to decide which helmet to use prior to a ride. Owing to the limited carriage space on the motorcycle, they may not carry a spare in the event the weather or road conditions change during the ride. Initially, an open face helmet may be suitable for a ride, but due to a change in the weather or road conditions, a closed or visor protective helmet may be warranted.

[0005] As can be seen, there is a need for an improved motorcycle helmet that allows the rider to quickly adapt to changing weather, road, or comfort conditions.

SUMMARY OF THE INVENTION

[0006] In one aspect of the present invention, a protective helmet is disclosed. The protective helmet includes a spheroidal shell defining an interior cavity that is dimensioned to receive a head of a user. A temporal extension is provided at a medial portion of each of a left side and a right side of the spheroidal shell. A mandibular guard extends from the temporal extension between a left side and a right side of the spheroidal shell at a first end of the spheroidal shell. A face shield encloses a first face opening defined between the mandibular guard, the temporal extension, and a first brow line defined across a first end of the spheroidal shell. A second brow line is defined at a second end of the spheroidal shell between the temporal extension of the left side and the right side of the spheroidal shell, the second brow line and the temporal extension define a second face opening.

[0007] In some embodiments, a chinstrap is attached a lower peripheral aspect of the temporal extension and a buckle is attached to the lower peripheral aspect of an opposite temporal extension.

[0008] In other embodiments, a protective padding is attached to an interior surface of the spheroidal shell.

[0009] In other embodiments, a vent may be defined in an intermediate portion of the mandibular guard.

[0010] In yet other embodiments, a communications module is attached to a lower aspect of the temporal extension.

[0011] In other aspects of the invention, a protective helmet includes a spheroidal shell that is configured to be reversibly worn on a wearer's head between a first orientation and a second orientation. In the first orientation, a first face opening is enclosed by a protective face shield. In the second orientation a second face opening is unobstructed.

[0012] In some embodiments, a temporal extension protrudes from a bottom medial section of the spheroidal shell.

[0013] In other embodiments, a mandibular guard extends from the temporal extension between a left side and a right side of the spheroidal shell.

[0014] In other embodiments, a padding layer is attached to an interior surface of the spheroidal shell.

[0015] In yet other embodiments, a chinstrap and cooperating buckle are attached to a lower peripheral aspect of the temporal extension between each of the left side and the right side of the spheroidal shell.

[0016] These and other features, aspects and advantages of the present invention will become better understood with reference to the following drawings, description and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] FIG. 1 is a perspective view of a two sided motorcycle helmet shown in use in a first orientation.

[0018] FIG. 2 is a perspective view of the two sided motorcycle helmet shown in use in a second orientation.

[0019] FIG. 3 is a perspective view of the two sided motorcycle helmet in the first orientation of FIG. 1.

[0020] FIG. 4 is a perspective view of the two sided motorcycle helmet in the second orientation of FIG. 2.

[0021] FIG. 5 is a side elevation view of the two sided motorcycle helmet in use in an orientation similar to FIG. 1.

[0022] FIG. 6 is a side elevation view of the two sided motorcycle helmet in use in an orientation similar to FIG. 2.

[0023] FIG. 7 is a cross-sectional view of the two sided motorcycle helmet taken on line 7-7 of FIG. 4.

DETAILED DESCRIPTION OF THE INVENTION

[0024] The following detailed description is of the best currently contemplated modes of carrying out exemplary embodiments of the invention. The description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating the general principles of the invention, since the scope of the invention is best defined by the appended claims.

[0025] Broadly, embodiments of the present invention provide a two sided, or reversible, protective helmet. In the non-limiting embodiment shown the helmet is reversible on the wearer's head to select between a closed face shield configuration and an open face visor free experience.

[0026] As seen in reference to the drawings of FIGS. 1-7, the protective helmet 10 of the present invention includes a generally rigid outer spheroidal shell 12 defining an interior cavity. In a first orientation of the helmet 10, shown in reference to FIG. 1, the shell 12 may include a face shield 14 to enclose the wearer's face and eyes from wind, debris, and other environmental elements. A mandibular guard 15 extends from a temporal extension 19 along the lateral aspects of the spheroidal shell 12 and is configured to extend around the lower jaw of the wearer. The temporal extension 19 is defined at a bottom medial section of the spheroidal shell 12. The face shield 14 and mandibular guard 15 provide a protective closure around the wearer's face. A vent 18 may be provided at a forward aspect, or intermediate portion, of the mandibular guard 15 to allow the user's breath to escape and be drawn into an interior of the helmet 10.

