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Application Number	
Filing Date	
First Named Inventor	Michael E. Cole
Title	Light Weight Modular Pouch Attachment System And Method
Art Unit	
Examiner Name	
Attorney Docket Number	DN 3875 PCT/US

### SIGNATURE of Applicant or Patent Practitioner

Signature	/ Stephen R Matthews /	Date	2014-02-06
Name	Stephen R. Matthews	Telephone	314-241-4427
Registration Number	34,384		

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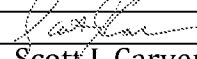
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	First Named Inventor	Cole, Michael E.	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	DN 3875 PCT/US	

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Application Number		
Filing Date		
First Named Inventor	Cole, Michael E.	
Art Unit		
Examiner Name		
Attorney Docket Number	DN 3875 PCT/US	

3	20090282595		2009-11-19	Branson et al.	
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Application Number	
Filing Date	
First Named Inventor	Cole, Michael E.
Art Unit	
Examiner Name	
Attorney Docket Number	DN 3875 PCT/US

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Signature	/ Stephen R Matthews /	Date (YYYY-MM-DD)	2014-02-06
Name/Print	Stephen R. Matthews	Registration Number	34384

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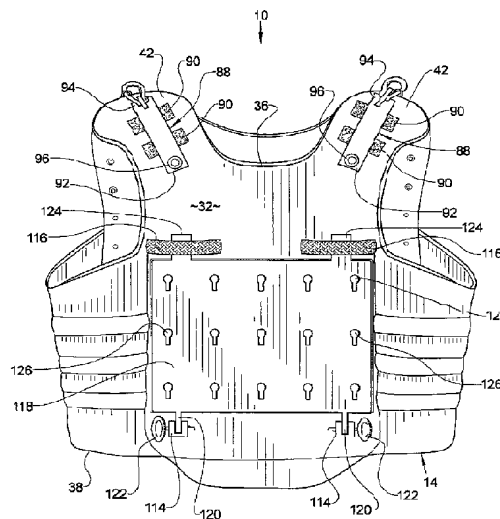


FIG. 1

(57) Abstract: A rapid doffing and donning vest (10) uses a clam shell design wherein the ends of the cummerbund (16) are removably attachable to the rear panel (12). A blade (50) on the cummerbund (16) mates with a receiver (70) on the rear panel (12) and has a plunger (104) hold the two together. The plunger (104) is attached to a pull strap (88) located on the front panel's shoulder strap via a cord (98). As the pull strap (88) is pulled outwardly, the cord (98) pulls the plunger (104) away from the mated blade (50) and receiver (70) and allows the two to decouple detaching the cummerbund (16) from the rear panel (12). Outward pulling on the pull strap (88) also facilitates decoupling of the shoulder strap (42) from the rear panel (12). When the vest (10) is doffed, the front panel (14) and cummerbund (16) remain attached to each other and detached from the rear panel (12).



WO 2009/051619 A2

**TITLE OF THE INVENTION**

RAPID DOFFING VEST

**BACKGROUND OF THE INVENTION**

## 1. Field of the Invention

5 The present invention relates to a vest, such as a bullet and shrapnel resistant vest worn by military personnel, which vest can be rapidly doffed by the wearer. The vest can be quickly donned.

## 2. Background of the Prior Art

Military and paramilitary body armor has developed primarily through numerous wars  
10 and has included such innovations and stages as chain mail and full metal armor for knights. More recent versions began with the "flack jackets" worn by World War II bomber crews. Besides those in the air, United States troops on the ground began wearing armor in the latter stages of the Viet Nam War. This body armor had numerous disadvantages including the armor's weight, its restriction of movement, its discomfort from heat and its lack of providing  
15 protection for portions of the trunk of the body. Recent years have seen tremendous improvements in materials and design that have resulted in several improvements in the body armor, especially in the amount of protection provided and the relative comfort increase for those wearing such armor. The improvements herein continue in this direction.

A body armor vest in wide use is the clam shell vest with cummerbund. This design  
20 uses a rear plate that covers the back with the opposing ends of a cummerbund attached to respective opposing sides of the rear plate, the medial section of the cummerbund being removably attachable to itself to effect sizing about the torso of the wearer. A front plate is attached to the rear plate by having shoulder straps on the front plate removably attach to the rear plate via the use of cooperating hook and loop material (including the newer dart and

hook) and side panels of the front plate removably attached to the cummerbund, again with cooperating hook and loop material.

Although a marked improvement over to previous generations of body armor, the basic clam shell design still has certain limitations for which further improvements continue to be needed. Oftentimes, the body armor needs to be shed quickly by the wearer. For example, when an explosion occurs near a vehicle, an occupant may have need to quickly exit the vehicle, especially if the vehicle is on fire. If any part of the vest is not capable of extraction from the vehicle or parts thereof, the wearer must shed the vest to escape injury from secondary sources as well as to get into the fight if necessary. If the wearer cannot escape the vehicle in a timely manner due to the vest being caught, such a person can be injured or killed or may not be able to help support his or her fellow soldiers in the fight against the enemy. When a wearer of a vest is wounded, medics generally need to remove the vest to effect treatment. Sooner removal is invariably better than later. Delays in vest removal oftentimes result in higher casualties among the (already) wounded as well as the medics.

As many body armor suits are made from an incredibly strong material, simply cutting the vest off of a wounded soldier is not practical, the armor must have a secondary ability for quick removal. Ideally, the vest should be able to be quickly and easily reassembled in order to be donned by the wearer for continued protection.

Many battlefields are found in warm and hot climates or in cold climates. Wearing of vests in warm and hot climates, while offering protection from projectiles, can result in early exhaustion, heat prostration, and dehydration for the wearer. Cold climates also cause problems for the soldier. These conditions reduce effectiveness of the wearer and sometimes result in a soldier needing medical attention or even in the death of the soldier.

Present vests offer numerous "tie-down" points for carrying and retaining supplies such as fighting load components, including ammunition pouches, grenade pouches, hydration systems, etc., or medical supplies, communication supplies, etc. However, the time required to utilize these tie-down points reduces the wearer's effectiveness. A system is  
5 needed whereby the wearer can quickly replace equipment and supplies while having them readily available when needed.

A body armor vest is needed that addresses the above-mentioned shortcomings found in the art. Specifically, such a body armor vest must be quickly and easily doffed by the wearer so that if a wearer needs to extricate himself or herself from a situation wherein the  
10 vest inhibits such extrication, the vest is shed, allowing the fighter to escape, or in the case of a wounded soldier, the body armor can be quickly removed in order to allow medical personnel to administer treatment as soon as possible. Additionally, such a vest should provide for keeping a wearer relatively cool in warm climate conditions and warm in cold climates. Furthermore, such a vest should provide tie-down points on the vest which points can carry  
15 and retain needed equipment and supplies which retention system allows for quick removal from and reattachment to the vest of the needed equipment and supplies.

Such a vest must be utilizable with various body armor configurations including the basic body armor outer tactical vest, with or without yoke and collar, as well as other body protectors including throat protectors, groin protectors, etc. The vest should have the ability  
20 to carry enhanced small arms protective inserts and enhanced ballistic inserts and carriers. The vest must not impede soldier tasks including the operation of individual weapons such as a rifle, grenade launcher, and pistol, must not impede the operation of crew served weapons, nor impede the ability to throw fragmentation and smoke grenades. Such a vest must allow for safe operation, ingress, and emergency egress of combat vehicles including the M1A1  
25 Abrams Tank, the Bradley Fighting Vehicle, and an Armored Security Vehicle as well as

tactical vehicles such as the Up Armored HMMWV. Such a vest should be able to provide for a tailored capability to incorporate modular extremity protection system components for the shoulder such as the Deltoid Auxiliary Protection System as well as arm and leg protection.

5

SUMMARY OF THE INVENTION

The rapid doffing vest of the present invention addresses the aforementioned needs by providing a body armor vest that can be quickly and easily doffed by the wearer so that if a wearer needs to extricate himself or herself from a situation, wherein the vest inhibits such  
5 extrication, the vest can be quickly and easily shed, allowing the wearer to escape, or in the case of a wounded soldier, the body armor can be quickly removed by medical or other personnel in order to allow the medical personal to administer treatment as soon as possible and possibly reassemble the vest on the patient after treatment. The rapid doffing vest makes provisions for keeping a wearer relatively cool in warm climate conditions and warm in cold  
10 climates. The rapid doffing vest provides tie-down points on the vest which tie-down points can carry and retain needed equipment and supplies which retention system allows for quick removal from and reattachment to the vest of the needed equipment and supplies with the flexibility to arrange the load without restricting the ability to don and doff the vest.

The rapid doffing vest of the present invention is very flexible in that it can be  
15 configured as needed for the battlefield so that the rapid doffing and the rapid donning functions do not interfere with such configurations and allow the overall body armor system to be utilizable with various configurations including the basic body armor outer tactical vest, with or without yoke and collar, as well as other body protectors including throat protectors, groin protectors, etc. The rapid doffing vest is configurable to have the ability to carry  
20 enhanced small arms protective inserts and enhanced ballistic inserts and-carriers including the ability to adjust the plates up and down within their pockets. The rapid doffing vest does not impede soldier tasks including the operation of individual weapons such as a rifle, grenade launcher, and pistol, does not impede the operation of crew served weapons, nor does the rapid doffing vest impede the ability to throw fragmentation and smoke grenades. The  
25 rapid doffing vest allows for safe operation, ingress, and emergency egress of combat vehicles



including the M1A1 Abrams Tank, the Bradley Fighting Vehicle, and an Armored Security Vehicle as well as tactical vehicles such as the Up Armored HMMWV. The rapid doffing vest may provide for a tailored capability to incorporate modular extremity protection system components for the shoulder such as the Deltoid Auxiliary Protection System as well as arm  
5 and leg protection.

The rapid doffing vest of the present invention is comprised of a rear panel that has a first outer surface, a first inner surface, a top, a bottom, and a pair of opposing sides. A front panel has a second outer surface, a second inner surface, and a pair of spaced apart shoulder straps that are each removably attachable to the first outer surface of the rear panel. A size-  
10 adjustable cummerbund has a pair of ends such that each end is attached to a respective one of the sides of the rear panel and at least one of the ends is removably attachable to its respective side via an attachment system. The attachment system comprises a blade that is attached to the end of the cummerbund, a blade receiver that is attached to the side of the rear panel such that the blade is laterally received within the blade receiver, and a plunger that has  
15 an upper surface and a lower surface, such that the plunger is removably attached to the blade receiver in order to prevent lateral movement of the blade with respect to the blade receiver whenever the blade is received within the blade receiver. At least one stop is located on the blade receiver in order to prevent longitudinal movement of the blade with respect to the blade receiver whenever the blade is received within the blade receiver, the stop may be  
20 located at the top of the blade receiver, at the bottom thereof, or at both locations. A cord is attached to the upper surface of the plunger. The cord is removably attached to a respective one of the shoulder straps of the front panel via a pull strap. A keeper is located on the shoulder strap while is stop located on the cord between the keeper and the plunger such that when the stop encounters the keeper, further cord travel through the keeper is prevented. A  
25 guide is attached to the outer surface of the rear panel above the receiver such that the cord

passes through the guide. The upper surface of the plunger is rounded and tapered in order to prevent snagging of the plunger on the guide as the plunger rapidly passes through the guide.

The plunger is received within a plunger receiver that is located on the blade receiver such that a notch on the blade aligns with the plunger receiver whenever the blade is received

5 within the blade receiver and such that the plunger prevents lateral notch travel in order to prevent the lateral movement of the blade. A reservoir is located on the second inner surface of the front panel. At least one capillary tube extends downwardly from the reservoir and has at least one opening located thereon. A load receiver is located on the second outer surface of the front panel to which a load carrier is removably attachable. A pocket is located on the  
10 first inner surface of the rear panel such that a thermal pack is removably receivable within the pocket, the thermal pack may, but need not necessarily be eutectic salt based.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective view of the front of the rapid doffing vest of the present invention illustrating the load receiver .

Figure 2 is perspective view of the rear of the rapid doffing vest.

5 Figure 3 is a perspective view of the female blade receiver mated with the male blade of the quick-release hinge of the rapid doffing vest.

Figure 4 is an elevation view of the female blade receiver.

Figure 5 is an elevation view of the male blade.

10 Figure 6 is an elevation view of the rapid doffing vest donned by a wearer wherein the release mechanism is partially opened on one side.

Figure 7 is a perspective view of the front of the rapid doffing vest illustrating the water cooling reservoir and drip manifold.

Figure 8 is an elevation view of the outer surface of the rear panel.

15 Figure 9 is an elevation view of the inner surface of the rear panel illustrating the cooling pouch and pack provision.

Similar reference numerals refer to similar parts throughout the several views of the drawings.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings, it is seen that the rapid doffing vest of the present invention, generally denoted by reference numeral 10, improves on the typical clam shell design and is comprised of a rear panel 12, a front panel 14 that is removably attached to the rear panel 12, and a cummerbund 16 that is also removably attachable to the rear panel 12. As seen, the rear panel 12 has an outer surface 18 and an inner surface 20, the inner surface 20 being positioned so as to face the back of the wearer S when the vest 10 is worn. The rear panel 12 also has a top 22, a bottom 24, a pair of sides 26. One or advantageously each end 28 of the cummerbund 16 is removably attachable to its respective side 26 of the rear panel 12 via an attachment system 30 as will be more fully discussed *infra*. The medial section of the cummerbund 16 attaches to itself in the usual way (attachment not illustrated) in order to provide sizing of the rear panel 12 about the torso of the wearer S. The front panel 14 also has an outer surface 32 and an inner surface 34, which faces the torso of the wearer S when the vest 10 is worn, and has a top 36, a bottom 38, and a pair of sides 40. A pair of shoulder straps 42 extends from the top 36 of the rear panel 12 proximate each side 40 and each shoulder strap 42 is removably attachable to the outer surface 18 of the rear panel 12 by the use of cooperating hook and loop material 44 (through the specification, hook and loop material includes and encompasses dart and loop and other similar materials) positioned on the inner surface 34 of the shoulder straps 42 of the front panel 14 and correspondingly on the outer surface 18 of the rear panel 12 proximate the rear panel's top 22. The side panels 46 of the front panel 14 removably attach to the cummerbunds 16 in the usual way by providing hook and loop material 48 on the inner surface 34 of the side panels 46 of the front panel 14 and correspondingly on the cummerbund 16 proximate each end 28 thereof.

The attachment system 30 comprises a male blade 50 that is a generally flat plate member made from a hard material such as a stiff plastic or metal and has a first side edge 52,

an opposing second side edge 54, a top edge 56, and a bottom edge 58. As seen, a series of openings 60 are located along the first side edge 52. A generally rectangular notch 62 is located on the top edge 56 while an extension 64 extends downwardly from the bottom edge 58 at the second side edge 54, the extension 64 having a diagonal cut 66. Each male blade 50 is attached to a respective end 28 of the cummerbund 16 (or just one male blade 50 is attached to one of the ends 28 of the cummerbund 16) by using appropriate fasteners 68 such as rivets, etc., and passing such fasteners 68 through respective openings 60 on the male blade 50 and corresponding openings (not illustrated) on the cummerbund 16.

A corresponding female blade receiver 70 has a rib 72 on one side, the rib 72 having a series of openings 74 extending along the length thereof. Extending from the rib 72, is a pair of parallel blade panels 76 that are spaced apart from each other to form a channel 78 therebetween. A rest 80 is located at the bottom of the channel 78, while a plunger receiver 82 is formed at the top of the pair of blade panels 76, the plunger receiver 82 being generally cylindrical in shape and may have a conical distal end for manufacturing expediency. The tops of the blade panels 76 between the rib 72 and the plunger receiver 82 are joined together in order to form a closed section 84 of the channel 78 at that point. Each female blade receiver 70, which is also made from an appropriate hard material such as metal, plastic, etc., is attached to its respective side 26 of outer surface 18 of the rear panel 12 by also using an appropriate fastener 86 such as rivets and passing such fasteners 86 through respective openings 74 on the female blade receiver 70 and corresponding openings (not illustrated) on the rear panel 12.

