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(54) **BALLISTIC RESISTANT NECK PROTECTOR**

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(57) **ABSTRACT**

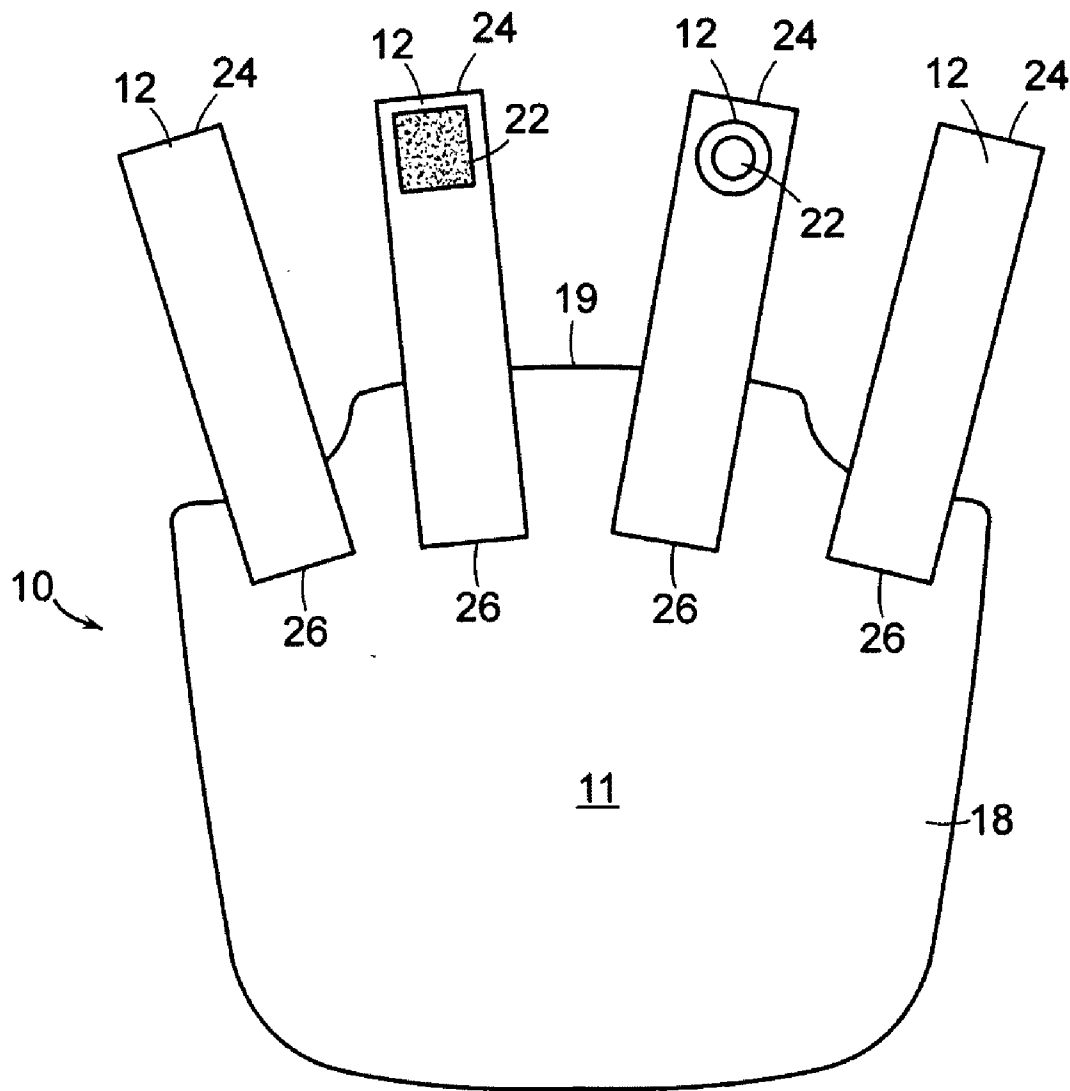
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A neck protector including a soft armor neck panel with an inner surface, an outer surface and an edge disposed between the inner surface and the outer surface. At least one tab is attached to the soft armor neck panel at a proximal end of the tab. A first half of a removable fastener is disposed on a distal end of the tab and configured to secure to a second half of the removable fastener that is disposed within a helmet. The soft armor neck panel may be shaped to curve around a user's neck.

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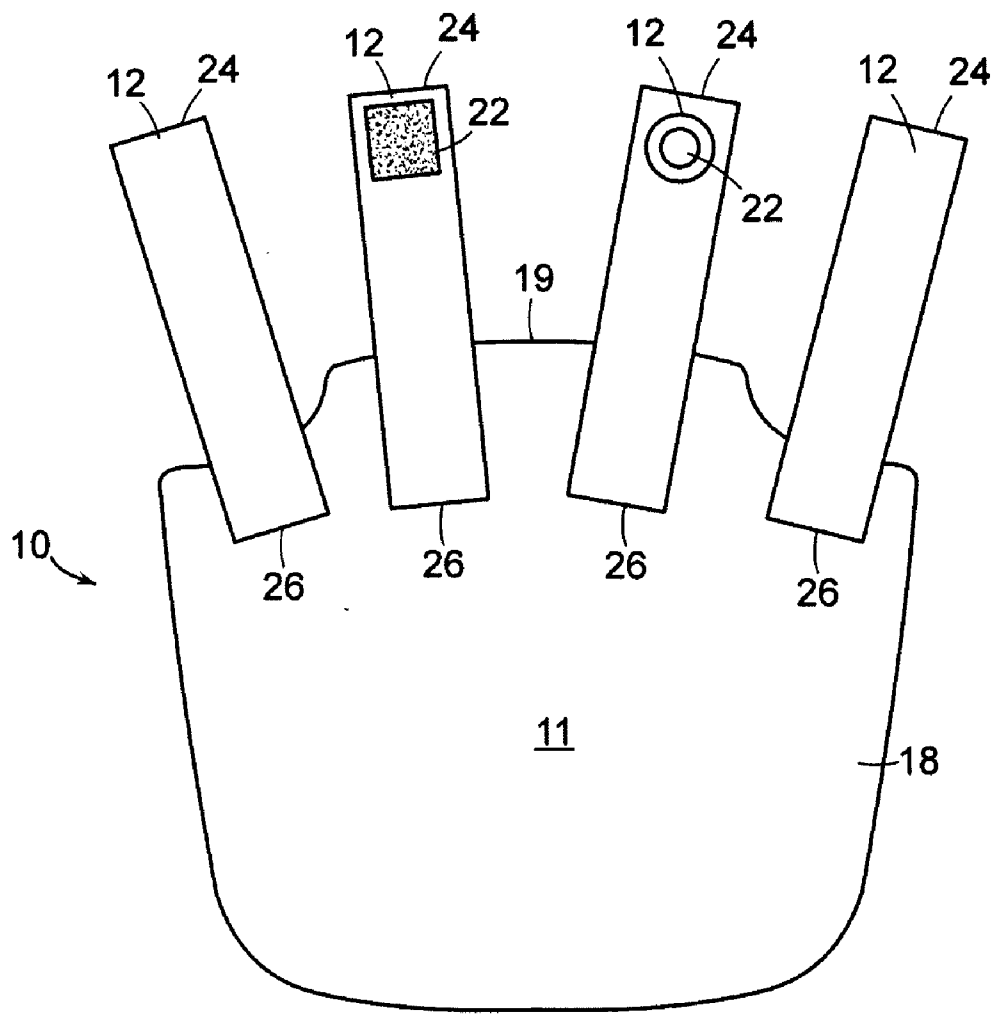