[0027] In a second orientation of the helmet **10b**, the shell **12** is configured in an open face configuration. A visor **16a** protrudes from a forward edge of the helmet around a top periphery of a face opening. The visor **16a** may be removably attached to the shell **12**, via one or more fasteners **17**. The visor **16a** may protect the wearer's vision from a sun glare, and the like. In each orientation, the shell is secured to the wearer's head via a chin strap **20**, adjustment buckle **22**. The chinstrap **20** may be pivotally or fixedly attached to a lower peripheral end of the temporal extension **19** of the shell **12** so that the chin strap **20** is useable to secure the helmet **10** to the user's head in either orientation.

[0028] As seen in the cross sectional view of FIG. 7, the interior of the shell **12** may be provided with a protective padding layer **26** to provide a desired level of impact protection to the wearer's skull in the event of an accident or mishap.

[0029] In some embodiments, a supplemental visor **16b** may be provided for wear within the face shield **14**. The supplemental visor **16b**, may for example, be tinted for sun or glare protection from oncoming headlights. The two sided helmet **10** of the present invention may also include a Bluetooth® or other communications module **24** to provide the wearer an audio communications capability while wearing the helmet **10**. The communications module **24** may be attached to a lower aspect of the temporal extension **19**.

[0030] As will be appreciated from the present disclosure, the shell **12** of the protective helmet **10** provides a generally spheroidal enclosure for the wearer's head. The padding layer **26** is disposed about an interior sidewall of the shell **12**. The helmet **10** is reversible between a first orientation and a second orientation, wherein in the first orientation, a mandibular guard **15** extends from a temporal extension **19** of the shell **12** and extends about the wearer's lower jaw between a left and right lateral side of the helmet **10**. A first brow line is dimensioned to extend across a forehead of the user. The face shield **14** provides a closure to an opening between the mandibular guard **15** and the first brow line.

[0031] A second brow line is dimensioned to extend around a periphery of the wearer's face between the temporal extensions **19** to provide an open face orientation for the helmet **10**.

[0032] In use, while on a brisk ride to work in the morning, the user can wear the helmet **10** in the first orientation with the closed face shield **14**. Then, on the ride home the user may realize it's a beautiful day, and has the option to turn the helmet **10** around and wear it as an open face second orientation to enjoy their ride.

[0033] It should be understood, of course, that the foregoing relates to exemplary embodiments of the invention and that modifications may be made without departing from the spirit and scope of the invention as set forth in the following claims.

What is claimed is:

1. A protective helmet comprising:
 - a spheroidal shell defining an interior cavity dimensioned to receive a head of a user;
 - a temporal extension at a medial portion of each of a left side and a right side of the spheroidal shell;
 - a mandibular guard extending from the temporal extension between a left side and a right side of the spheroidal shell at a first end of the spheroidal shell;
 - a face shield enclosing a first face opening defined between the mandibular guard, the temporal extension, and a first brow line defined across a first end of the spheroidal shell; and
 - a second brow line defined at a second end of the spheroidal shell between the temporal extension of the left side and the right side of the spheroidal shell, the second brow line and the temporal extension defining a second face opening.
2. The protective helmet of claim 1, further comprising:
 - a chinstrap attached a lower peripheral aspect of the temporal extension; and
 - a buckle attached to the lower peripheral aspect of an opposite temporal extension.
3. The protective helmet of claim 1, further comprising:
 - a protective padding attached to an interior surface of the spheroidal shell.
4. The protective helmet of claim 1, further comprising:
 - a vent defined in an intermediate portion of the mandibular guard.
5. The protective helmet of claim 1, further comprising:
 - a communications module attached to a lower aspect of the temporal extension.
6. A protective helmet, comprising:
 - a spheroidal shell configured to be reversibly worn on a wearer's head between a first orientation and a second orientation, wherein in the first orientation, a first face opening is enclosed by a protective face shield, and wherein in the second orientation a second face opening is unobstructed.
7. The protective helmet of claim 6, further comprising:
 - a temporal extension protruding from a bottom medial section of the spheroidal shell.
8. The protective helmet of claim 7, further comprising:
 - a mandibular guard extending from the temporal extension between a left side and a right side of the spheroidal shell.
9. The protective helmet of claim 8, further comprising:
 - a padding layer attached to an interior surface of the spheroidal shell.
10. The protective helmet of claim 9, further comprising:
 - a chinstrap and cooperating buckle attached to a lower peripheral aspect of the temporal extension between each of the left side and the right side of the spheroidal shell.

* * * * *