A pull strap 88 is removably attachable to the outer surface 18 of the shoulder strap 42 of the front panel 14 by the use of cooperating hook and loop material sections 90 on the pull strap 88 and correspondingly on the shoulder strap 42. The pull strap 88 has a lower end 92 and an upper end 94, the lower end 92 of the pull strap 88 having a grommet 96 thereat. A

pull cord 98 is attached to the upper end 94 of the pull strap 88 in appropriate fashion. The pull cord 98 passes through a keeper 100 attached to shoulder strap 42 above the pull strap 88 and through a guide 102 attached to the outer surface 18 of the rear panel 12, the guide 102 located between the female blade receiver 70 and the section of hook and loop material 44 on the outer surface 18 of the rear panel 12 that mates with the corresponding hook and loop material 44 on the shoulder strap 42. The guide 102, which is a hollow tubular member, has its longitudinal axis generally aligned with plunger receiver 82. A plunger 104 is located on the distal end of the pull cord 98 while a stop 106 is located medially along the pull cord 98 proximate the keeper 100, the stop 106 located between the keeper 100 and the plunger 104, the stop 106 preventing further advancement of the pull cord 98 through the keeper 100. If desired, a connector cord 108 connects the two grommets 96 on the respective pull straps 88 and may further have a tether 110 extending medially from the connector cord 108, the tether 110 having a pull handle 112 on a distal end thereof.

In order to attach each end 28 of the cummerbund 16 to its respective side 26 of the rear panel 12, the male blade 50 is received within a respective one of the female blade receivers 70 by passing the second side edge 54 of the male blade 50 into the channel 78 of the female blade receiver 70 until the second side edge 54 reaches the back end of the channel 78. The extension 64 of the male blade 50 passes over the step 80 and thereafter seats within the cavity formed between the step 80 and the back end of the channel 78, the cut 66 in the extension 64 helping the male blade 50 be angularly inserted into the female blade receiver 70. Once the male blade 50 is fully received within the female blade receiver 70 and the two are parallel with one another, the notch 62 is within the plunger receiver 82. At this point, the plunger 104 is inserted into the plunger receiver 82 wherein the plunger 104 is frictionally held. The male blade 50 is locked to the female blade receiver 70 as the plunger 104, by being inserted into the plunger receiver 82 that is aligned with the notch 62 of the male blade

50, prevents the top 56 of the male blade 50 from being retracted laterally out of the female blade receiver 70 while the step 80 within the female blade receiver 70 acts as a stop and prevents the extension 64 of the male blade 50 from being laterally retracted from the female blade receiver 70 and also prevents the male blade 50 from sliding longitudinally downwardly within the channel 78. The closed section 84 of the channel 78 acts as another stop and prevents the male blade 50 from sliding longitudinally upwardly within the channel 78. Each side of the vest 10 is similarly attached.

The vest 10 is donned by attaching the cummerbund 16 to the rear panel 12 as described and sizing the rear panel 12 about the wearer via the cummerbund 16. Thereafter, the front panel 14 is attached by attaching the shoulder straps 42 to the rear panel and attaching the side panels 46 to the cummerbund 16, the front panel 14 being in proximity to the wearer S during rear panel 12 donning due to the fact that the pull cord 98 upon which the plunger 104 is attached, is attached to the front panel 14.

In order to doff the vest 10, then the pull strap 88 is grasped and pulled outwardly, either via each pull strap 88 being pulled directly or via the pair of pull straps 88 being pulled via the connector strap 108 and/or the tether 110 including pull handle 112. The outward pulling on the pull strap 88 causes the shoulder strap 42 to decouple from the rear panel 12 and also causes an upward pull on the pull cord 98 in order to extract the plunger 104 from the plunger receiver 82 as well as through the pull cord guide 102, the upper surface of the plunger 104 being rounded and tapered in order to help prevent the plunger 104 from getting caught on the pull cord guide 102, the stop 106 preventing further advancement of the pull cord 98 once the pull cord 98 has traveled a sufficient amount. Once the plunger 104 is so extracted, the top 56 of the male blade 50 falls outwardly out of the female blade receiver 70 due to gravity (or force of the wearer S or other personnel). If the wearer S is upright, gravity will cause the male blade 50 to pivot within the female blade receiver 70 about the extension

64, the cut 66 allowing such pivotal action, the male blade 50 eventually coming free of the female blade receiver 70. If the wearer S is not gravitationally positioned for this to occur, then the wearer S or other personal can effect such pivoting and lateral extraction. Each side of cummerbund 16 to rear panel 12 attachment is so effected, and once each side is so detached, the front panel 14 is detached from the rear panel 12 and the vest 10 is clear of the torso from the wearer S with the cummerbund 16 remaining attached to the front panel 14.

During normal wearing of the vest 10, the pull cord guide 102 helps prevent the pull cord 98 from being caught on something or otherwise being bunched and also helps to laterally deflect any undesired pull on the pull cord 98 should the pull cord 98 be caught on something, thereby helping minimize unwanted removal of the plunger 104 from the plunger receiver 82,. Additionally, as the stop 106 is a short distance from the keeper 100, the keeper 100 by catching the stop 106 after only a short distance of travel by the pull cord 98 also helps minimize unwanted removal of the plunger 104 from the plunger receiver 82.

The rapid doffing vest 10 may have additional features.

As seen, a pair of receivers 114 is located on the outer surface 32 of the front panel 14 proximate the front panel's lower edge 38, the receivers 114 being in spaced apart fashion to each other, while a pair of retainer straps 116 is located on the outer surface 32 of the front panel 14, one retainer strap 116 generally above each receiver 114. The ends of each retainer strap 116 are attached to the front panel 14, fixedly or otherwise, while the medial portion remains detached (or just removably attached). A load carrier 118 has a pair of lower leg 120 such that each lower leg 120 is received with a respective one of the receivers 114. A key 122 passes through corresponding openings (neither illustrated) on the receiver 114 and its respective lower leg 120. The load carrier 118 also has a pair of upper legs 124, such that each upper leg 124 is received between the ends of one of the respective retainer straps 116. As seen, the load carrier 118 has a series of keyhole openings 126 thereon, which openings



126 removably receive an appropriate load or supply thereat. Of course, the load carrier 118 may utilize different attachment methods for attaching loads to the load carrier 118.

A flexible fluid reservoir 128 may be located on the inner surface 34 of the front panel 14 (or within any protective material cover) and has a fill plug 130. One or more capillary tubes 132 depend downwardly from the reservoir 128, each tube 132 having a series of small openings 134.

As best seen in figure 9, a pouch 136 is located on the inner surface 20 of the rear panel 12 which pouch 136 has an appropriate hook and loop fastener 138 with pull handle 140. The pouch 136 is designed to removably hold a thermal pack 142, which may be filled with a eutectic salt.

Prior to donning the vest, and if so equipped, an appropriate pack or packs 142 may be placed into the pouch 136 so that such packs 130 provide cooling (or heating) for the wearer S especially around the kidney region.

If so equipped, the reservoir 128 may be filled with water via the fill plug 130 in order to allow the water to slowly drip onto the front torso of the wearer S via the capillaries 132 in order to provide evaporative cooling to the wearer.

If so equipped, a load carrier 118 may be attached to the front panel 14 and any desired loads or supplies loaded thereonto.

As noted previously, the vest 10 is designed to accommodate varying armor designs as required by the wearer or the entity so ordering the vests 10. The rapid doffing vest 10 of the present invention is concerned with rapid doffing and rapid donning of the vest 10, as well as cooling or warming and load carrying, irrespective of the specific armor architecture.

While the invention has been particularly shown and described with reference to an embodiment thereof, it will be appreciated by those skilled in the art that various changes in form and detail may be made without departing from the spirit and scope of the invention.

WE CLAIM:

## Claim 1.

A clam shell vest for wearing about the torso of a person, the vest comprising:

a rear panel having a first outer surface, a first inner surface, a top, a bottom, and a

5 pair of opposing sides;

a front panel having a second outer surface, a second inner surface, and a pair of spaced apart shoulder straps each shoulder strap removably attachable to the first outer surface of the rear panel; and

a size adjustable cummerbund having a pair of ends, each end attached to a respective  
10 one of the sides of the rear panel and at least one of the ends being removably attachable to its respective side via an attachment system.

## Claim 2.

The vest as in claim 1 wherein the attachment system comprises:

a blade attached to the end of the cummerbund;

15 a blade receiver attached to the side of the rear panel such that the blade is laterally received within the blade receiver; and

a plunger having an upper surface and a lower surface, the plunger removably attached to the blade receiver in order to prevent lateral movement of the blade with respect to the blade receiver whenever the blade is received within the blade receiver.

## 20 Claim 3.

The vest as in claim 2 further comprising at least one stop located on the blade receiver in order to prevent longitudinal movement of the blade with respect to the blade receiver whenever the blade is received within the blade receiver.

## Claim 4.

The vest as in claim 2 further comprising a cord attached to the upper surface of the plunger.

Claim 5.

The vest as in claim 4 wherein the cord is removably attached to a respective one of  
5 the shoulder straps of the front panel.

Claim 6.

The vest as in claim 5 further comprising:

a keeper located on the shoulder strap;

a stop located on the cord between the keeper and the plunger such that when the stop  
10 encounters the keeper further cord travel through the keeper is prevented.

Claim 7.

The vest as in claim 5 wherein the cord is removably attached to the shoulder strap via a pull strap itself removably attachable to the shoulder strap.

Claim 8.

15 The vest as in claim 5 further comprising a guide attached to the outer surface of the rear panel above the receiver such that the cord passes through the guide.

Claim 9.

The vest as in claim 8 wherein the upper surface of the plunger is rounded and tapered.

20 Claim 10.

The vest as in claim 2 wherein the plunger is received within a plunger receiver located on the blade receiver such that a notch on the blade aligns with the plunger receiver whenever the blade is received within the blade receiver and such that the plunger prevents lateral notch travel in order to prevent the lateral movement of the blade.

25 Claim 11.

The vest as in claim 10 further comprising at least one stop located on the blade receiver' in order to prevent longitudinal movement of the blade with respect to the blade receiver whenever the blade is received within the blade receiver.

Claim 12

5 The vest as in claim 10 further comprising a cord attached to the upper surface of the plunger.

Claim 13.

The vest as in claim 12 wherein the cord is removably attached to a respective one of the shoulder straps of the front panel.

10 Claim 14.

The vest as in claim 13 further comprising:

a keeper located on the shoulder strap;

a stop located on the cord between the keeper and the plunger such that when the stop encounters the keeper further cord travel through the keeper is prevented.

15 Claim 15.

The vest as in claim 12 wherein the cord is removably attached to the shoulder strap via a pull strap itself removably attachable to the shoulder strap.

Claim 16.

20 The vest as in claim 12 further comprising a guide attached to the outer surface of the rear panel above the receiver such that the cord passes through the guide.

Claim 17.

The vest as in claim 16 wherein the upper surface of the plunger is rounded and tapered.

Claim 18.

25 The vest as in claim 1 further comprising:

a reservoir located on the second inner surface of the front panel;  
at least one capillary tube extending downwardly from the reservoir; and  
at least one opening located on the capillary tube.

Claim 19.

- 5        The vest as in claim 1 further comprising:  
a load receiver located on the second outer surface of the front panel; and  
a load carrier removably attachable to the load receiver.

Claim 20.

- 10       The vest as in claim 1 further comprising:  
a pocket located on the first inner surface of the rear panel; and  
a thermal pack removably receivable within the pocket.