FIG. 1

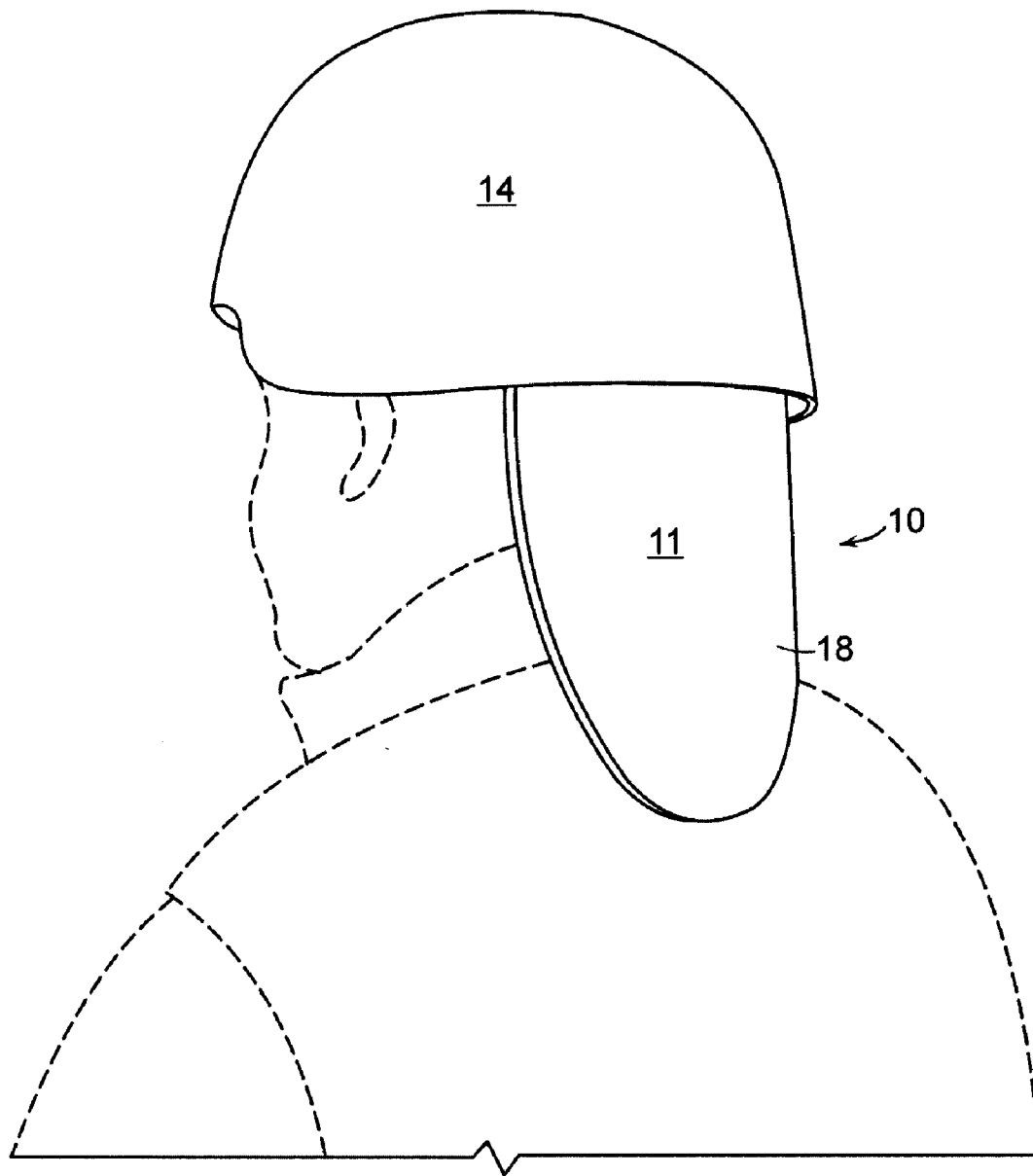


FIG. 1a

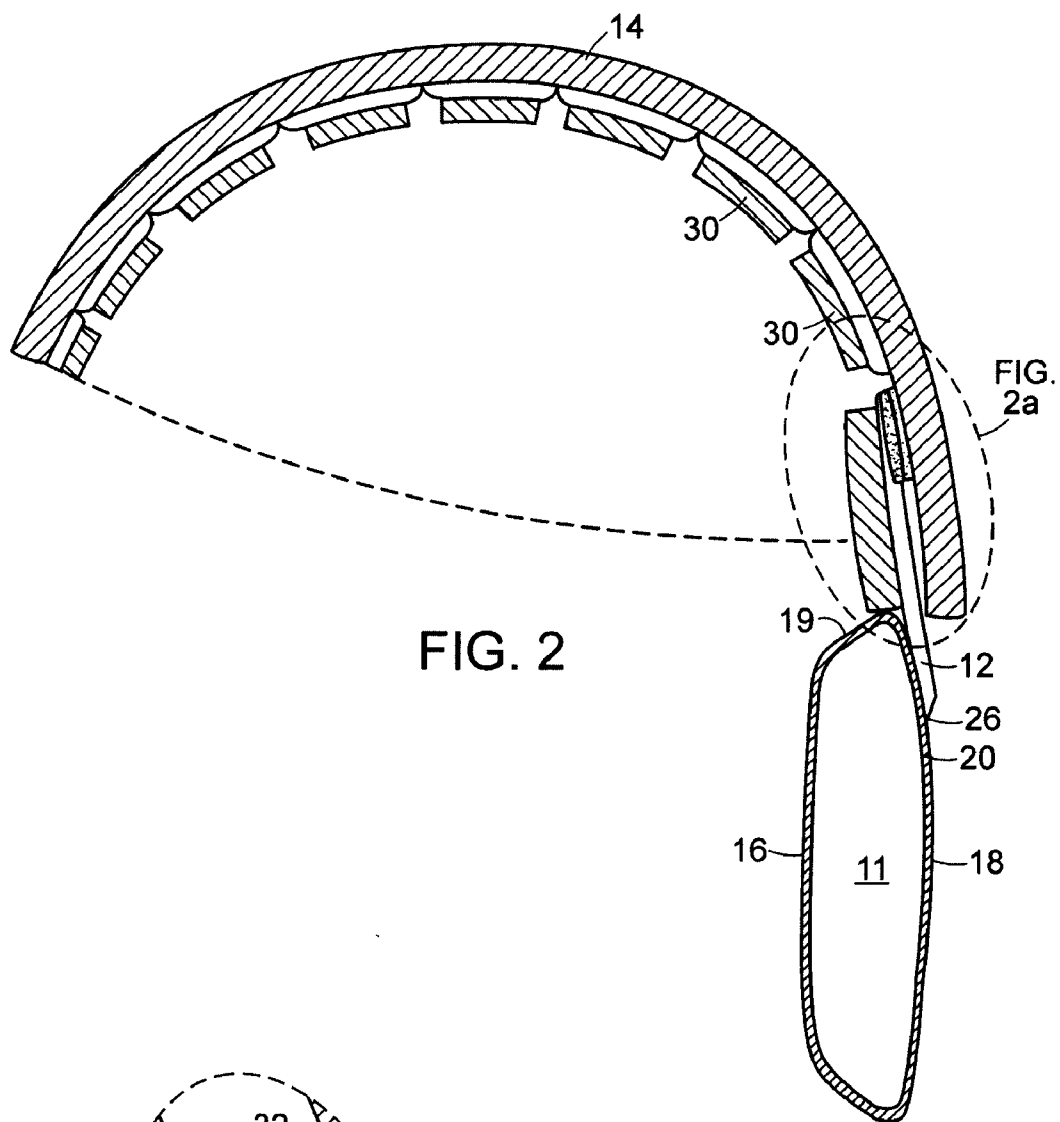


FIG. 2

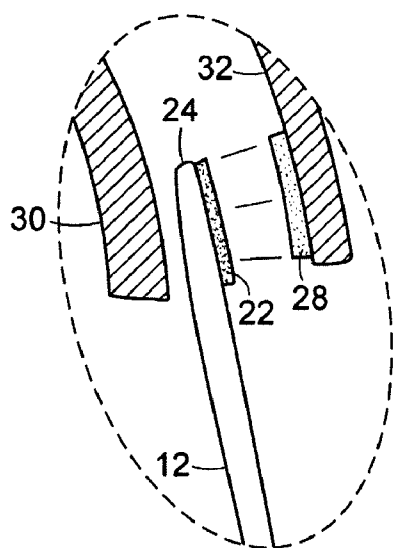


FIG. 2a

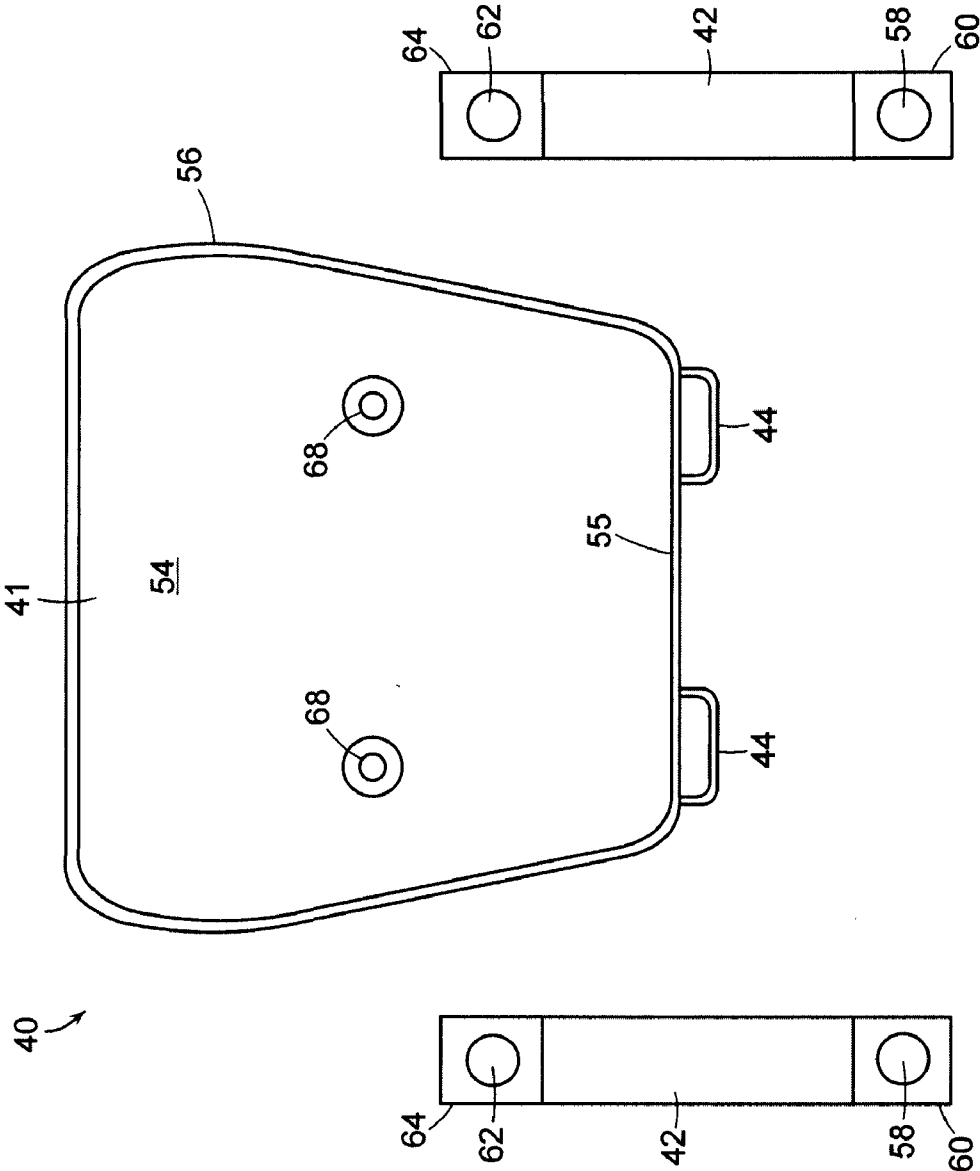


FIG. 3a

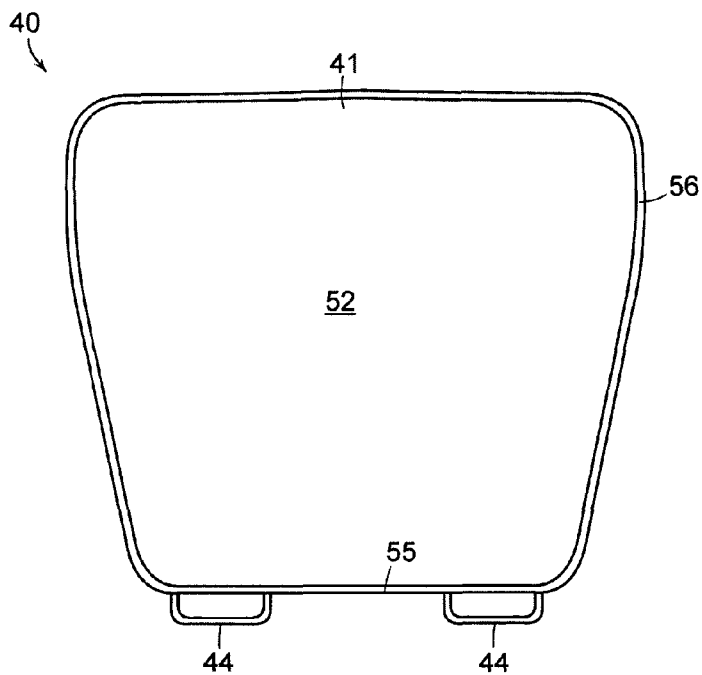


FIG. 3b

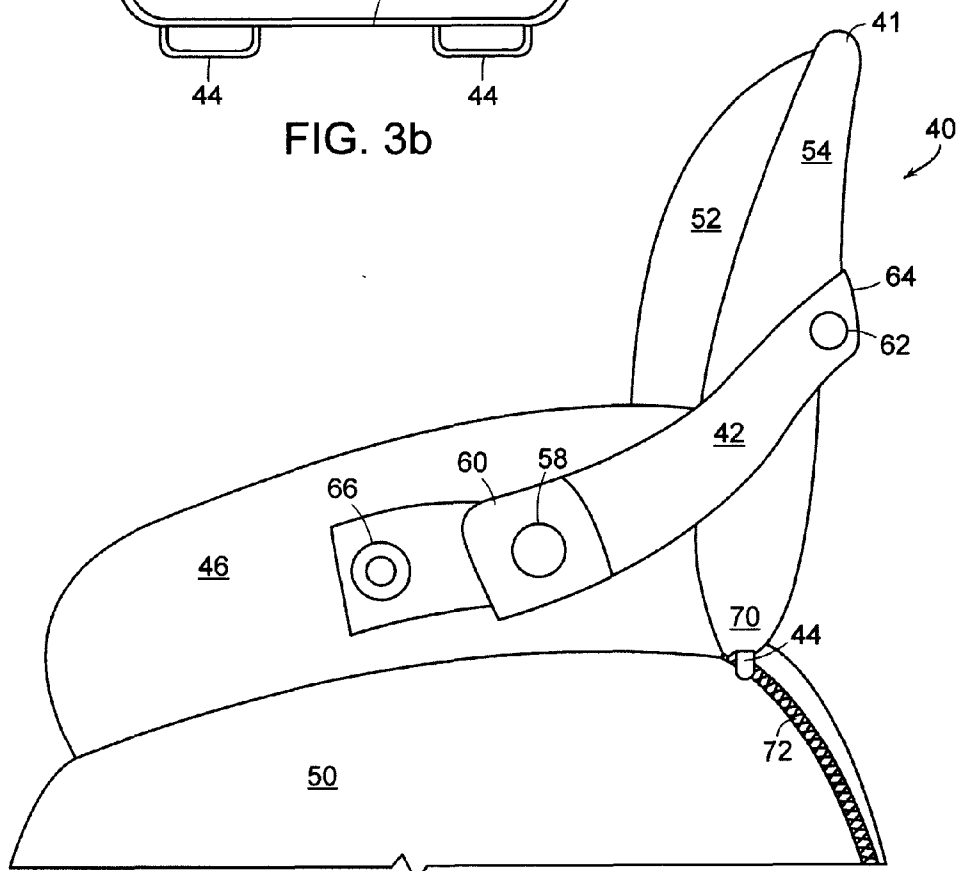


FIG. 4

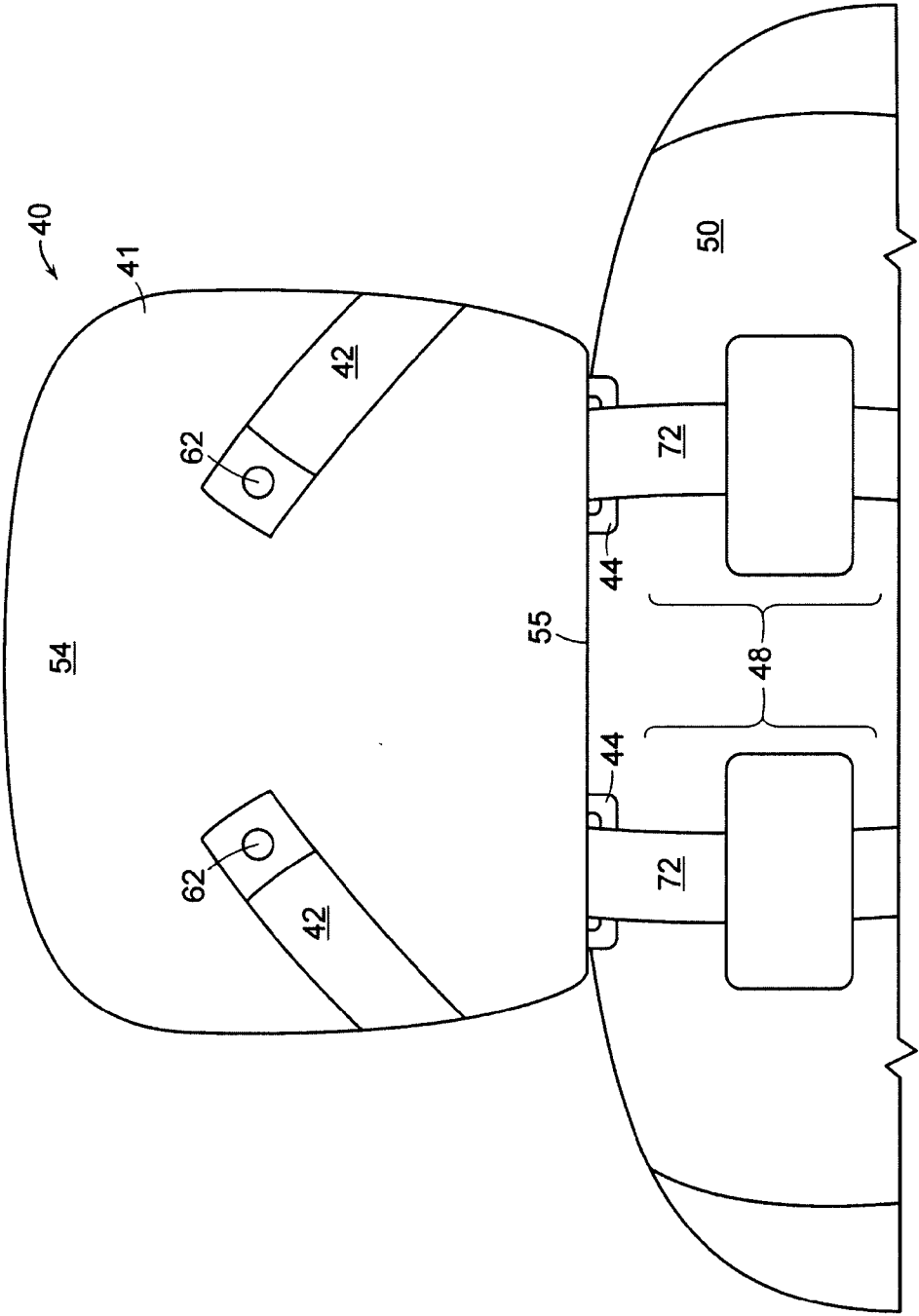


FIG. 5

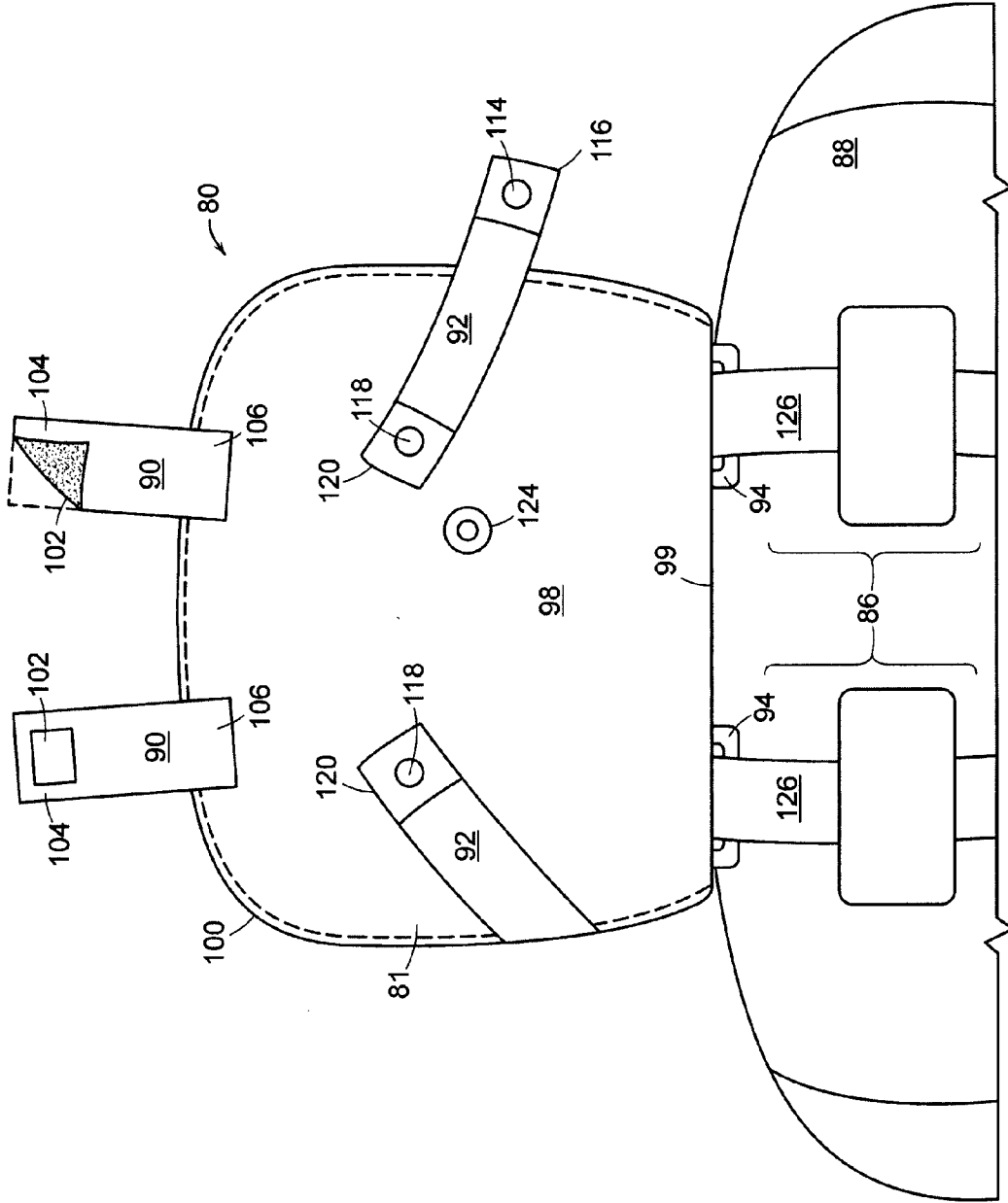


FIG. 6



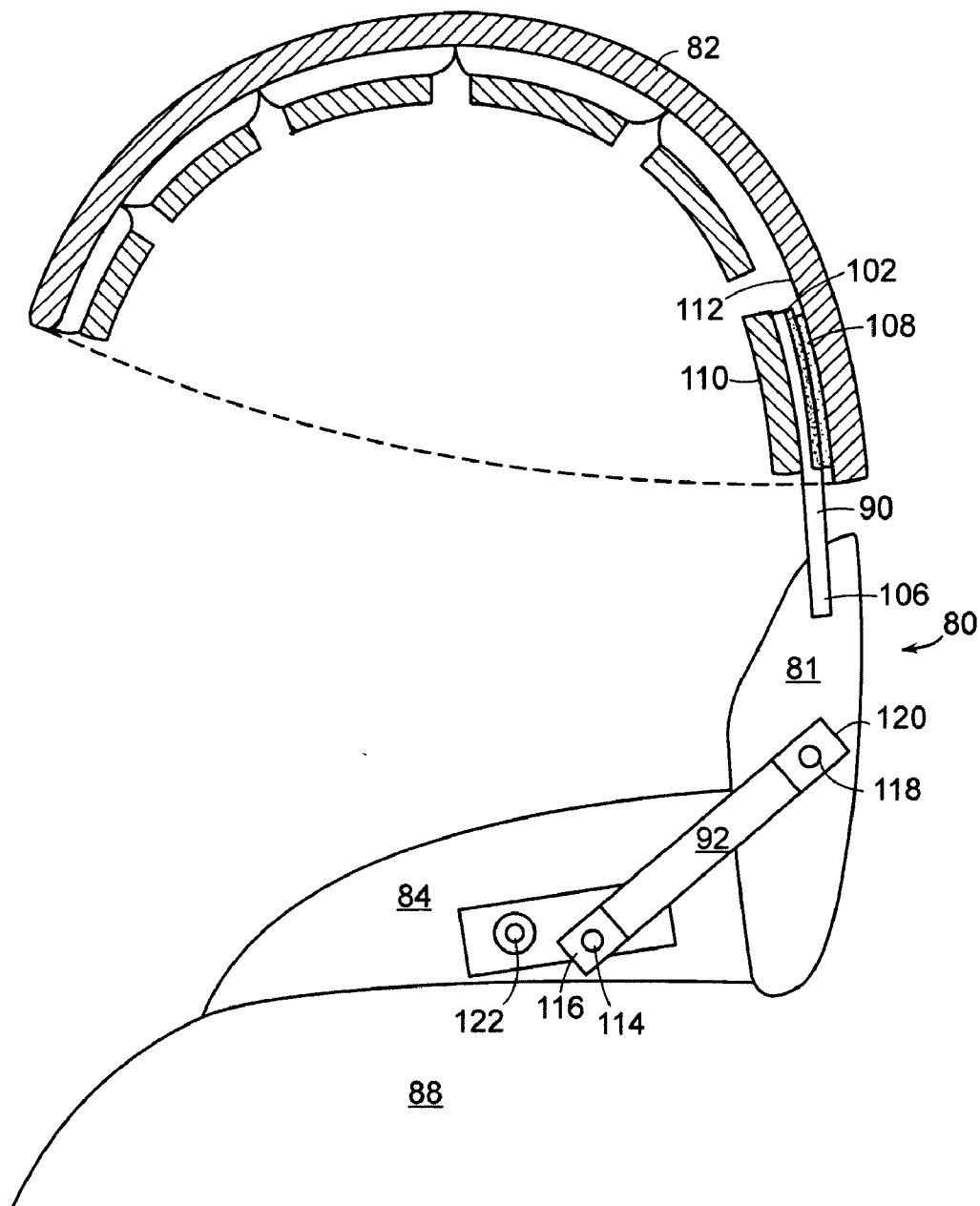


FIG. 7

**BALLISTIC RESISTANT NECK PROTECTOR**

FIELD OF INVENTION

[0001] The present invention relates to ballistic resistant armor and more specifically to ballistic resistant neck protection.

BACKGROUND

[0002] Ballistic resistant garments are available to protect various parts of the body from various ballistic threats, such as bullets or shrapnel. Some ballistic resistant garments are made of "soft armor," which is generally flexible. For example, ballistic resistant vests that are worn to protect a user's torso are usually made of soft body armor. Other garments are made of "hard armor," which