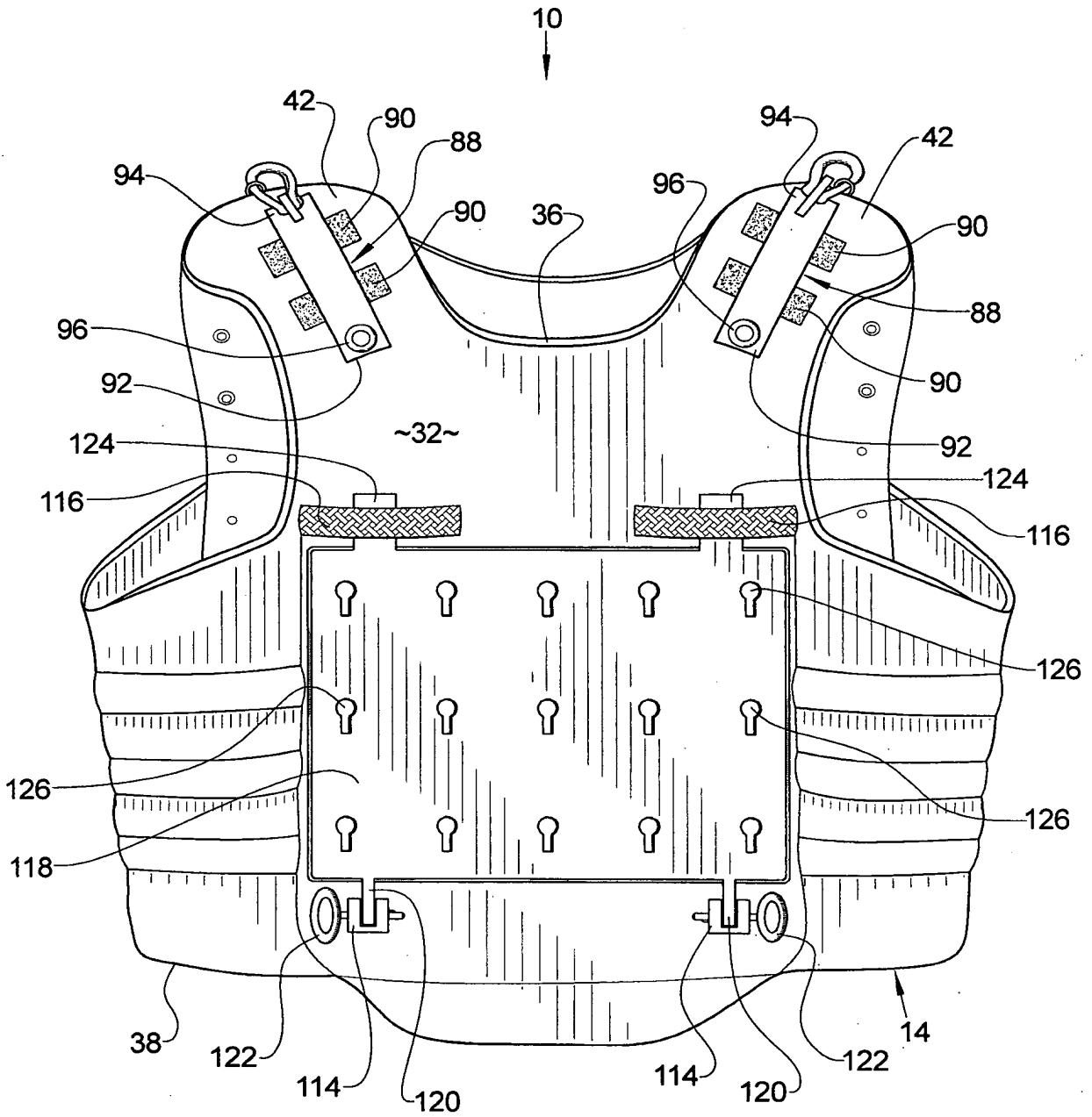


FIG. 1

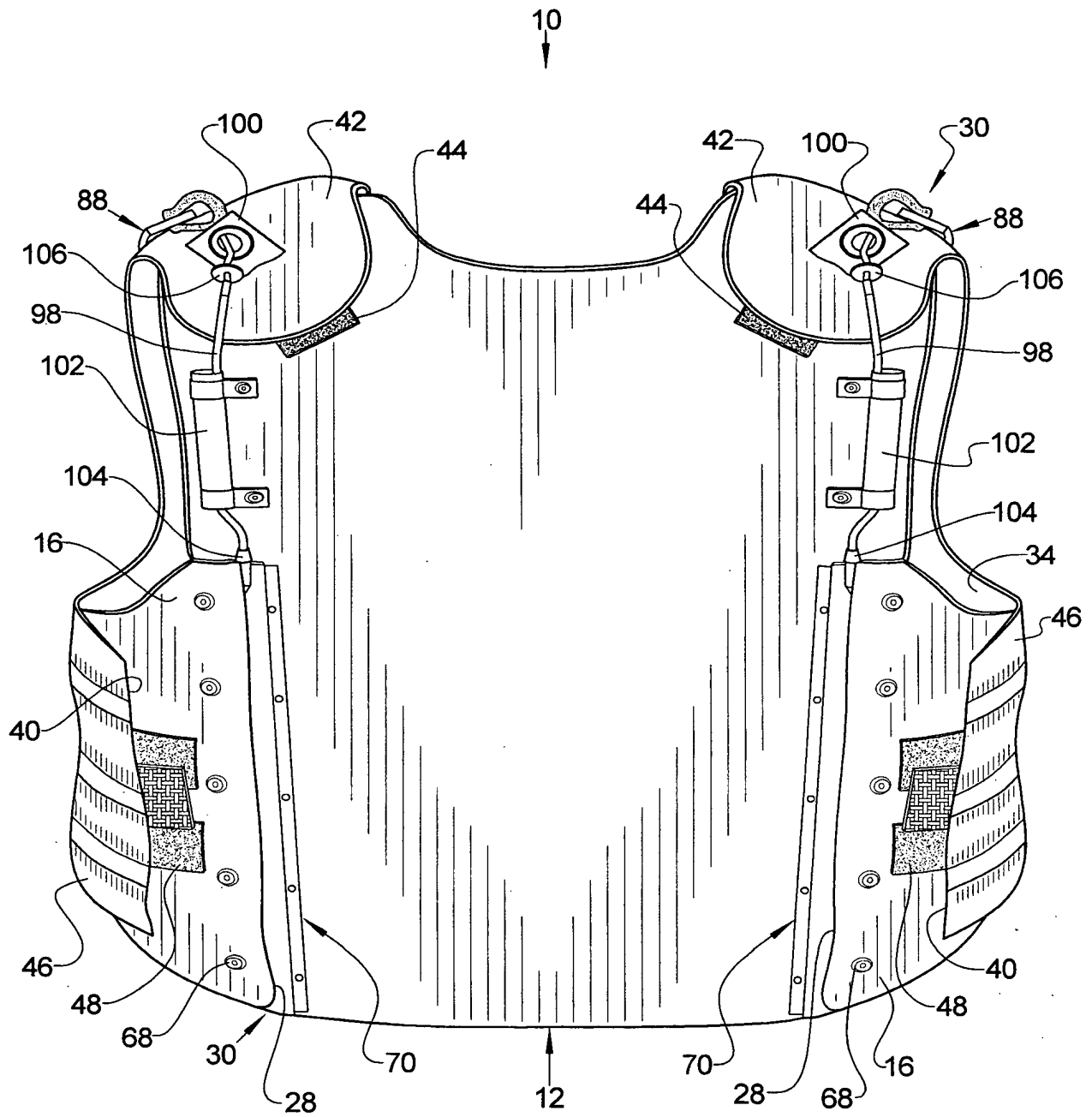
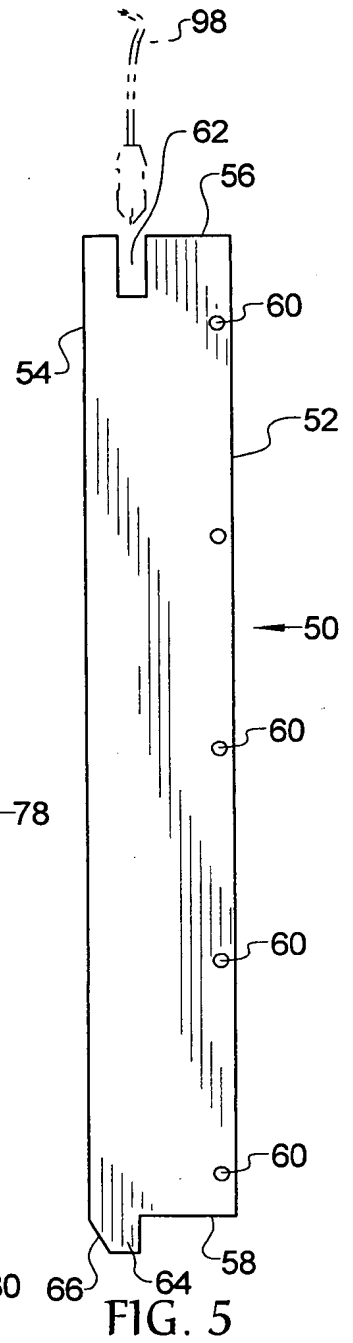
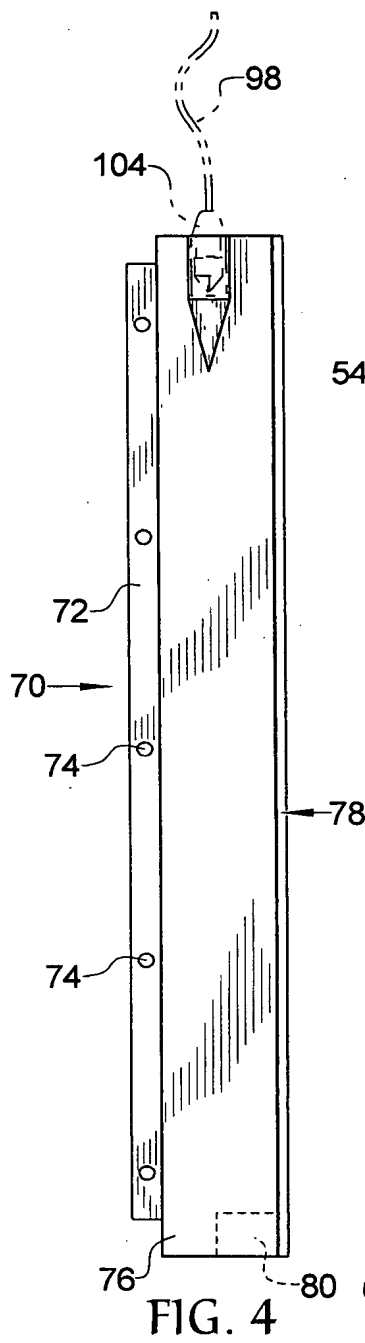
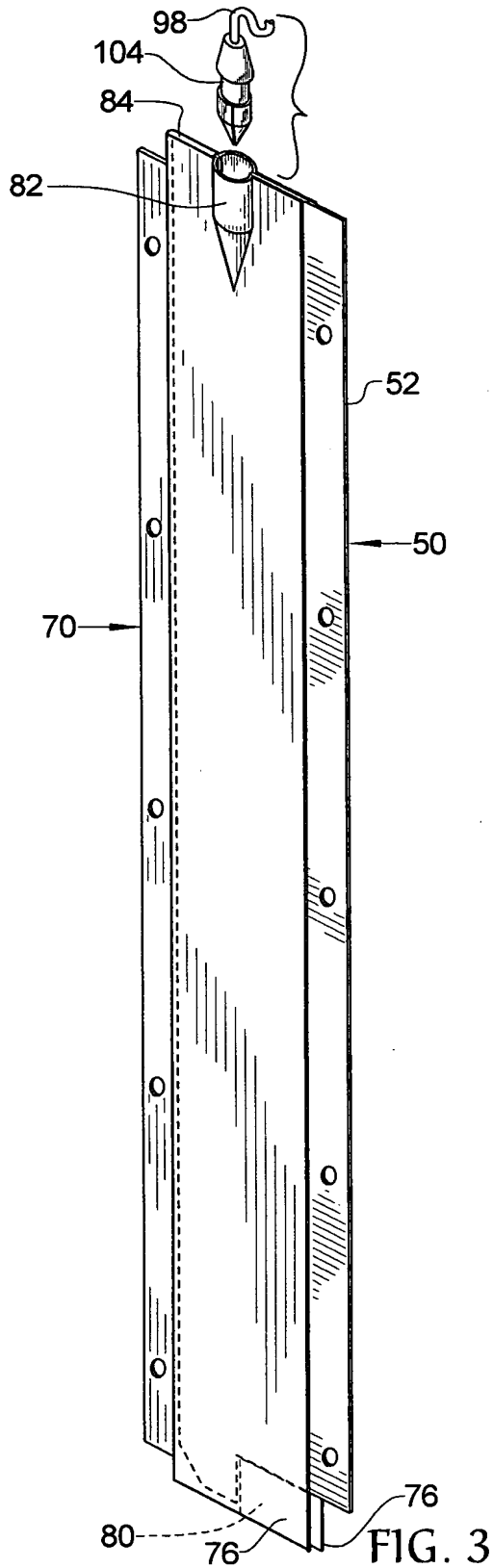


FIG. 2





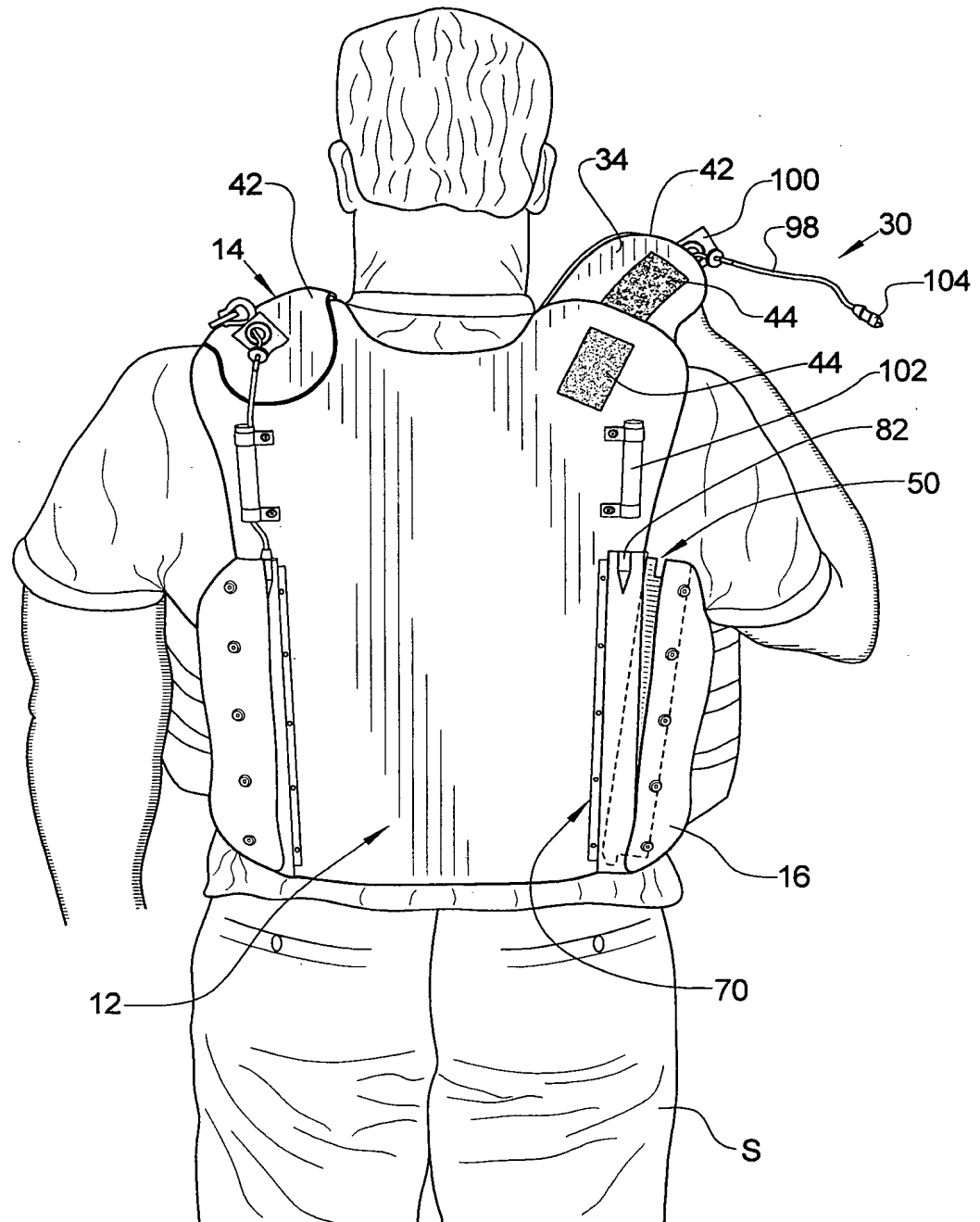


FIG. 6

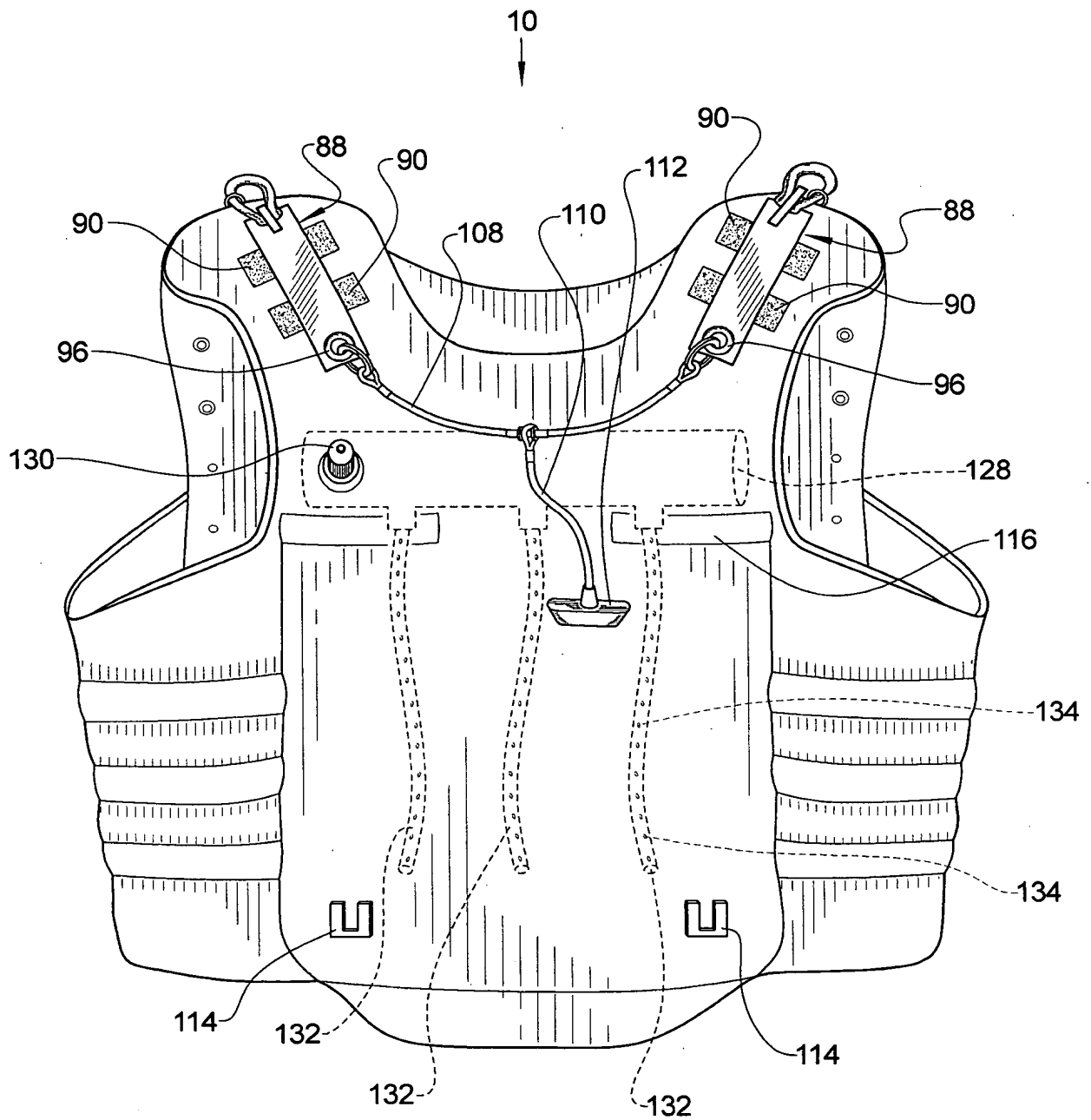


FIG. 7

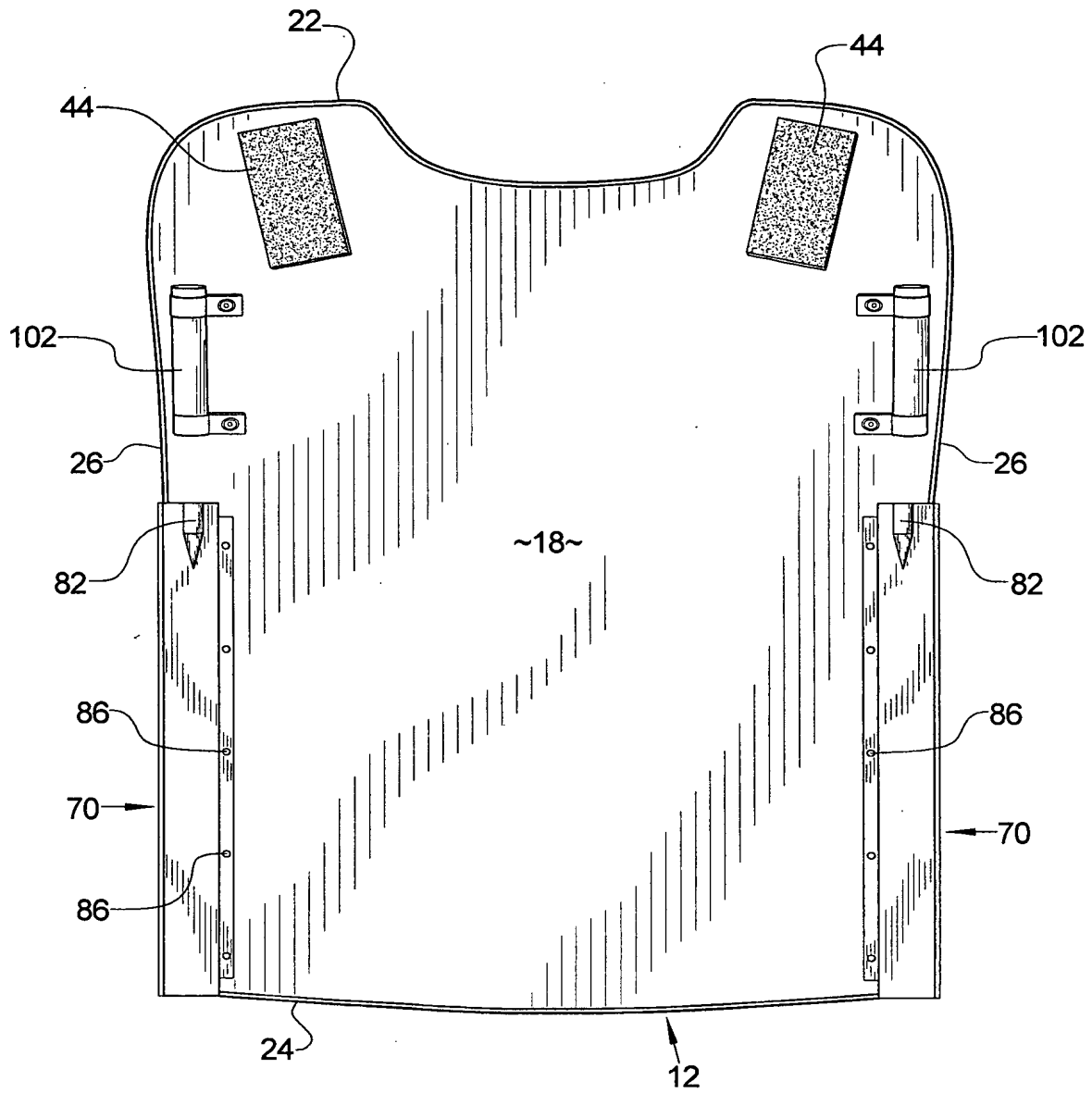


FIG. 8

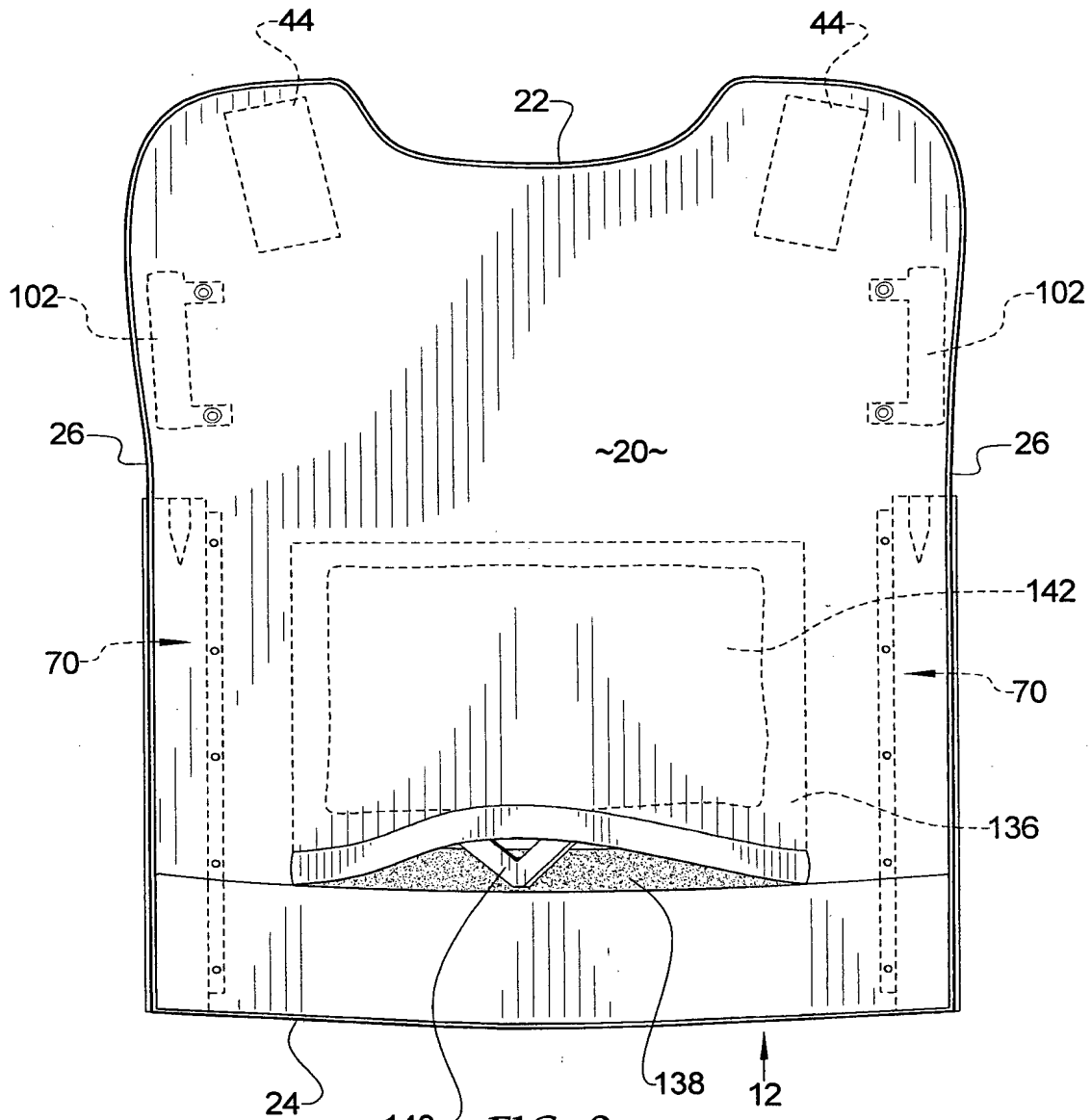


FIG. 9

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>				
<b>Filing Date:</b>				
<b>Title of Invention:</b>	LIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM AND METHOD			
<b>First Named Inventor/Applicant Name:</b>	Michael E. Cole			
<b>Filer:</b>	Stephen Roy Matthews/Barbara Kuntz			
<b>Attorney Docket Number:</b>	DN 3875 PCT/US			
Filed as Small Entity				
<b>U.S. National Stage under 35 USC 371 Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
Basic National Stage Fee	2631	1	140	140
Natl Stage Search Fee - U.S. was the ISA	2641	1	60	60
Natl Stage Exam Fee - all other cases	2633	1	360	360
<b>Pages:</b>				
<b>Claims:</b>				
Claims in excess of 20	2615	3	40	120
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>680</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	18135845
<b>Application Number:</b>	14237468
<b>International Application Number:</b>	PCT/US12/50001
<b>Confirmation Number:</b>	7080
<b>Title of Invention:</b>	LIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM AND METHOD
<b>First Named Inventor/Applicant Name:</b>	Michael E. Cole
<b>Customer Number:</b>	2128
<b>Filer:</b>	Stephen Roy Matthews/Barbara Kuntz
<b>Filer Authorized By:</b>	Stephen Roy Matthews
<b>Attorney Docket Number:</b>	DN 3875 PCT/US
<b>Receipt Date:</b>	06-FEB-2014
<b>Filing Date:</b>	
<b>Time Stamp:</b>	16:04:24
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$680
RAM confirmation Number	2714
Deposit Account	081280
Authorized User	

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part / zip (if appl.)	Pages (if appl.)
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Page 3 of 2

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2	Application Data Sheet	3875pctusApplicationDataSheet.pdf	998813	no	6
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	Specification		1	21	
	Claims		22	27	
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4	Drawings-only black and white line drawings	3875pctusFormalDrawings.pdf	310225	no	16
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8	Foreign Reference	WO_2009_051619_A2.pdf	327037 d5a147d89d93f8d9b5f6bc7a90a52b3322d d547c	no	26
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<b>Total Files Size (in bytes):</b>			6704276		
<p><b>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b>  <b>If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</b></p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b>  <b>If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</b></p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b>  <b>If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</b></p>					

<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		Attorney Docket No. <b>DN 3875 PCT/US</b>
		U.S. Application No. (if known, see 37 CFR 1.5)
International Application No. <b>PCT/US12/50001</b>	International Filing Date <b>8 August 2012</b>	Priority Date Claimed <b>8 August 2011</b>
Title of Invention <b>LIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM AND METHOD</b>		
First Named Inventor <b>Cole, Michael E.</b>		
<p><b>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information.</b></p> <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). NOTE: The express request under 35 U.S.C. 371(f) will not be effective unless the requirements under 35 U.S.C. 371(c)(1), (2), and (4) for payment of the basic national fee, copy of the International Application and English translation thereof (if required), and the oath or declaration of the inventor(s) have been received.</li> <li>2. <input type="checkbox"/> A copy of the International Application (35 U.S.C. 371(c)(2)) is attached hereto (not required if the International Application was previously communicated by the International Bureau or was filed in the United States Receiving Office (RO/US)).</li> <li>3. An English language translation of the International Application (35 U.S.C. 371(c)(2))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>4. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4))             <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached.</li> <li>b. <input type="checkbox"/> was previously filed in the international phase under PCT Rule 4.17(iv).</li> </ol> </li> </ol> <p><b>Items 5 to 8 below concern amendments made in the international phase.</b></p> <p><u>PCT Article 19 and 34 amendments</u></p> <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Amendments to the claims under PCT Article 19 are attached (not required if communicated by the International Bureau) (35 U.S.C. 371(c)(3)).</li> <li>6. <input type="checkbox"/> English translation of the PCT Article 19 amendment is attached (35 U.S.C. 371(c)(3)).</li> <li>7. <input type="checkbox"/> English translation of annexes (Article 19 and/or 34 amendments only) of the International Preliminary Examination Report is attached (35 U.S.C. 371(c)(5)).</li> </ol> <p><u>Cancellation of amendments made in the international phase</u></p> <ol style="list-style-type: none"> <li>8a. <input type="checkbox"/> Do not enter the amendment made in the international phase under PCT Article 19.</li> <li>8b. <input type="checkbox"/> Do not enter the amendment made in the international phase under PCT Article 34.</li> </ol> <p>NOTE: A proper amendment made in English under Article 19 or 34 will be entered in the U.S. national phase application absent a clear instruction from applicant not to enter the amendment(s).</p> <p><b>The following items 9 to 17 concern a document(s) or information included.</b></p> <ol style="list-style-type: none"> <li>9. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>10. <input type="checkbox"/> A preliminary amendment.</li> <li>11. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>12. <input type="checkbox"/> A substitute specification. NOTE: A substitute specification cannot include claims. See 37 CFR 1.125(b).</li> <li>13. <input checked="" type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>14. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.3 and 37 CFR 1.821-1.825.</li> <li>15. <input type="checkbox"/> Assignment papers (<i>cover sheet and document(s)</i>). Name of Assignee: _____</li> <li>16. <input type="checkbox"/> 37 CFR 3.73(c) Statement (<i>when there is an Assignee</i>). _____</li> </ol>		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. APPLN. No. (if known – see 37 CFR 1.5)	INTERNATIONAL APPLICATION No. PCT/US12/50001	ATTORNEY DOCKET No. DN 3875 PCT/US
17. <input checked="" type="checkbox"/> Other items or information:  16 sheets of formal drawings -- these drawings contain no new matter.		
<b>The following fees have been submitted.</b>		<div style="display: flex; justify-content: space-between;"> <span>CALCULATIONS</span> <span>PTO USE ONLY</span> </div>
18. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a)) ..... <b>\$280</b>		\$ 280
19. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... <b>\$0</b> All other situations ..... <b>\$720</b>		\$ 720
20. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... <b>\$0</b> Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority ..... <b>\$120</b> International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB ..... <b>\$480</b> All other situations ..... <b>\$600</b>		\$ 120
<b>TOTAL OF 18, 19, and 20 =</b>		\$ 1120
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) in an electronic medium or computer program listing in an electronic medium) (37 CFR 1.492(j)). Fee for each additional 50 sheets of paper or fraction thereof ..... <b>\$400</b>		
Total Sheets	Extra Sheets	RATE
- 100 =	/ 50 =	x <b>\$400</b>
Surcharge of <b>\$140.00</b> for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).		\$
CLAIMS	NUMBER FILED	NUMBER EXTRA
Total claims	23 - 20 =	3
Independent claims	3 - 3 =	0
MULTIPLE DEPENDENT CLAIM(S) (if applicable)		+ <b>\$780</b>
Processing fee of <b>\$140.00</b> for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).		\$
<b>TOTAL OF ABOVE CALCULATIONS =</b>		\$ 1360
<input checked="" type="checkbox"/> <b>Applicant asserts small entity status.</b> See 37 CFR 1.27. Fees above are reduced by 1/2.		
<input type="checkbox"/> <b>Applicant certifies micro entity status.</b> See 37 CFR 1.29. Fees above are reduced by 3/4. Applicant must attach form PTO/SB/15A or B or equivalent.		
<b>TOTAL NATIONAL FEE =</b>		\$ 680
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property.		\$
<b>TOTAL FEES ENCLOSED =</b>		\$ 680
		Amount to be refunded:
		\$
		Amount to be charged:
		\$

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- a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 08-1280 in the amount of \$ 680 to cover the above fees.
- c. ☒ The Director is hereby authorized to charge additional fees which may be required, or credit any overpayment, to Deposit Account No. 08-1280 as follows:
- i. ☒ any required fee.
- ii. ☐ any required fee except for excess claims fees required under 37 CFR 1.492(d) and (e) and multiple dependent claim fee required under 37 CFR 1.492(f).
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. The PTO-2038 should only be mailed or faxed to the USPTO. However, when paying the basic national fee, the PTO-2038 may NOT be faxed to the USPTO.

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**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

#### Correspondence Address

☒ The address associated with Customer Number: 02128 OR ☐ Correspondence address below

Name					
Address					
City		State		Zip Code	
Country				Telephone	
Email					

Signature	/ Stephen R Matthews /	Date	2014-02-06
Name (Print/Type)	Stephen R. Matthews	Registration No. (Attorney/Agent)	34,384

[Page 3 of 3]

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>Application Data Sheet 37 CFR 1.76</b>		Attorney Docket Number	DN 3875 PCT/US
		Application Number	
Title of Invention	Light Weight Modular Pouch Attachment System And Method		
<p>The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.</p> <p>This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.</p>			

## Secrecy Order 37 CFR 5.2

<input type="checkbox"/> Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)
--

## Inventor Information:

Inventor 1					Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	Michael	E.	Cole			
Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service						
City	Ste. Genevieve	State/Province	MO	Country of Residence <sup>i</sup>	US	

### Mailing Address of Inventor:

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Address 2						
City	Ste. Genevieve	State/Province	MO			
Postal Code	63670	Country <sup>i</sup>	US			

Inventor 2					Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	Scott	J.	Carver			
Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service						
City	Manchester	State/Province	MO	Country of Residence <sup>i</sup>	US	

### Mailing Address of Inventor:

Address 1	731 Carman Meadows					
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City	Manchester	State/Province	MO			
Postal Code	63021	Country <sup>i</sup>	US			

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button.

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## Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.  
For further information see 37 CFR 1.33(a).

<b>Application Data Sheet 37 CFR 1.76</b>		Attorney Docket Number	DN 3875 PCT/US
		Application Number	
Title of Invention	Light Weight Modular Pouch Attachment System And Method		

☐ An Address is being provided for the correspondence information of this application.