are generally stiff and inflexible. For example, helmets worn to protect a user's head are generally made of hard armor. However, some garments may employ a combination of soft and hard armor to increase protection for the user.

[0003] Ballistic resistant garments are often used in high threat situations, such as firefights or riots, by military or police personnel. In these situations, a user of these ballistic resistant garments must be adequately covered but freely mobile and be able to visualize possible threats. Thus, any ballistic resistant garment worn by the user must provide maximum body coverage while not restricting the user's mobility or field of vision. If the ballistic resistant garment is restrictive or not comfortable, a user may not wear this protective equipment.

[0004] For military and police personnel, a ballistic threat may come from any direction without notice. Further, the back of the head and neck, especially the spinal column, are especially vulnerable. Ballistic resistant vests and ballistic resistant helmets may not provide adequate coverage between the bottom of the ballistic helmet and the top of the back of the bullet resistant vest, leaving the back of the head and neck exposed to a ballistic threat. Some vests provide high collars around the neck, but these tend to restrict head movement or interfere with the user's field of vision without protecting the back of the user's head. Some helmets may include a fixed extension on the rear of the helmet made of hard or soft armor. However, these types of fixed extensions may interfere with head movement or may not provide full protection for the neck.

SUMMARY

[0005] The present invention provides a ballistic resistant neck protector that provides improved protection for the back of the head and neck without interfering with the user's mobility or line of sight.

[0006] In general, in one aspect, the invention features a soft armor neck panel with an inner surface, an outer surface and an edge disposed between the inner surface and the outer surface. At least one tab is attached to the soft armor neck panel at a proximal end of the tab. A first half of a removable fastener is disposed on a distal end of the tab and configured to secure to a second half of the removable fastener that is disposed within a helmet.

[0007] One or more of the following features may be included. In some embodiments, the soft armor neck panel may be configured to curve partially around a neck of a user. In some embodiments, an outer layer of protective fabric is disposed around the soft armor neck panel. In further embodi-

ments, the tab may be disposed on the outer layer of protective fabric around the soft armor neck panel.

[0008] In some embodiments, the tab may be disposed on the inner surface of the soft armor neck panel. In other embodiments, the tab is disposed on the outer surface of the soft armor neck panel. The tab may be made from an elastic material, such as an elastic strap. The first and second halves of a removable fastener may be a two piece buckle, a hook and loop fastener, buttons or snaps. The proximal end of the tab may be removably attached to the outer surface of the soft armor neck panel.