Customer Number	02128		
Email Address	mail@matthewsedwards.com	<input type="button" value="Add Email"/>	<input type="button" value="Remove Email"/>

## Application Information:

Title of the Invention	Light Weight Modular Pouch Attachment System And Method		
Attorney Docket Number	DN 3875 PCT/US	Small Entity Status Claimed	<input checked="" type="checkbox"/>
Application Type	Nonprovisional		
Subject Matter	Utility		
Suggested Class (if any)		Sub Class (if any)	
Suggested Technology Center (if any)			
Total Number of Drawing Sheets (if any)	16	Suggested Figure for Publication (if any)	14

## Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

## Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	<input checked="" type="radio"/> Customer Number	<input type="radio"/> US Patent Practitioner	<input type="radio"/> Limited Recognition (37 CFR 11.9)
Customer Number	02128		

## Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

Prior Application Status		<input type="button" value="Remove"/>	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	a 371 of international	PCT/US12/50001	2012-08-08

<b>Application Data Sheet 37 CFR 1.76</b>		Attorney Docket Number	DN 3875 PCT/US
		Application Number	
Title of Invention	Light Weight Modular Pouch Attachment System And Method		
Prior Application Status		<a href="#">Remove</a>	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	non provisional of	61521309	2011-08-08
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the <b>Add</b> button.			<a href="#">Add</a>

## Foreign Priority Information:

This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(a).			
			<a href="#">Remove</a>
Application Number	Country <sup>i</sup>	Filing Date (YYYY-MM-DD)	Priority Claimed
			<input type="radio"/> Yes <input type="radio"/> No
Additional Foreign Priority Data may be generated within this form by selecting the <b>Add</b> button.			<a href="#">Add</a>

## Authorization to Permit Access:

<input checked="" type="checkbox"/> Authorization to Permit Access to the Instant Application by the Participating Offices
<p>If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application is filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the instant patent application is filed to have access to the instant patent application.</p> <p>In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application.</p> <p>In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.</p>

## Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.
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<b>Application Data Sheet 37 CFR 1.76</b>		Attorney Docket Number	DN 3875 PCT/US
		Application Number	
Title of Invention	Light Weight Modular Pouch Attachment System And Method		

<b>Applicant 1</b>			
<p>If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.</p> <p style="text-align: right;"><b>Remove</b></p>			
<input checked="" type="radio"/> Assignee		<input type="radio"/> Legal Representative under 35 U.S.C. 117	
<input type="radio"/> Person to whom the inventor is obligated to assign.		<input type="radio"/> Person who shows sufficient proprietary interest	
If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:			
Name of the Deceased or Legally Incapacitated Inventor : <input type="text"/>			
If the Assignee is an Organization check here. <input checked="" type="checkbox"/>			
Organization Name	FirstSpear, LLC		
<b>Mailing Address Information:</b>			
Address 1	2275 Cassens Drive, Suite 135		
Address 2			
City	Fenton	State/Province	MO
Country <sup>i</sup>	US	Postal Code	63026
Phone Number	636-349-4820	Fax Number	636-326-5557
Email Address			
Additional Applicant Data may be generated within this form by selecting the Add button. <b>Add</b>			

**Signature:****Remove**

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications					
Signature	/ Stephen R Matthews /			Date (YYYY-MM-DD)	2014-02-06
First Name	Stephen	Last Name	Matthews	Registration Number	34384
Additional Signature may be generated within this form by selecting the Add button. <b>Add</b>					



<b>Application Data Sheet 37 CFR 1.76</b>		Attorney Docket Number	DN 3875 PCT/US
		Application Number	
Title of Invention	Light Weight Modular Pouch Attachment System And Method		

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

# Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Description

LIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM AND METHOD

5   **[0001]**       This application is submitted under 35 U.S.C.  
371 claiming priority to PCT/US2012/50001, filed August  
8, 2012, which application claims the benefit of U.S.  
Provisional Application No. 61/521,309, filed August 8,  
2011.

10

Technical Field

15   **[0002]**       The present invention relates generally to a  
system and method for removably attaching pouches and  
other accessories to a carrier, such as a vest or other  
garment, or other device, and more particularly, which  
is light weight, non-metallic, resists accumulation of,  
and degradation of operation from, particulates such as  
dirt dust and the like, is quiet in operation, and is  
compatible with some known systems.

20

Background Art

25   **[0003]**       The disclosure of U.S. Provisional Application  
No. 61/521,309, filed August 8, 2011, is hereby  
incorporated herein in its entirety by reference.

30   **[0004]**       Modular pouch attachment systems and methods  
for carrier garments, hereinafter sometimes referred to  
by the term carrier or carriers, such as, but not  
limited to, vests, cummerbunds, belts, and the like, for  
carrying holders such as, but not limited to, pouches  
for holding items and accessories on a person's body,  
are well known. Advantages include an ability to attach  
pouches and accessories to a platform and easily remove  
them; rearrange or configure them; and exchange for  
other pouches or accessories.

35   **[0005]**       Reference, Kirk et al., U.S. Patent No.  
5,724,707, issued on March 10, 1998; and Johnson, U.S.

Patent No. 7,047,570, issued on May 23, 2006, which show representative commercially available pouch attachment systems and methods. Typically, as shown in FIGS. 3A and 3B of the 7,047,570 patent, reproduced here as FIGS. 1 and 2, such known systems utilize one or more elongate woven webs or straps, sewn or otherwise affixed to at longitudinally spaced locations to a panel comprising fabric layers, forming a side by side pattern of loops. If multiple webs or straps are used, they are laterally spaced apart, e.g., vertically, so as to extend horizontally across a surface of the garment or other device, at vertically spaced intervals, such that the loops of the webs will be vertically aligned. A pouch or other accessory will include one or more elongate straps configured to be inserted through the aligned loops. The straps will typically each be attached at one end to the pouch or accessory, and have an opposite free end. The backside of the pouch or other accessory will typically include additional loops positioned to be disposed in alternating relation to the loops on the panel, such that the straps can be alternately woven through the loops on the panel and the back of the pouch or accessory, for attaching the pouch or accessory to the panel. The free end of the attachment straps can then be secured, using a snap, hook and loop fastener, or the like, to the back of the pouch or accessory.

**[0006]** Stated advantages in U.S. Patent No. 5,724,707 of the known pouch attachment systems such as just discussed, include that they are light weight, quiet to use, and stronger than earlier known systems, including known systems using hook and loop type fasteners. Shortcomings of hook and loop fasteners mentioned in U.S. Patent No. 5,724,707 include heavy weight, noisiness, low strength, and failure under dirty and dusty conditions. Although past known carriers

utilizing hook and loop fasteners have suffered from these disadvantages, inherent advantages of hook and loop fasteners such as ease and familiarity of use, and non-metallic construction, still make them attractive.

5 The non-metallic attribute is particularly desirable for military applications wherein the carrier is subject to explosions which can cause metallic objects to fragment and possibly injure wearers. As a result, it is still sought to find a manner of use hook and loop type  
10 fasteners for attachment of holders and the like, particularly for military carrier applications.

**[0007]** Therefore, what is sought is an attachment system and method that utilizes the advantageous attributes of hook and loop fastening systems, but which  
15 overcomes one or more of the know disadvantages thereof, set forth above.

#### Summary Of The Invention

**[0008]** What is disclosed is an attachment system and  
20 method for carrier garments such as, but not limited to, vests, cummerbunds, belts, shirts, jackets, pants, and the like, that utilizes the advantageous attributes of hook and loop fastening systems, but which overcomes one or more of the known disadvantages thereof set forth  
25 above.

**[0009]** According to a preferred aspect of the invention, the attachment system utilizes a platform having a front side, an opposite back side, and a plurality of slits through the platform arranged in a  
30 predetermined pattern of vertically aligned and spaced apart rows, configured for receiving elements for attaching at least one holder to the platform. As a non-limiting example, adjacent ones of the slits can be spaced vertically apart to correspond to the vertical  
35 spacing of loops of currently used MOLLE systems. The

platform is supported by and comprises an element of, an attachment or accessory to, a carrier configured to be worn on a user's body, for carrying at least one holder at a desired location on the user's body, e.g., front, 5 back, or side. The platform can be permanently affixed, e.g., by stitching, or incorporated into the carrier, or removably attached, e.g., via hook and loop fasteners, belts, snaps, zippers, or the like, in covering relation to an outwardly facing surface of the carrier or a 10 backing element such as, but not limited to, a fabric layer or sheet.

**[0010]** According to another aspect of the invention, a back side of the platform faces and covers the outer surface of the carrier or backing element and includes a 15 first fastening component of a hook and loop fastening system thereon adjacent to, e.g., around or beside, the slits, and disposed in opposing relation to the carrier or backing element surface. This forms a generally flat pocket or cavity between the opposing surface and the 20 back side, into which a user can insert his or her fingers for attaching and detaching objects to/from the fastening component, and/or weaving straps through the slits. This is advantageous as the carrier surface or backing element protects the component of the hook and 25 loop fastener, and with the fastener component located on the back side and in the pocket or cavity, noise generated when detaching from the fastener is contained and muted or muffled so as to be suitable for applications where silence when configuring the system, 30 e.g., adding, removing, moving holders, is required. Also preferably, the platform and the carrier or backing element have generally coextensive peripheral edge portions bounding and at least substantially or effectively enclosing the flat pocket or cavity behind 35 the platform, providing a cover or barrier to entry of

particulates such as dirt and dust into the cavity. Operationally, at least one of the coextensive edge portions is open or openable, e.g., via a hook and loop fastening system, buttons, overlapping flaps, etc., to  
5 allow the insertion of at least fingers of a hand into the cavity for attaching, detaching, weaving, etc.. In this latter regard, the platform can have any required extent, e.g., the height and width of a person's midsection or chest, and the opening or openings should  
10 be sufficiently large and/or positioned to enable a person to reach a desired location within the cavity for attaching and detaching straps or tabs extending through any of the slits.

**[0011]** Each of the slits through the platform is  
15 defined and bound by opposing edges, respectively, disposed sufficiently close together when in a free state, to provide an effective barrier to prevent or substantially reduce passage of particulates such as dust and dirt to the fastening system component on the  
20 back side of the platform. As a result of this and the enclosing of the pocket or cavity behind the platform, degradation of operation of the fastening system component from accumulated particulate contaminants, e.g., dirt and dust, is sufficiently limited to allow  
25 usage of the carrier for intended uses and durations of use, such as military missions.

**[0012]** According to another preferred aspect of the invention, the first fastening component located on the back side of the platform comprises a loop pile fabric  
30 layer, which can be of commercially available composition and construction such as available under the trademark "Velcro". The front side can comprise a woven fabric such as a nylon or the like, which is preferably non-stretch, and the fabric layers are joined together  
35 by lamination using adhesives, gluing, or fusion. As

another preferred aspect, the fabric layers comprising the edges bounding the slits are fused together, e.g., using a laser cutting process for forming the slits, so as to be hardened but at least semi-flexible to allow  
5 insertion of flat straps and tabs through the slits, and such that the edges will not fray or wear significantly under expected use. Also preferably, the edges will have sufficient resilient flexibility so as to be capable of conforming at least generally about  
10 anticipated items to extend through the slits such as straps or flat tabs that may be attached to the fastening system component within the pocket.

**[0013]** According to another preferred aspect of the invention, the system includes at least one holder  
15 including at least one tab having a second component of the hook and loop fastening system thereon, e.g., hooks for use with the pile loop fabric, such as commercially available under the trade name "Velcro". The tabs are substantially flat, so as to be easily insertable  
20 through the slits, and a user can position and attach the tabs to the back side of the platform using fingers inserted into the pocket or cavity behind the platform. Similarly, the user can insert the fingers into the pocket to detach the tabs to allow removal or  
25 repositioning of the holder.

**[0014]** The tabs attached to the holders can be straight and sized for passage through the slits, or can be V shape, in which case they can be folded or bent as required to pass through the slits and attach to the  
30 back side. In this regard, as another advantage of one embodiment of the tabs, they are relatively short, for instance, but not limited to, not exceeding the vertical distance between two adjacent slits of the pattern, even for holders that have a length equal to the distance  
35 between 4, 6, or more slits. The tabs can be



constructed of a thin nylon film, and with the short length, this provides substantially reduced weight compared to the much longer conventional heavy nylon fabric MOLLE straps. For strength, when inserted  
5 through the slits, the tabs are bent over for attachment to the back side, so that the hook and loop fasteners are loaded in shear, and are not subject to direct pulling away from the back side of the platform. The V shape tabs are advantageous in this regard as they  
10 provide up to double the attachment capability in a still relatively short, lightweight tab.

**[0015]** As another advantage, the tabs of the present system can be merely inserted through the slits and attached to the back side of the platform, whereas a  
15 MOLLE strap would be woven through interlocking loops on both the platform and back of the holder. For longer holders, the short tabs can be provided at spaced locations along the length of the holder, and are insertable and attachable through correspondingly  
20 located slits of the platform. The slits are also configured and sized to accommodate multiple tabs, so that a holder can be attached to the platform both above and below a particular slit. This results in an attachment capability that requires less time and is  
25 easier to do in the dark and when relying on feel or gloves are used, compared to conventional MOLLE systems. Also, because loops on the back of holders are eliminated, additional weight advantage is achieved.

**[0016]** As an alternative, the tabs can be provided in  
30 a length comparable to that of a conventional MOLLE strap, and the back side of a holder can include slits also, to allow weaving and interlocking the holder to the platform using the longer tabs, which will have the second component of the hook and loop fastening system  
35 only at an appropriate location on the ends of the tabs.

Alternatively, an enlarged tuck tab can be provided on the end of the longer tab, and the tuck tab inserted into an adjacent slit on either the platform or the holder, to secure the holder. In this embodiment, another advantage achieved is that this attachment system can be backwards compatible with existing MOLLE platforms, enabling using the holders with both the platform of the invention and MOLLE platforms.

**[0017]** As another preferred aspect of the invention, the edges bounding the slits of the platform are sufficiently resiliently flexible to allow passage of the tabs therethrough, respectively, for fastening to the loop pile fabric while biasing against the tabs forming at least a partial barrier to passage of particulates thereabout, to further prevent degradation of the hook and loop fastening system. In this regard, the lack of stretch and manner of attachment of the platform allows it to support a relatively large number of holders without pulling away from the supporting carrier, while being sufficiently flexible to accommodate normal body movements such as twisting and bending of the wearer.

**[0018]** As another advantage of the attachment system of the invention, the tightness of attachment of a holder to the platform is a function of the location of attachment of the tabs to the back side. The tabs can be attached to the back side of the platform tightly with little slack, in a manner so as to limit or prevent relative movements of the holder relative to the platform, which may be desirable for some applications wherein low noise is desired or required, or, if desired, with slack to loosely hold the holder to the front side.

**[0019]** As another preferred aspect of the invention, representative holders contemplated for use with the

invention include pouches for carrying batteries for electronic equipment, magazines for ammunition and weapons, radio, medical, clothing, food, and the like and the pouch portion of the holder can be of  
5 conventional fabric construction. Because weaving of straps through loops on the platform is not necessary, loops on the back of the holder can be eliminated, resulting in significant weight saving without loss of carrying capability or other performance. If desired,  
10 the back side of the holders can include a mating pattern of slits to allow interweaving of the tabs between the platform and holder, or the use of separate MOLLE style straps for attachment, if desired.

**[0020]** As a hybrid embodiment of the system of the invention for use with conventional MOLLE straps, the  
15 slits are provided on a backing element which includes the second component of the hook and loop fastening system. The backing element is attached to the back side of the platform using the hook and loop fastening  
20 system, and the MOLLE straps are inserted through the slits and either pass over the front side of the platform or the back of the backing element, for securing the attached holder to the platform. This embodiment is particularly useful for vertically  
25 narrower applications such as belts, and allows carrying longer MOLLE holders such as magazine pouches, on a narrow belt, without relative shifting and movement.

#### Brief Description Of The Drawings

30 **[0021]** FIG. 1 is a fragmentary perspective view of a prior art attachment system, showing a MOLLE style pouch;

**[0022]** FIG. 2 is a fragmentary sectional view of the attachment system and pouch of FIG. 1;

**[0023]** FIG. 3 is an exploded perspective view of one embodiment of an attachment system of the invention showing a representative holder of the system which is a pouch;

5 **[0024]** FIG. 4 is a rearview of a standard MOLLE style pouch for use with the system of FIG. 3;

**[0025]** FIG. 5 is an exploded perspective view of another embodiment of an attachment system of the invention, including attachment tabs having hooks of a hook and loop system thereon and a rear fabric of loop  
10 pile on a back side of a platform of the system;

**[0026]** FIG. 6 is an enlarged view of a pouch of the attachment system of FIG. 5 having additional tabs;

**[0027]** FIG. 7 shows tabs of the pouch of FIG. 6 being  
15 inserted through slits of the platform of FIG. 5, shown in place on a representative carrier, and insertion of fingers behind the platform for attaching the tabs to the back side of the platform;

**[0028]** FIG. 8 is another enlargement of the system of  
20 FIGS. 6 and 7, showing tabs of pouches inserted through slits of the platform and hooks of the tabs attached to pile on the back side;

**[0029]** FIG. 9 is fragmentary perspective view of a carrier incorporating the attachment system of the  
25 invention, showing two holders attached to the front side of the platform of the system;

**[0030]** FIG. 10 is fragmentary side view of a representative platform of the system of FIGS. 5 and 6, showing one manner of attachment of tabs, illustrating a  
30 tight fit;

**[0031]** FIG. 11 is fragmentary side view of a representative platform of the system of FIGS. 5 and 6,

showing another manner of attachment of tabs,  
illustrating a loose fit;

5     **[0032]**     FIG. 12 is a rear view of a holder of the  
system of the invention, showing alternative V shape  
tabs;

**[0033]**     FIG. 13 is a rear view of a platform of the  
system showing the V shape tabs of FIG. 12 inserted  
through slits of the platform and having hooks attached  
to loop pile on the back side of the platform;

10    **[0034]**     FIG. 14 is a front view of a platform of the  
system of the invention on a representative carrier,  
showing representative holders attached thereto by  
passage of tabs on the backs of the holders through  
slits of the platform of the system;

15    **[0035]**     FIG. 15 is a side view of a platform of the  
system, showing a pouch having longer tabs such as  
illustrated in FIG. 3, woven through the slits and  
attached to the platform by the hook and loop fasteners  
on the end of the tabs;

20    **[0036]**     FIG. 16 is a front view of the platform and  
pouch of FIG. 15;

**[0037]**     FIG. 17 is a rear view of the platform and  
tabs of FIG. 15, weaving and attachment of the tabs;

25    **[0038]**     FIG. 18 is a side view of a platform of the  
system of the invention, showing attachment of an  
alternative holder having an elongate tab with a tuck  
tab on the end; and

30    **[0039]**     FIG. 19 is a side assembly view of an  
alternative embodiment of the invention having slits on  
a removable backing element attachable to a platform of  
the invention, and weaving of a conventional MOLLE style  
strap through the slits for attachment of a pouch to the  
platform.

Detailed Description Of The Invention

5       **[0040]**       Referring to the drawings, in FIGS. 1, 2 and 4, elements of a conventional prior art MOLLE style attachment system are illustrated. Essentially, the system includes a panel 20 on which straps 22 are sewn or otherwise affixed at longitudinally spaced locations forming a side by side pattern of vertically aligned loops 24. Elongate straps 26 attached to a holder 28, which here is illustrated as a pouch, are interlocked or  
10 woven through vertically aligned ones of loops 24 on panel 20, and straps 22 on the back side of holder 28 to attach the holder to panel 20. A fastener, e.g., a snap or button, is often provided on the end of the elongate strap 26 for attachment to an associated fastener on the  
15 holder. As discussed above, straps 22 and 26 are relatively heavy, and this weaving and interlocking process is time consuming and requires dexterity. For this and other reasons, an alternative to the widely used MOLLE system is desired.

20       **[0041]**       Referring to FIGS. 3, 5, and 6 through 13, and improved attachment system 32, constructed and operable according to the teachings of the present invention, which can be constructed in a more light weight manner and has other advantages compared to known MOLLE  
25 systems, is shown.

**[0042]**       Referring to FIGS. 3 and 5, a first embodiment of system 32 of the invention is shown, including a platform 34 which eliminates webbing straps and their associated weight. The platform 34 accomplishes this by  
30 comprising a pattern of cuts or slits 36 therethrough arranged in a vertically spaced pattern, at locations generally corresponding to be locations and spacings of the loops of a conventional prior art MOLLE style attachment system as shown in FIGS. 1, 2 and 4. As will  
35 be discussed, this provides the advantage of enabling

use with various holders, e.g., pouch or accessory, of those prior art systems which are in wide spread use.

**[0043]** Essentially, according to steps of a method of the invention, straps 26 of a MOLLE style holder would  
5 be interlocked and woven through the slits 36 of the platform 34 of present system 32, by being inserted through selected upper slits 36 of the platform 34 to the back side of the platform, then inserted through selected lower slits 36 of the platform to the front  
10 side thereof, then through webbing straps 22 or loops on the back side of the pouch or accessory. The straps 26 can then be inserted through still lower slits 36 of the platform to the back side, then through still lower slits 36 to the front side, and through webbing loops on  
15 the back side of the pouch or accessory, for further attachment, one or more additional times, depending on the length of the straps and platform, and available number of slits. The free end of the straps 26 can then be attached to the back side of the pouch or accessory,  
20 using snaps, hook and loop fasteners, or other means provided.

**[0044]** As a preferred aspect of the system of the invention of FIGS. 3 and 5, as illustrated in FIG. 5, the platform 34 can comprise one or more layers of a  
25 fabric material, such as, but not limited to, a 500 denier nylon, and/or a sheet or film of other material such as, but not limited to, a plastics film or sheet, e.g., a synthetic rubber compound such as a chloroprene or polychloroprene commercially available from DuPont  
30 under the trade name Neoprene, optionally as a laminate, of sufficient overall strength to hold one or more holders such as pouches thereto, while being sufficiently flexible to move with the body of a wearer, such as to accommodate bending and twisting of the torso  
35 of the body. For this purpose, at least layer 42 is of

a strong material which does not stretch significantly under anticipated loads exerted thereagainst. Other exemplary materials that can be used providing the desired properties can include, but are not limited to,  
5 a woven or knitted nylon fabric; woven or knitted loop fabric; woven or knitted polyester fabric; woven or knitted par-aramid synthetic fiber fabric, e.g., such as commercially available under the trade name Kevlar; woven or knitted ultra-high-molecular-weight  
10 polyethylene, e.g., such as commercially available under the trade names Dyneema and Spectra; and non-woven para-aramid nylon, a non-woven polyethylene, or other non-woven composition fabric. The lamination can be accomplished in any suitable manner, such as, but not  
15 limited to, using a laminating adhesive such as a curable polyurethane applied from water or hot melt. As another alternative, platform 34 can comprise a single composite fabric having a smooth face for the front surface, and a loop pile or hook component of a hook and  
20 loop fastening system for the back surface.

**[0045]** The slits 36 can be formed in any manner suitable for the anticipated application, as a non-limiting example, by knife or die cutting, using a button hole machine, or more preferably, by laser  
25 cutting. In regard to laser cutting, an advantage achieved is that the edges 38 and 40 (FIG. 7) of the laminated layers bounding and defining the slits 36 can be fused together, to increase stiffness and reduce sagging, reduce or eliminate fraying, and increase wear  
30 and abrasion resistance at that location, while still being sufficiently pliable or bendable to facilitate opening and insertion of a strap, or a tab of the invention to be discussed, therethrough. As an additional advantage, edges 38 and 40 can be cut so as  
35 to be very closely or intimately spaced, to serve as a



barrier to entry or passage of particulate contaminants such as dust and dirt through the slits, to reduce accumulation of the contaminants in an area behind the platform. And, the edges 38 and 40 can be constructed so as to at least generally conform or bias itself about a strap or tab inserted therethrough, so as to maintain the barrier against penetration of particulates when in use.

**[0046]** Additional advantages of the attachment system of the invention include a need for less material, and thus less weight, a reduced side profile, ability to provide a smoother face on the profile of platform 34, and the illustrated ability to use prior art holders such as MOLLE style pouches.

**[0047]** Referring more particularly to FIGS. 8 and 13, platform 34 of the attachment system 32 comprises a back side 48 having a first component of a suitable fastening system thereon, such as, but not limited to, a loop pile fabric 48 of a hook and loop fastening system such as available under the trademark Velcro. This can be provided as layer 44 in a layered or laminated, fused, glued, or composite construction with a suitable face fabric layer 42, for example, but not limited to, a 500 denier nylon, on a front side 50 of platform 34.

Additionally, one or more intermediate layers can be provided, such as a non-woven layer of a non-stretchable material to provide added strength and shape retention, if desired.

**[0048]** As another aspect of the invention, the system 32 of the invention can include holders 52, in the form of pouches, appliances and the like, which are also of a light weight construction, to further reduce the weight of the attachment system compared to known MOLLE systems. This will preferably include another component of the fastening system used, here, one or more tabs 54

having hooks 56 of a hook and loop fastening system, releasably attachable to the loop pile fabric 48 on the back side 46 of platform 34. The tabs 54 are configured to be inserted through the slits 36 of the platform and  
5 can have any of a variety of shapes, such as, but not limited to, an elongate strap shape (FIGS. 3, 5, 6, 7, 8), or a V shape (FIGS. 12, 13).

**[0049]** In use, the tabs 54 are inserted into selected slits 36, and the hooks 56 thereof attached to loop pile  
10 fabric 48 on the back side 46 of the platform. For strength, when inserted through slits 36, the tabs 54 are bent over for attachment to the back side 46, so that the hook and loop fasteners are loaded in shear, and are not subject to direct pulling away from the back  
15 side of the platform. The V shape tabs provide increased holding strength with a shorter overall length and can be folded or bent for insertion through the slits. Tabs 56 can be located at the top, bottom, middle, and/or sides of a holder 52 such as the pouch,  
20 appliance or other article to be attached to the platform. As examples, FIG. 3 illustrates tabs 56 on just the top of a holder 52; FIG. 5 illustrates tabs at the top and bottom; and FIGS. 6 and 7 illustrate tabs attached to the top, middle and bottom of a pouch.

**[0050]** FIG. 8 shows the back side 46 of a  
25 representative platform 34 of the invention, with top, bottom and middle tabs 54 of a pouch (FIGS. 6 and 7) through respective slits 36 therethrough and attached pile fabric 48. In FIG. 13, V shape tabs have two hook  
30 surfaces extending in different direction and attached to the loop fabric.

**[0051]** As another advantage of the attachment system of the invention, the tightness of attachment of a holder or holders 52 to platform 34 is a function of the  
35 location of attachment of tabs 54 to back side 46. As

illustrated in FIG. 10, tabs 54 can be attached to the back side of the platform tightly with little slack, in a manner so as to limit or prevent relative movements of the holder relative to the platform, which may be desirable for some applications, e.g., wherein low noise is desired or required. In FIG. 11, tabs 54 are illustrated attached to the back side of the platform more loosely with greater slack, to allow movement of the holder on the front side, which may increase comfort and freedom of movement for the user.

**[0052]** Referring also to FIG. 14, in use on a carrier 58 to be worn on a part of a persons body, which carrier can comprise, but is not limited to, a vest, cummerbund, backpack, shirt, pants, belt, etc., platform 34 is preferably attached, connected, or incorporated into the carrier in a manner such that the platform 34, holder or holders 52, and items carried in the holders, e.g., ammunition magazines, batteries, radios, medical supplies, tools, etc., are supported in the desired manner on the wearing person's body. This can be accomplished by attaching, e.g., fastening or sewing, one or several peripheral edges of platform 34 to carrier 58 such that platform 34 overlays or covers all or a portion of an outer surface 60 of the carrier. As a result, back side 46 of platform 34 faces and covers all or a portion of surface 60, forming and enclosing a cavity or pocket 62 therebetween. Platform 34 has a peripheral edge 64 thereabout that overlays a peripheral edge 66 of outer surface 60, and which is attached to surface about the periphery of the platform, but at least one open edge portion or openable closure 68 (FIGS. 7 and 9) is preferably provided to allow a person to insert at least the fingers of a hand 70 through the closure when open, as denoted by arrow A and into pocket 62 for accessing tabs 54 or straps inserted through

slits 36, for attaching and detaching the hook and loop fasteners. Closure 68 can comprise for example, but is not limited to, a hook component of a hook and loop fastening system attachable to the loop pile fabric of back side 46, snaps, a zipper, overlapping flaps, tied or laced strings or cords, a draw cord, or the like. The opening or openable closure 68 can be located along any suitable edge of the platform as denoted by arrow A in various of the FIGS., which provides sufficient attachment strength for supporting desired holders and carried items, while serving also as a barrier to entry of particulates into pocket 62. Location of the components of the attachment system 32 within pocket 62 also provides a cover for muffling or silencing sounds generated when detaching the tabs. And, the attachment in this manner is advantageous as it can be performed easily by feel.

**[0053]** As noted above, an advantage of the system of the invention is backward compatibility with existing MOLLE and similar systems to enable use of MOLLE style holders 28 having long straps 26, and also holders 52 of the present system having longer tabs 54 with hooks 56 at the ends such as shown in FIG. 3. This is illustrated in FIGS. 15, 16 and 17, where straps 26 or long tabs 54 are woven through slits 36 through platform 34 and interlocked with straps (if provided) on the back of holder 28. If tabs 54 are used, the hooks 56 on the ends are then attached to the pile fabric 48 on the back side 46 of the platform.

**[0054]** Referring also to FIG. 18, as another variant, a holder 52 having longer tabs 54 with a semi-rigid tuck tab 72 on the end can be woven through slits 36 through platform 34 of system 32, and the tuck tab tucked between the back side of the holder and the front side of the platform, or into an aperture in the back of the

holder or a slit for supporting the holder on the front side of the platform. In this regard, it should be noted and understood that as an option, any holder for use with the system can include slits through the back side thereof for weaving of straps or the longer tabs therethrough for attachment as an alternative to using multiple tabs at spaced locations along the length of the holder. Further in this regard, it is contemplated that the tuck tabs 72 will have a length appropriate for self-retention between the holder and platform, or receipt in an aperture or slit on the back of the holder or on the platform. As a representative example, a tuck tab 72 can have a length equal to at least about the vertical distance between two or three slits 36, or 1 to 2 inches.

**[0055]** Referring also to FIG. 19, as another embodiment of the system 32 of the invention, particularly having utility for attachment of longer MOLLE style holders 28 such as magazine pouches to shorter platforms 34, such as can be incorporated into or used as a belt 74, platform 34, e.g., in the form of a belt 74 includes the first component of the hook and loop fastening system, e.g., loop pile fabric 48, on its back side, and the second component, e.g., loops 56, is provided on a separate backing element 76 including slits 36 at upper and lower ends thereof, for instance, extending through flat rings 78 attached, e.g., by sewing. Backing element 76 can be of suitable material such as a non-stretchable fabric, plastics, or metal, and rings 78 can be fabric, plastics, or metal also. In use, backing element 76 will be attached to the back side of platform 34 via the hook and loop fasteners, and strap 26 inserted through slits 36 of rings 78, so as to pass between the back side of the holder 28 and front side of platform 34. A snap or other component of a

fastener 80 on the end of the strap can then be fastened to its associated component on the holder 28 to secure the holder to the platform. Here, it should be noted that the size of slits 36 will be advantageously provided to be just marginally larger or smaller in thickness compared to the strap 26 so that frictional forces exist therebetween, such that holder 28 will be held in a fixed position on the platform (belt).

**[0056]** Here, it can be observed that relatively long pouches can be provided with shorter tabs of the invention, for easy attachment and removal, without requiring complex weaving of long straps through loops on both the platform and the pouch itself. The tabs are merely inserted through the selected slots, folded or bent over from the side or another direction, and attached to the back side of the platform, which is made easy due to the relatively short length of tabs that can be used with good holding strength. The system of the invention also requires less material, is of less weight, and has a reduced profile when viewed from the side. This allows the face of the platform to be smoother.

**[0057]** In light of all the foregoing, it should thus be apparent to those skilled in the art that there has been shown and described a novel modular pouch attachment system for carriers such as vests, belts, and the like. However, it should also be apparent that, within the principles and scope of the invention, many changes are possible and contemplated, including in the details, materials, and arrangements of parts which have been described and illustrated to explain the nature of the invention. Thus, while the foregoing description and discussion addresses certain preferred embodiments or elements of the invention, it should further be understood that concepts of the invention, as based upon

the foregoing description and discussion, may be readily incorporated into or employed in other embodiments and constructions without departing from the scope of the invention. Accordingly, the following claims are

5 intended to protect the invention broadly as well as in the specific form shown, and all changes, modifications, variations, and other uses and applications which do not depart from the spirit and scope of the invention are deemed to be covered by the invention, which is limited

10 only by the claims which follow.