[0009] In general, in another aspect, the invention features a soft armor neck panel that has an inner surface, an outer surface and an edge disposed between the inner surface and the outer surface. The neck protector includes at least one strap with a distal end and a proximal end. A first half of a first removable fastener is disposed on the distal end of the strap configured to secure to a second half of the first removable fastener that is disposed on a collar of a ballistic garment. At least one second half of a second removable fastener is disposed on the soft armor ballistic neck panel. A first half of the second removable fastener is disposed on the proximal end of the strap and is configured to secure to the second half of the second removable fastener that is disposed on the soft armor ballistic neck panel. At least one fastener loop is disposed on a lower portion of the soft armor neck panel and is configured to secure the soft armor neck panel to a collar and yoke assembly of a ballistic garment.

[0010] One or more of the following features may be included. In some embodiments, the second half of the second removable fastener may be disposed on the outer surface around the soft armor neck panel. Alternatively, the second half of the second removable fastener may be disposed on the inner surface of the soft armor neck panel. The soft armor neck panel may be configured to curve partially around a neck of a user. In some embodiments, the neck protector may include an outer layer of protective fabric disposed around the soft armor neck panel.

[0011] In some embodiments, the strap may elastically secure the ballistic neck panel to a collar of a ballistic garment. The fastener loop may be configured to detachably secure the soft armor neck panel to a yoke assembly of a ballistic garment. The first and second halves of a removable fastener may be a two piece buckle, a hook and loop fastener, buttons or snaps.

[0012] In general, in a third aspect, the invention features a soft armor neck panel having an inner surface, an outer surface and an edge disposed between the inner surface and the outer surface. At least one tab with a proximal end and a distal end is included. The proximal end of the at least one tab is attached to the soft armor neck panel and the distal end of the at least one tab includes a first half of a first removable fastener that is configured to secure to a second half of the first removable fastener disposed within a helmet. The neck protector includes at least one strap having a proximal end and a distal end. A first half of a second removable fastener is disposed on the distal end of the strap and is configured to secure to a second half of the second removable fastener that is disposed on a collar of a ballistic garment. At least one second half of a third removable fastener is disposed on the soft armor neck panel. A first half of the third removable fastener is disposed on the proximal end of the strap and is configured to secure to the at least one second half of the third removable fastener disposed on the soft armor neck panel. At

least one fastener loop is disposed on a lower portion of the soft armor neck panel and is configured to secure the soft armor neck panel to a yoke assembly of a ballistic garment.

[0013] One or more of the following features may be included. In some embodiments, the second half of the third removable fastener is disposed on the outer surface of the soft armor neck panel. In other embodiments, the second half of the third removable fastener is disposed on the inner surface of the soft armor neck panel. The soft armor neck panel may be configured to curve partially around a neck of a user. The neck protector may include an outer layer of protective fabric disposed around the soft armor neck panel.

[0014] In some embodiments, the tab may be disposed on the outer layer of protective fabric around the soft armor neck panel. Alternatively, the tab may be disposed on the inner surface of the soft armor neck panel. In some embodiments, the proximal end of the tab is removably attached to the outer surface of the soft armor neck panel. The tab and the strap may be made of an elastic material.

[0015] In some embodiments, the fastener loop may be configured to detachably secure the soft armor neck panel to a yoke assembly of a ballistic garment. The first and second halves of the removable fasteners may be a two piece buckle, a hook and loop fastener, buttons or snaps.

[0016] Other features and advantages of the invention are apparent from the following description, the drawings and the claims.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0017] FIG. 1 is a front view of a neck protector.

[0018] FIG. 1a is a perspective view of the neck protector of FIG. 1 attached to a helmet.

[0019] FIG. 2 is a side cut-away view of the neck protector of FIG. 1 attached to a helmet.

[0020] FIG. 2a is an exploded side view of a tab and helmet attachment.

[0021] FIG. 3a is a back view of a neck protector.

[0022] FIG. 3b is a front view of the neck protector of FIG. 3a.

[0023] FIG. 4 is a side perspective view of the neck protector of FIGS. 3a and 3b attached to a collar of a ballistic vest.

[0024] FIG. 5 is a back view of the neck protector of FIGS. 3a and 3b attached to a yoke assembly of the ballistic vest.

[0025] FIG. 6 is a back view of a neck protector configured to attach to a vest or a helmet.

[0026] FIG. 7 is a side perspective view of a neck protector attached to a vest and a cross-section of a helmet.

#### DETAILED DESCRIPTION

[0027] As seen in FIGS. 1, 1a, 2 and 2a, an exemplary neck protector 10 may include a soft armor neck panel 11, tabs 12 to join the soft armor neck panel 11 to a helmet 14. In this embodiment, the weight of the neck protector 10 is borne by the head and neck of a user. The tabs 12 may be elastic to enable the tabs 12 to extend and retract as the user's head is moved, enabling the soft armor neck panel 11 to shift and move while providing continuous protection and greater mobility.

[0028] The neck protector 10 includes an inner surface 16, an outer surface 18 and an edge 19 disposed between the inner surface 16 and outer surface 18. The inner surface 16 and outer surface 18 of the soft armor neck panel may include an outer layer of protective fabric 20 for comfort and to protect

the ballistic panel from abrasion and deterioration. The tabs 12 are preferably disposed on the outer surface 18 of the soft armor neck panel 10. This configuration helps alleviate the risk of the soft armor neck panel 11 getting wedged at an angle outside the helmet 14. The soft armor neck panel 11 may be configured to partially curve around the neck of a user.

[0029] The tabs 12 include a first half of a removable fastener 22 disposed at a distal end 24 of the tabs 12, while a proximal end 26 of the tabs 12 is attached to the soft armor neck panel 11. The helmet 14 includes second halves of the removable fastener 28 disposed between helmet pads 30 and an interior surface of the helmet 32. The second halves of the removable fastener 28 are configured to secure to the first half of the removable fastener 22 disposed on the distal end 24 of the tabs 12, enabling attachment of the soft armor neck panel 11 to the helmet 14. The tabs 12 are disposed on the soft armor neck panel 11 in a configuration that enables alignment of the first half of the removable fastener 22 with the second half of the removable fastener 28 disposed within the helmet 14. The first and second halves of the removable fastener 22, 28 may be a two piece buckle, a hook and loop fastener, buttons, snaps or any other suitable fastener combination. The length of the tabs 12 may be adjustable in order to adjust the position of the armor panel 11 in relation to the helmet 14.

[0030] Referring to FIGS. 3a, 3b, 4 and 5, in a second embodiment, a neck protector 40 includes a soft armor neck panel 41 having straps 42 and fastener loops 44 for joining the soft armor neck panel 41 to a collar 46 and yoke assembly 48 of a ballistic resistant vest 50. In this embodiment, the weight of the soft armor neck panel 41 is borne by a user's shoulders. The neck protector 40 includes an inner surface 52, an outer surface 54 and an edge 55 disposed between the inner surface 52 and outer surface 54. The inner surface 52 and outer surface 54 of the neck protector 40 may include an outer layer of protective fabric 56 for comfort and to protect the ballistic panel from abrasion and deterioration. The soft armor neck panel 41 may be configured to partially curve around the neck of a user. The straps 42 may be elastic to enable the straps to extend and retract as the head and shoulders of a user move, enabling the soft armor neck panel 41 to shift and move, providing greater mobility with continuous protection.

[0031] The straps 42 include a first half of a first removable fastener 58 disposed at a distal end 60 of the straps 42 and a first half of a second removable fastener 62 disposed at a proximal end 64 of the straps 42. A second half of the first removable fastener 66 is disposed on the collar 46 of a ballistic vest 50 and a second half of the second removable fastener 68 is disposed on the outer surface 54 of the soft armor neck panel 41. The second halves of the first and second removable fasteners 66, 68 are configured to secure to the first halves of the first and second removable fasteners 58, 62 disposed on the straps 42, thereby enabling the attachment of the soft armor neck panel 41 to the collar 46 of a ballistic vest 50. The first and second halves of the fastener 58, 62, 66, 68 may be a two piece buckle, a hook and loop fastener, buttons, snaps or any other suitable fastener combination. There are at least the same amount of second halves of removable fasteners disposed on the outer surface 54 of the soft armor neck panel 41 and on the collar 46 of the ballistic vest 50 as there are straps 42 with first halves of removable fasteners for attaching the soft armor neck panel 41 to the collar 46.