Claims

What is claimed is:

1           1.    An attachment system, comprising:  
2           a platform having a front side, an opposite  
3 back side, and a plurality of slits through the platform  
4 arranged in a predetermined pattern of vertically  
5 aligned and spaced apart rows, configured for receiving  
6 elements for attaching at least one holder to the  
7 platform, wherein the platform is supported by and  
8 comprises an element of a carrier configured to be worn  
9 on a user's body for carrying the at least one holder at  
10 a desired location on the user's body;  
11           characterized by the back side of the platform  
12 including a fastening component of a hook and loop  
13 fastening system thereon adjacent to the slits and being  
14 disposed in opposing relation to a surface of the  
15 carrier or a backing element forming a generally flat  
16 cavity therebetween, the platform and the carrier or  
17 backing element having generally coextensive peripheral  
18 edge portions bounding and substantially enclosing the  
19 flat cavity providing a barrier to entry of particulates  
20 thereabout, at least one of the coextensive edge  
21 portions being openable to allow insertion of fingers of  
22 a hand into the flat cavity, and the slits being defined  
23 and bound by opposing edges, respectively, disposed  
24 sufficiently close together when in a free state,  
25 providing a barrier to passage of particulates  
26 therebetween.

1           2.    The attachment system of claim 1, wherein  
2 the fastening component of the hook and loop fastening  
3 system comprises a loop pile fabric.



1                   3.     The attachment system of claim 2, wherein  
2     the front side of the platform comprises a woven or a  
3     non-woven fabric.

1                   4.     The attachment system of claim 3, wherein  
2     the loop pile fabric and the woven fabric are laminated,  
3     adhered, or fused together, or comprise a composite of a  
4     smooth fabric on one surface and a pile fabric on an  
5     opposite surface.

1                   5.     The attachment system of claim 3, wherein  
2     each of the edges bounding the slits comprises a  
3     hardened fusion of the loop pile fabric and the woven  
4     fabric.

1                   6.     The attachment system of claim 5, wherein  
2     the edges are laser fused.

1                   7.     The attachment system of claim 5, further  
2     comprising a holder including at least one tab having  
3     hook components of the hook and loop fastening system  
4     thereon, and wherein the edges bounding the slits are  
5     sufficiently resiliently flexible to allow passage of  
6     the tabs therethrough, respectively, for fastening to  
7     the loop pile fabric while biasing against the tabs  
8     forming a barrier to passage of particulates thereabout,  
9     respectively.

1                   8.     The attachment system of claim 7, wherein  
2     the tab has a V shape.

1           9.    The attachment system of claim 1,  
2   comprising a holder including at least one tab extending  
3   therefrom having a free end portion including a  
4   fastening component of a hook and loop fastening system  
5   thereon attachable to the fastening component of the  
6   hook and loop fastening system on the back side of the  
7   platform, the at least one tab being sized for insertion  
8   through any of the slits, respectively, such that edges  
9   of the platform bounding the slit will contact the tab  
10  forming a barrier to passage of particulates thereabout.

1           10.   The attachment system of claim 9, wherein  
2   the holder comprises a pouch.

1           11.   The attachment system of claim 9, wherein  
2   the carrier comprises a vest, a cummerbund, or a  
3   component of a cummerbund or a vest.

1           12.   The attachment system of claim 9, wherein  
2   the tab has a V shape.

1           13.   The attachment system of claim 1, wherein  
2   adjacent ones of the rows of slits are spaced a  
3   predetermined distance apart, and the at least one tab  
4   has a length equal to about twice the predetermined  
5   distance or less.

1           14. An attachment system for removably  
2 attaching at least one holder to a carrier configured  
3 for wear on a human body, the carrier having at least  
4 one outer surface oriented to face away from a body on  
5 which the carrier is worn, the attachment system  
6 comprising:

7           a platform supported in an upstanding  
8 orientation on the carrier in covering relation to at  
9 least a portion of the outer surface of the carrier to  
10 bound and enclose a generally flat cavity therebetween,  
11 the platform having a front side facing outwardly, an  
12 opposite back side facing the cavity, and a plurality of  
13 slits through the platform arranged in a predetermined  
14 pattern of vertically aligned and spaced apart rows, the  
15 back side including a fastening component of a hook and  
16 loop fastening system thereon adjacent to the slits;

17           at least one holder configured for holding an  
18 article or object, having at least one flat, flexible  
19 tab extending therefrom including a fastening component  
20 of a hook and loop fastening system thereon attachable  
21 to the fastening component of the back side of the  
22 platform, the at least one tab being configured for  
23 passage through any of the slots, respectively, into the  
24 flat cavity, for attaching the fastening component  
25 thereof to the fastening component on the back side, for  
26 releasably securing the holder adjacent to the front  
27 side of the platform.

1           15. The attachment system of claim 14,  
2 wherein the fastening component on the back side of the  
3 platform comprises a loop pile fabric.

1           16. The attachment system of claim 15,  
2 wherein the front side of the platform comprises a woven  
3 or non-woven fabric attached to the loop pile fabric.

1           17. The attachment system of claim 16,  
2 wherein the loop pile fabric and the woven or non-woven  
3 fabric are attached by lamination, adhesive, or fusion,  
4 or comprise a composite of a smooth fabric on one  
5 surface and a pile fabric on an opposite surface.

1           18. The attachment system of claim 16,  
2 wherein each of the slits is bound by opposing edges of  
3 the loop pile fabric and the woven fabric fused  
4 together.

1           19. The attachment system of claim 14,  
2 wherein the at least one tab has a V shape.

1           20. The attachment system of claim 19,  
2 wherein the holder comprises a pouch and includes a  
3 plurality of the V shape tabs at spaced locations  
4 therealong.

1           21. An attachment system for supporting  
2 holders on a carrier, including a generally vertical  
3 platform including a front side having a plurality of  
4 slits arranged in a predetermined pattern of vertically  
5 aligned and spaced apart rows, configured for receiving  
6 one or more elongate straps in a vertical interlocking  
7 manner for supporting a holder against the front side,  
8           characterized by the front side being  
9 substantially smooth, the platform having a back side  
10 opposite the front side and opposing a surface of the  
11 carrier enclosing a generally flat pocket therebetween  
12 generally coextensive with the platform, a closure along

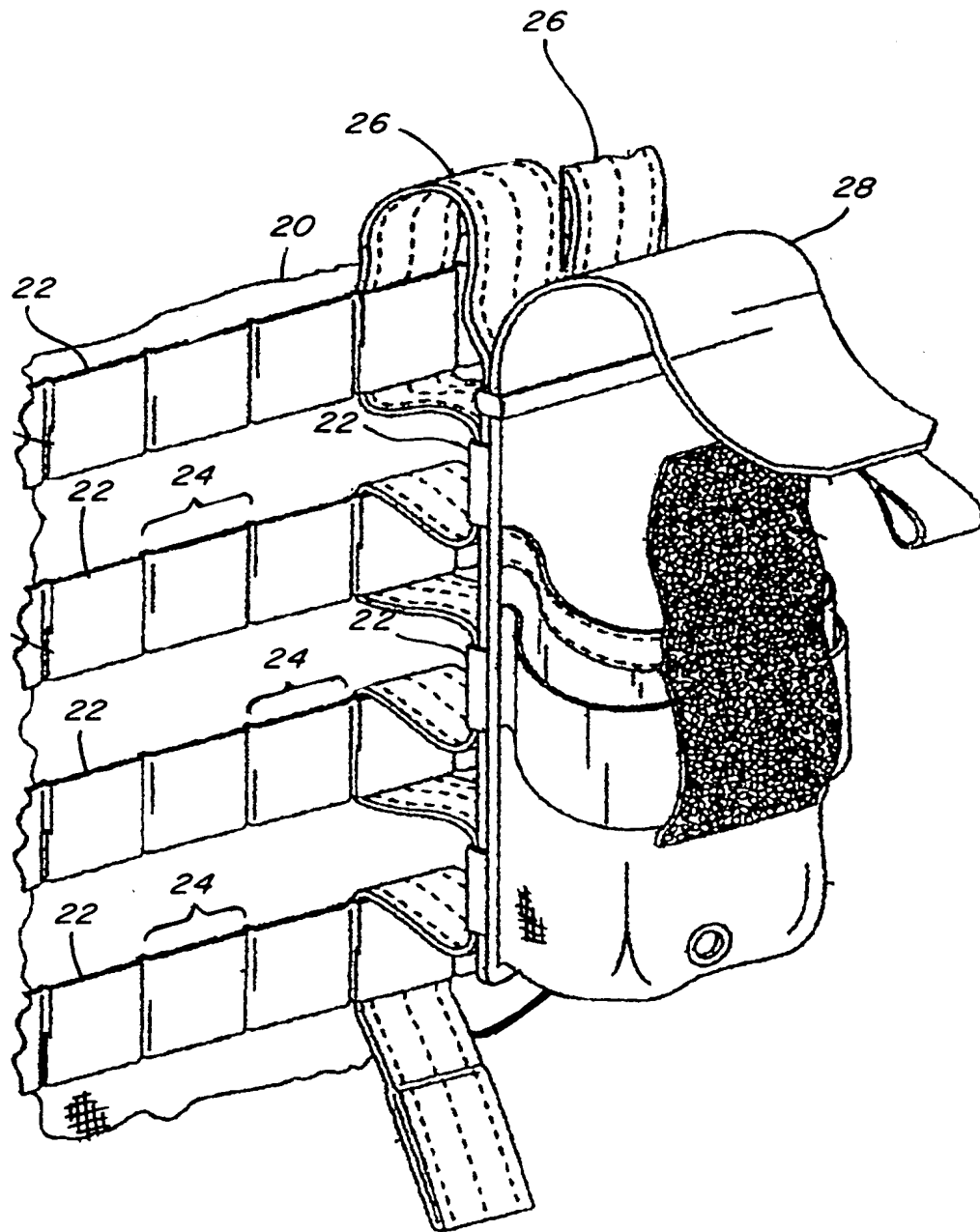
13 an edge of the platform for preventing entry of  
14 particulates into the pocket and configured to be  
15 openable sufficiently to allow insertion of at least  
16 fingers of a hand into the cavity therethrough, and the  
17 slits extending through the platform to the cavity and  
18 being defined and bounded by edges configured as a  
19 barrier to passage of particulates through the slits  
20 while allowing passage of flat straps therethrough for  
21 interlockingly securing a holder against the front side  
22 and maintaining the barrier to passage of particulates  
23 through the slits about the straps, and the back side of  
24 the platform at least partially comprising a first  
25 fastening component of a hook and loop fastening system.

1           22. The attachment system of claim 21,  
2 further characterized by at least one holder supported  
3 adjacent to the front side of the platform by at least  
4 one substantially flat, flexible tab extending through  
5 one of the slits with the edges defining the slit  
6 maintaining the barrier about the tab, and the tab  
7 having a second fastening component of a hook and loop  
8 fastening system attached to the second fastening  
9 component in the pocket securing the holder to the  
10 platform.

1           23. The attachment system of claim 22,  
2 wherein the second fastening component is detachable  
3 from the first component by opening the closure and  
4 inserting fingers into the pocket for grasping and  
5 detaching the fastening components.

Abstract Of The Disclosure

An attachment system for supporting holders on a carrier, including a platform with a front side having  
5 slits in a pattern of vertically aligned and spaced  
apart rows, for receiving one or more elongate straps in  
a vertical interlocking manner for supporting a holder  
against the front side, a back side opposing a surface  
of the carrier enclosing a generally flat pocket, the  
10 slits extending through the platform, defined and  
bounded by edges cooperable to form a barrier to passage  
of particulates through the slits while allowing passage  
of flat straps or tabs for interlockingly securing a  
holder against the front side and maintaining the  
15 barrier to passage of particulates through the slits  
about the straps, and the back side of the platform  
including a first fastening component of a hook and loop  
fastening system and the tabs including a second  
component fastenable to the first to secure the tabs.