[0032] The fastener loops 44 may be disposed on the edge 55 disposed between the inner surface 52 and outer surface 54

of the neck protector **40** for attachment to web straps **72** on the yoke assembly **48** for a ballistic vest **50**. Specifically, the web straps **72** are threaded through the fastener loops **44** to prevent the neck protector **40** from moving side-to-side, and to prevent the neck protector **40** from bouncing up while the user moves. By securing the web straps **72** through the fastener loops **44**, the soft armor neck panel **41** may be securely attached in an appropriate location as an add-on module to the existing ballistic vest **50** without modifying or affecting the performance of the ballistic vest **50**.

[0033] Referring to FIGS. 6 and 7, in another example, it may be desirable, for ease of use as well as for ease of manufacture, for a neck protector **80** to be configured to secure to either a helmet **82** or a collar **84** and yoke assembly **86** of a ballistic vest **88**. In such a configuration, the neck protector **80** includes an soft armor neck panel **81**, tabs **90** to join the soft armor neck panel **81** to a helmet **82**, and straps **92** and fastener loops **94**, to join the soft armor neck panel **81** to the collar **84** and yoke assembly **86** of the ballistic vest **88**. The soft armor neck panel **81** may be configured to partially curve around the neck of a user.

[0034] The neck protector **80** includes an inner surface **96**, an outer surface **98** and an edge **99** disposed between the inner surface **96** and outer surface **98**. The inner surface **96** and outer surface **98** of the neck protector **80** may include an outer layer of protective fabric **100** for comfort and to protect the soft armor neck panel **81** from abrasion and deterioration.

[0035] The neck protector **80** may be secured to the helmet **82**, the collar **84** and yoke assembly **86** or both using the tabs **90**, straps **92** and fastener loops **94**. The tabs **90** are disposed on the outer surface **98**, enabling attachment to the helmet **82**. The length of the tabs **90** may be adjustable in order to adjust the position of the soft armor neck panel **81** in relation to the helmet **82**. The tabs **90** and the straps **92** may be elastic to enable them to extend and retract as the user's head and shoulders move, enabling the soft armor neck panel **81** to shift and move while providing continuous protection and greater mobility. The elasticity of the tabs **90** and the straps **92** enable such movement of the soft armor neck panel **81** when used separately or when used in conjunction with each other, thus enabling movement of the soft armor neck panel **81** without any compromise in protection from shifting of the helmet **82** or the ballistic vest **88**.

[0036] The tabs **90** include a first half of a first removable fastener **102** disposed at a distal end **104** of the tabs **90**, while a proximal end **106** of the tabs **90** is attached to the soft armor neck panel **81**. The helmet **82** includes second halves of the first removable fastener **108** disposed between helmet pads **110** and an interior surface **112** of the helmet **82**. The second halves of the first removable fastener **108** on the helmet **82** are configured to secure to the first half of the first removable fastener **102** disposed on the distal end **104** of the tabs **90**, enabling attachment of the soft armor neck panel **81** to the helmet **82**. The tabs **90** are disposed on the soft armor neck panel **81** in a configuration that enables alignment of the first half of the removable fastener **102** on the tabs **90** with the second half of the removable fastener **108** disposed within the helmet **82**. The first and second halves of the first removable fastener **102**, **108** may be a two piece buckle, a hook and loop fastener, buttons, snaps or any other suitable fastener combination.

[0037] The straps **92** include a first half of a second removable fastener **114** disposed at a distal end **116** of the straps and a first half of a third removable fastener **118** disposed at a

proximal end **120** of the straps **92**. A second half of the second removable fastener **122** is disposed on the collar **84** of a ballistic vest **88** and a second half of the third removable fastener **124** is disposed on the outer surface **98** of the soft armor neck panel **81**. The second halves of the second and third removable fasteners **122**, **124** are configured to secure to the first halves of the second and third removable fasteners **114**, **118** disposed on the straps **92**, thereby enabling the attachment of the soft armor neck panel **81** to the collar **84** of a ballistic vest **88**. The first and second halves of the second and third removable fasteners **114**, **118**, **122**, **124** may be a two piece buckle, a hook and loop fastener, buttons, snaps or any other suitable fastener combination. There are at least the same amount of second halves of removable fasteners disposed on the outer surface **98** of the soft armor neck panel **81** and on the collar **84** of the ballistic vest **88** as there are straps **92** with first halves of removable fasteners for attaching the soft armor neck panel **81** to the collar **84**.

[0038] The fastener loops **94** may be disposed on the edge **99** disposed between the inner surface **96** and outer surface **98** of the neck protector **80** for attachment to web straps **126** on the yoke assembly **86** for a ballistic vest **88**. Specifically, the web straps **126** are threaded through the fastener loops **94** to prevent the neck protector **80** from moving side-to-side, and to prevent the neck protector **80** from bouncing up while the user moves. By securing the web straps **126** through the fastener loops **94**, the soft armor neck panel **81** may be securely attached in an appropriate location as an add-on module to the existing ballistic vest **88** without modifying or affecting the performance of the ballistic vest **88**.

[0039] The soft armor neck panel **11**, **41**, **81** portion of the neck protector **10**, **40**, **80** may include any type of soft armor including, for example, soft flexible woven aramid (KEVLAR®, TWARON®, ARTEC®, etc.), woven or unidirectional laminate polyethylene's (DYNEEMA® or SPPECTRA®), or any combination or hybrid thereof. For example, to provide protection from a Level IIA, II or IIIA threat (as defined in the National Institute for Justice Standard 0101.04 ("NIJ Standard")), the soft armor neck panel **11**, **41**, **81** may include an aramid fabric having a denier of 840 d and an areal density of 210 oz/yd<sup>2</sup> (1.46 psf). The aramid fabric may be made to a thickness of 0.33 inches, and, as described above, disposed in a water resistant outer layer of protective fabric **20**, **56**, **100**. The outer layer of protective fabric **20**, **56**, **100**, into which the soft armor neck panel **11**, **41**, **81** is placed, may be made from 500 d CORDURA®, or any weight of nylon protective covering such as, for example, 70 d Ripstop or 210 d Nylon Pack cloth. This configuration may provide protection of V50 at 0° of 1769 fps with an average deformation of 25 mm when struck with a 9 mm 124 grain full metal jacket bullet.

[0040] Once attached to either a helmet or the collar and yoke of a ballistic vest, the neck protector **10**, **40**, **80** may remain in position and does not interfere with donning or doffing the helmet or ballistic vest. The neck protector **10**, **40**, **80** is designed to be fully compatible with existing body armor and mission equipment.

[0041] It is to be understood that the foregoing description is intended to illustrate and not to limit the scope of the invention, which is defined by the scope of the appended claims. Other embodiments are within the scope of the following claims. For example, while the neck protector has been described as being made from an aramid fabric, it may be made of any soft body armor, such as para-aramid (e.g.,

Kevlar®), polypropylene, PBO, polyethylene or any other ballistic-resistant material or combination thereof. Further, while the aramid fabric was described as being of a particular denier, areal density and thickness, ballistic resistant fabric having any denier, areal density or thickness may be used.

[0042] Also, while the neck protector has been described as partially curving around the neck of a user and protecting the back of the head and neck, the neck protector may be made to cover varying amounts of the neck depending upon its intended application. For example, the neck protector may be made to cover the sides of the neck in the form of an extended collar. This would enable greater protection of the neck from ballistic threats coming from either side of the user.

[0043] Further, hard body armors may be combined with the soft body armor for more protection. For example, a ceramic plate may be combined in the neck protector, thereby increasing the amount of protection from ballistic threats. While this would increase the weight of the neck protector, additional straps and supports may be added to balance to load.

[0044] Further still, more or less tabs, straps and fasteners may be used to accomplish removably attaching the ballistic soft armor neck panel to the helmet or collar. For example, there may be more fasteners disposed within the helmet to provide greater adjustability. Additionally, the tabs and second halves of the removable fasteners may be disposed directly on the ballistic armor panel or, alternatively, the tabs and second halves of the removable fasteners may be disposed on the protective fabric for easy access for attachment and removal of the neck protector. Also, though the tabs are described as adjustable in length, the tabs may have a fixed length while the user may be able to adjust the position of the first half of the removable fastener disposed on the tabs or there may be multiple second halves of the removable fastener disposed within the helmet.

[0045] Also, though an embodiment of the neck protector is described as attaching to the interior of a helmet with the tabs disposed on the outer surface of the soft armor neck panel, alternatively, the neck protector may attach to the exterior of the helmet and/or the tabs may be located on the inner surface of the soft armor neck panel. Similarly, though the tabs and straps are described as attaching to the outer surface of the soft armor neck panel, the tabs and straps may alternatively be attached to an edge of the soft armor neck panel. Further, though the fastener loops are described as attaching to an edge of the soft armor neck panel, the fastener loops may alternatively be attached to a lower portion of the soft armor neck panel.

[0046] Further, though ballistic vests have been described, the neck protector may be configured to similarly attach to any type of ballistic garment, such as a ballistic jacket or a ballistic shirt.

What is claimed is:

1. A ballistic neck protector comprising:

a soft armor neck panel having an inner surface, an outer surface and an edge disposed between the inner surface and the outer surface;

at least one tab attached to the soft armor neck panel at a proximal end of the at least one tab; and

a first half of a removable fastener disposed on a distal end of the at least one tab and configured to secure to a second half of the removable fastener disposed within a helmet.

2. The ballistic neck protector of claim 1, wherein the soft armor neck panel comprises an outer layer of protective fabric disposed around a soft armor panel.

3. The ballistic neck protector of claim 2, wherein the at least one tab is disposed on the outer layer of protective fabric.

4. The ballistic neck protector of claim 1, wherein the soft armor neck panel is configured to curve partially around a neck of a user.

5. The ballistic neck protector of claim 1, wherein the at least one tab is disposed on the inner surface of the soft armor neck panel.

6. The ballistic neck protector of claim 1, wherein the at least one tab is disposed on the outer surface of the soft armor neck panel.

7. The ballistic neck protector of claim 1, wherein the at least one tab is disposed on the edge disposed between the inner surface and the outer surface of the soft armor neck panel.

8. The ballistic neck protector of claim 1, wherein the at least one tab is an elastic strap.

9. The ballistic neck protector of claim 1, wherein the first and second halves of the removable fastener are selected from the group consisting of a two piece buckle, a hook and loop fastener, buttons and snaps.

10. The ballistic neck protector of claim 1, wherein the proximal end of the at least one tab is removably attached to the outer surface of the soft armor neck panel.

11. A ballistic neck protector comprising:

a soft armor neck panel having an inner surface, an outer surface and an edge disposed between the inner surface and the outer surface;

at least one strap having a distal end and a proximal end;

a first half of a first removable fastener disposed on the distal end of the at least one strap configured to secure to a second half of the first removable fastener disposed on a collar of a ballistic garment;

at least one second half of a second removable fastener disposed on the soft armor neck panel;

a first half of the second removable fastener disposed on the proximal end of the at least one strap configured to secure to the at least one second half of the second removable fastener disposed on the soft armor neck panel; and

at least one fastener loop disposed on a lower portion of the soft armor neck panel configured to secure the soft armor neck panel to a yoke assembly of a ballistic garment.

12. The ballistic neck protector of claim 11, wherein the at least one second half of the second removable fastener is disposed on the outer surface of the soft armor neck panel.

13. The ballistic neck protector of claim 11, wherein the at least one second half of the second removable fastener is disposed on the inner surface of the soft armor neck panel.

14. The ballistic neck protector of claim 11, wherein the soft armor neck panel is configured to curve partially around a neck of a user.

15. The ballistic neck protector of claim 11, wherein the soft armor neck panel comprises an outer layer of protective fabric disposed around a soft armor panel.

16. The ballistic neck protector of claim 11 wherein the at least one strap elastically secures the soft armor neck panel to the collar of the ballistic garment.

17. The ballistic neck protector of claim 15, wherein the at least one second half of the second removable fastener is disposed on the outer layer of protective fabric.

18. The ballistic neck protector of claim 11, wherein the at least one fastener loop is disposed on the edge disposed between the inner surface and the outer surface of the soft armor neck panel.

19. The ballistic neck protector of claim 15, wherein the at least one fastener loop is disposed on the outer layer of protective fabric.

20. The ballistic neck protector of claim 11, wherein the at least one fastener loop is configured to detachably secure the soft armor neck panel to the yoke assembly of a ballistic garment.

21. The ballistic neck protector of claim 11, wherein the first and second halves of the removable fastener are selected from the group consisting of a two piece buckle, a hook and loop fastener, buttons and snaps.

22. A ballistic neck protector comprising:  
a soft armor neck panel having an inner surface, an outer surface and an edge disposed between the inner surface and the outer surface;  
at least one tab having a proximal end and a distal end, wherein the proximal end of the at least one tab is attached to the soft armor neck panel and the distal end of the at least one tab includes a first half of a first removable fastener configured to secure to a second half of the first removable fastener disposed within a helmet;  
at least one strap having a proximal end and a distal end;  
a first half of a second removable fastener disposed on the distal end of the at least one strap configured to secure to a second half of the second removable fastener disposed on a collar of a ballistic garment;  
at least one second half of a third removable fastener disposed on the soft armor neck panel;  
a first half of the third removable fastener disposed on the proximal end of the at least one strap configured to secure to the at least one second half of the third removable fastener disposed on the soft armor neck panel; and  
at least one fastener loop disposed on a lower portion of the soft armor neck panel configured to secure the soft armor neck panel to a yoke assembly of a ballistic garment.

23. The ballistic neck protector of claim 22, wherein the at least one second half of the third removable fastener is disposed on the outer surface of the soft armor neck panel.

24. The ballistic neck protector of claim 22, wherein the at least one second half of the third removable fastener is disposed on the inner surface of the soft armor neck panel.

25. The ballistic neck protector of claim 22, wherein the soft armor neck panel is configured to curve partially around a neck of a user.

26. The ballistic neck protector of claim 22, wherein the soft armor neck panel comprises an outer layer of protective fabric disposed around a soft armor panel.

27. The ballistic neck protector of claim 26, wherein the at least one tab and the at least one fastener loop are disposed on the outer layer of protective fabric.

28. The ballistic neck protector of claim 26, wherein the at least one second half of a third removable fastener is disposed on the outer layer of protective fabric.

29. The ballistic neck protector of claim 22, wherein the at least one tab is disposed on the inner surface of the soft armor neck panel.

30. The ballistic neck protector of claim 22, wherein the at least one tab is disposed on the edge disposed between the inner surface and the outer surface of the soft armor neck panel.

31. The ballistic neck protector of claim 22, wherein the proximal end of the at least one tab is removably attached to the outer surface of the soft armor neck panel.

32. The ballistic neck protector of claim 22, wherein the at least one tab and the at least one strap are made of an elastic material.

33. The ballistic neck protector of claim 22, wherein the at least one fastener loop is disposed on the edge disposed between the inner surface and the outer surface of the soft armor neck panel.

34. The ballistic neck protector of claim 22, wherein the at least one fastener loop is configured to detachably secure the soft armor neck panel to the yoke assembly of a ballistic garment.

35. The ballistic neck protector of claim 22, wherein the first and second halves of a removable fastener are selected from the group consisting of a two piece buckle, a hook and loop fastener, buttons and snaps.

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