PRIOR ART

Fig. 1

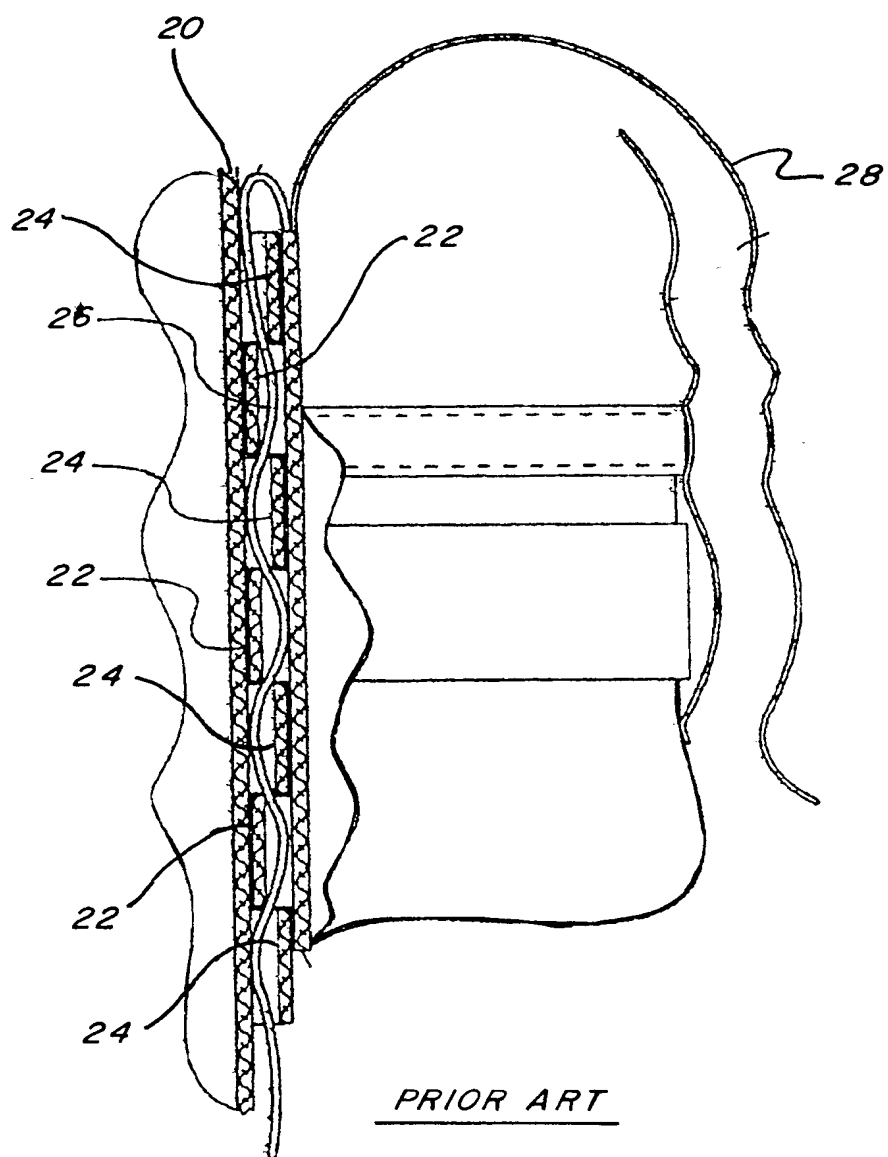


Fig. 2



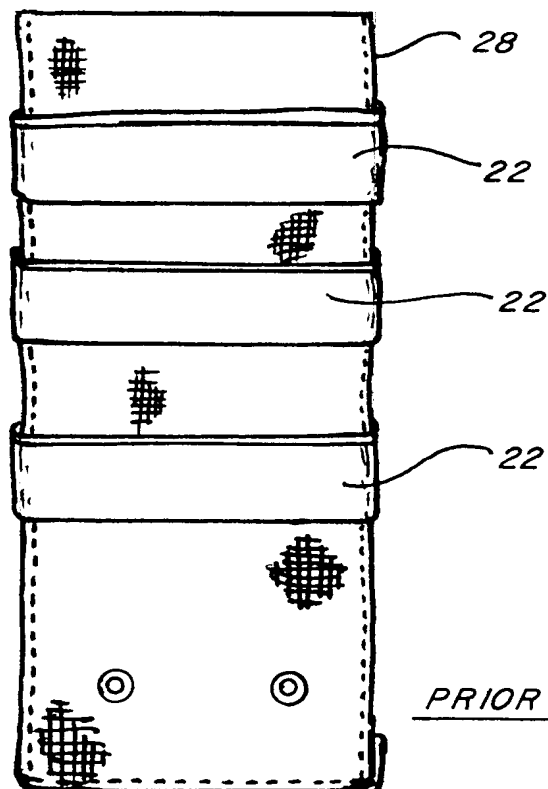
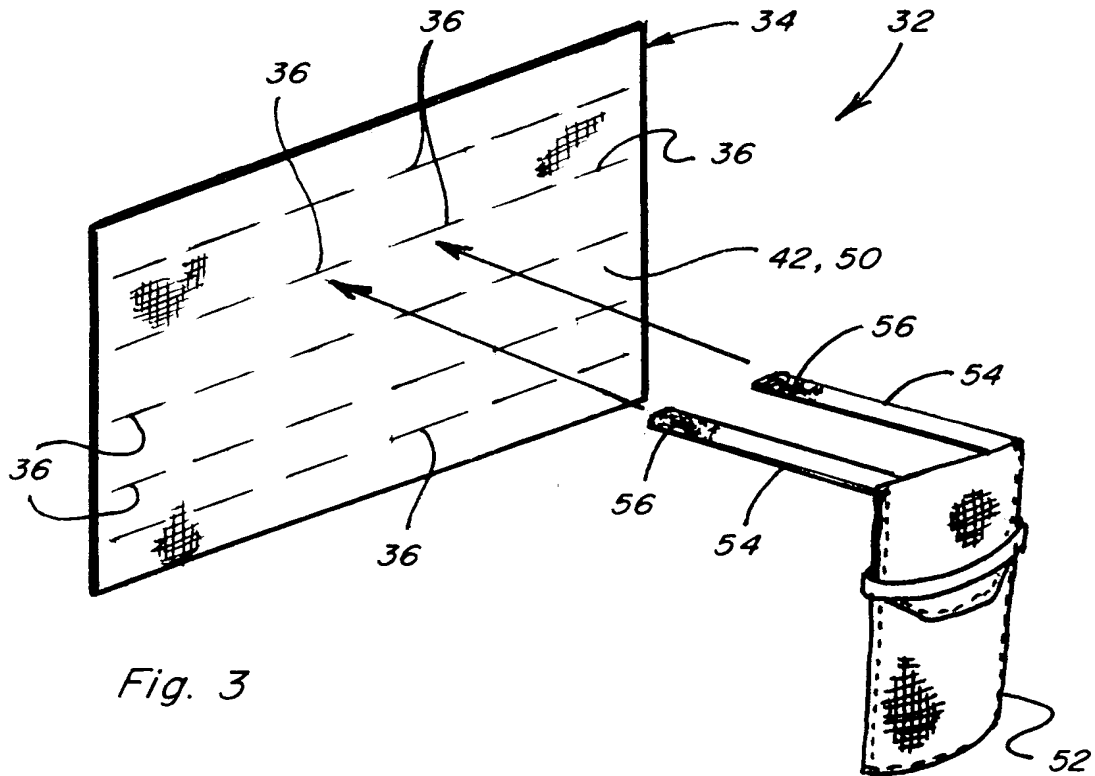
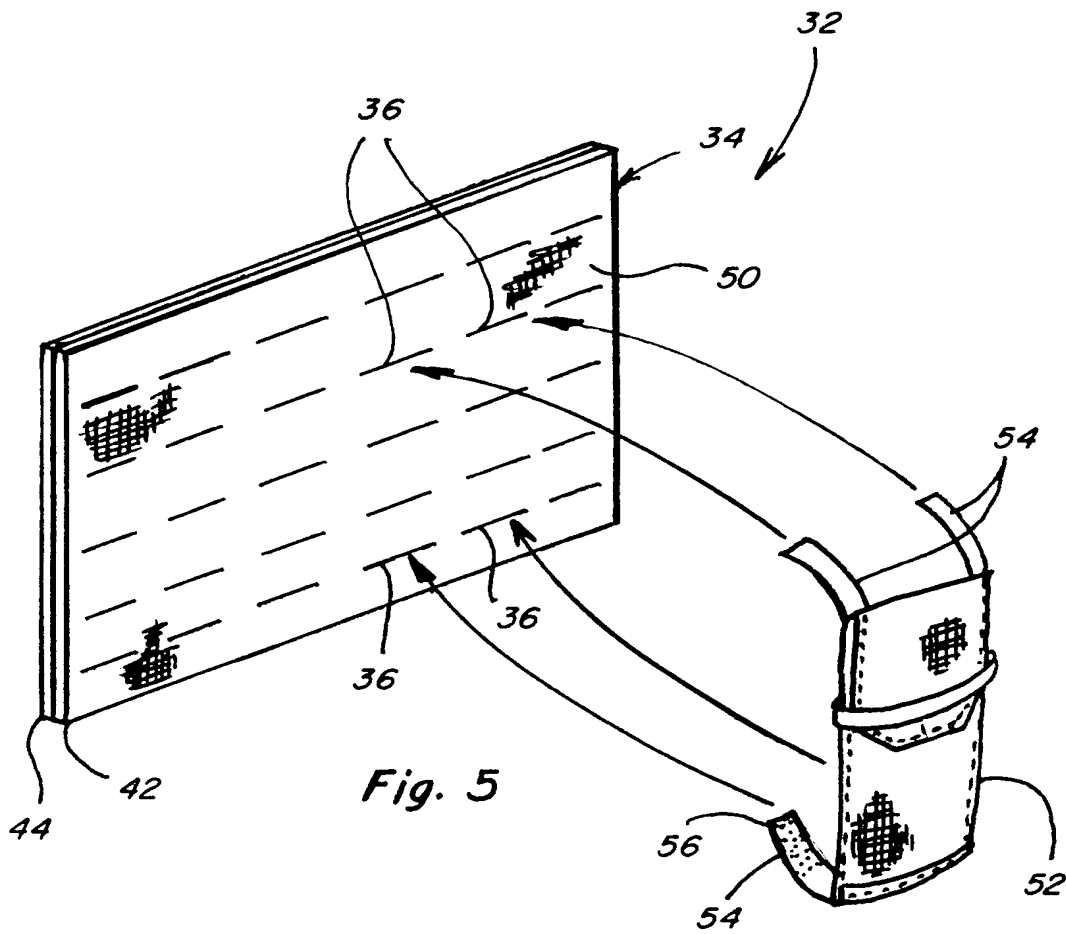


Fig. 4



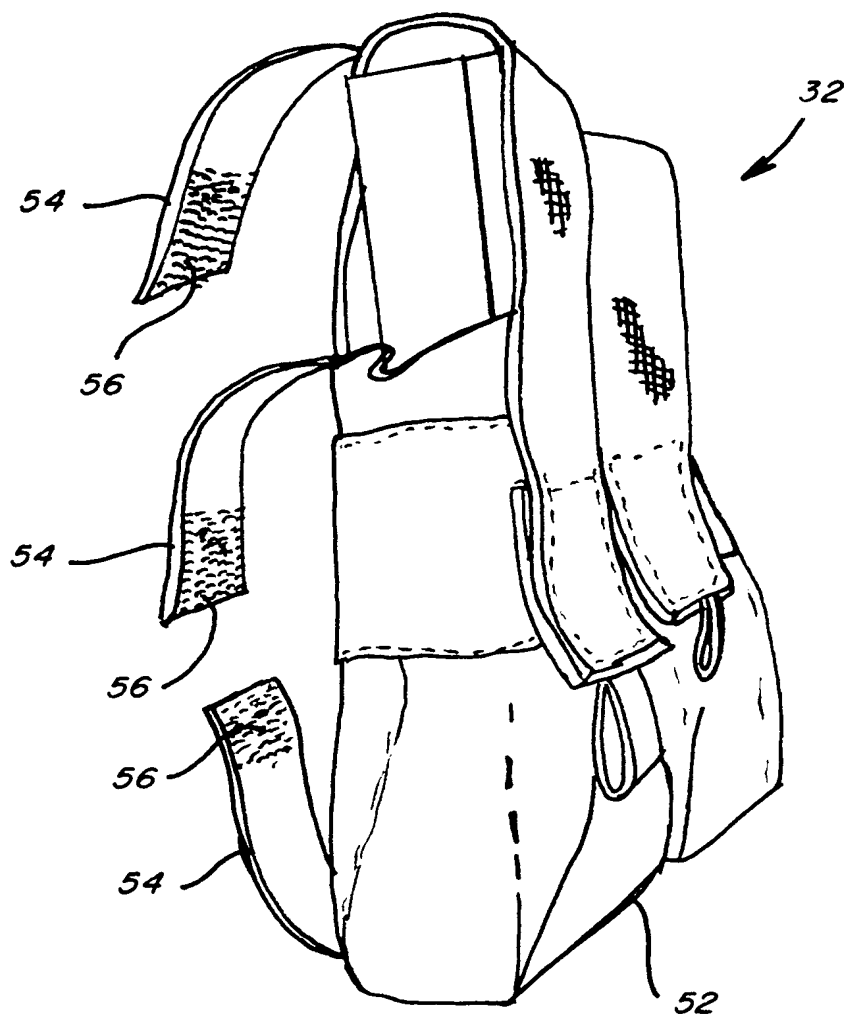


Fig. 6

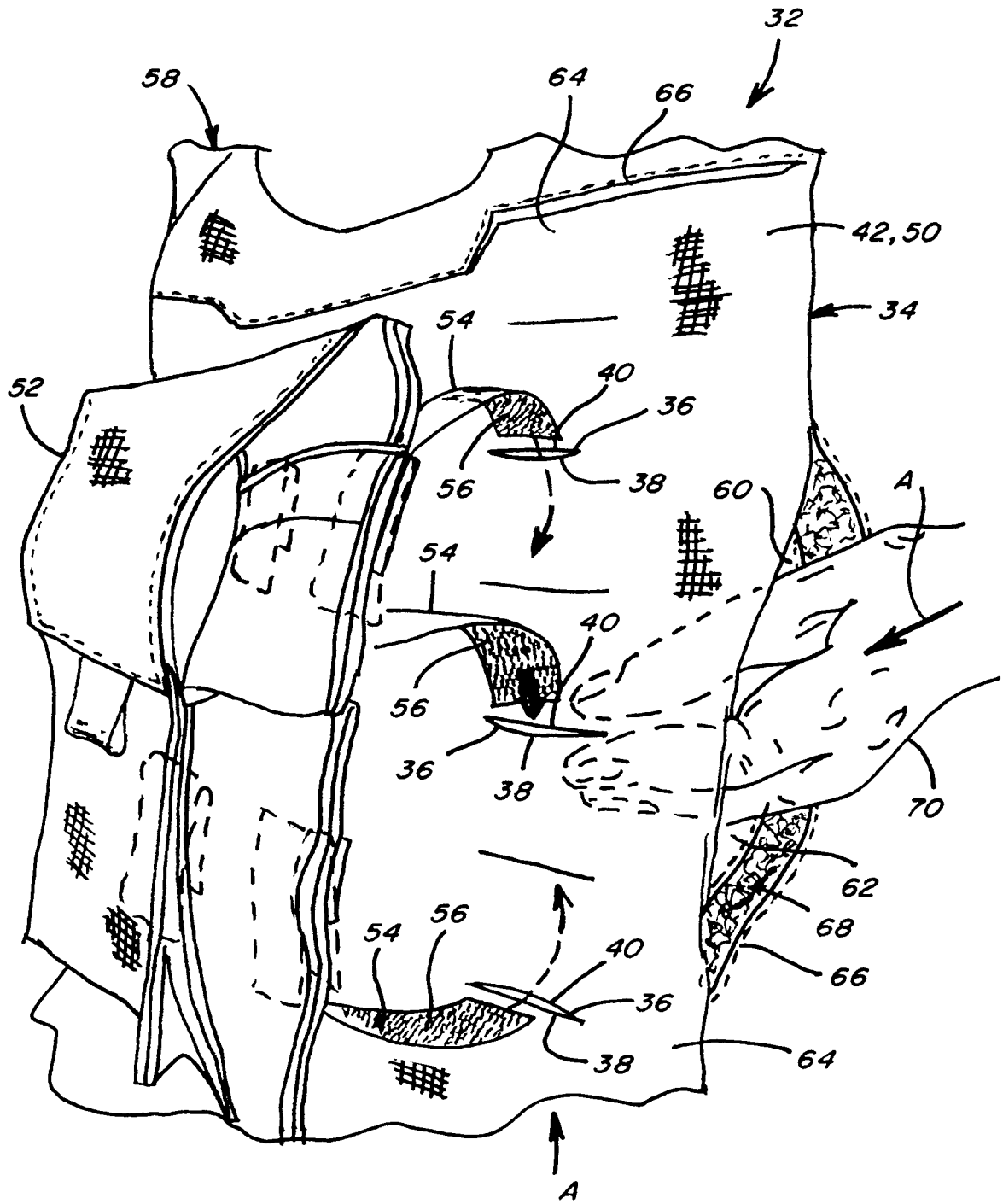


Fig. 7

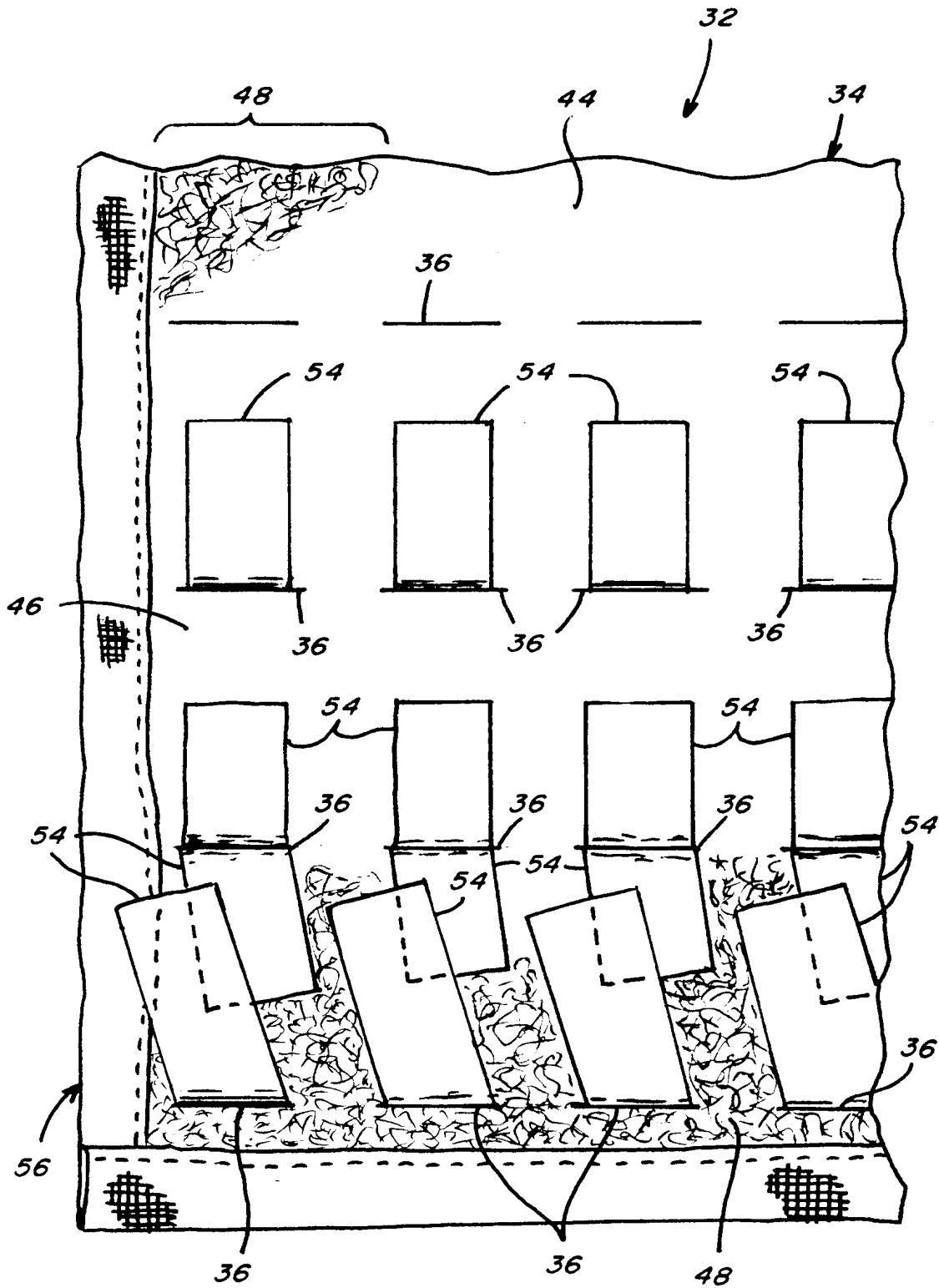


Fig. 8

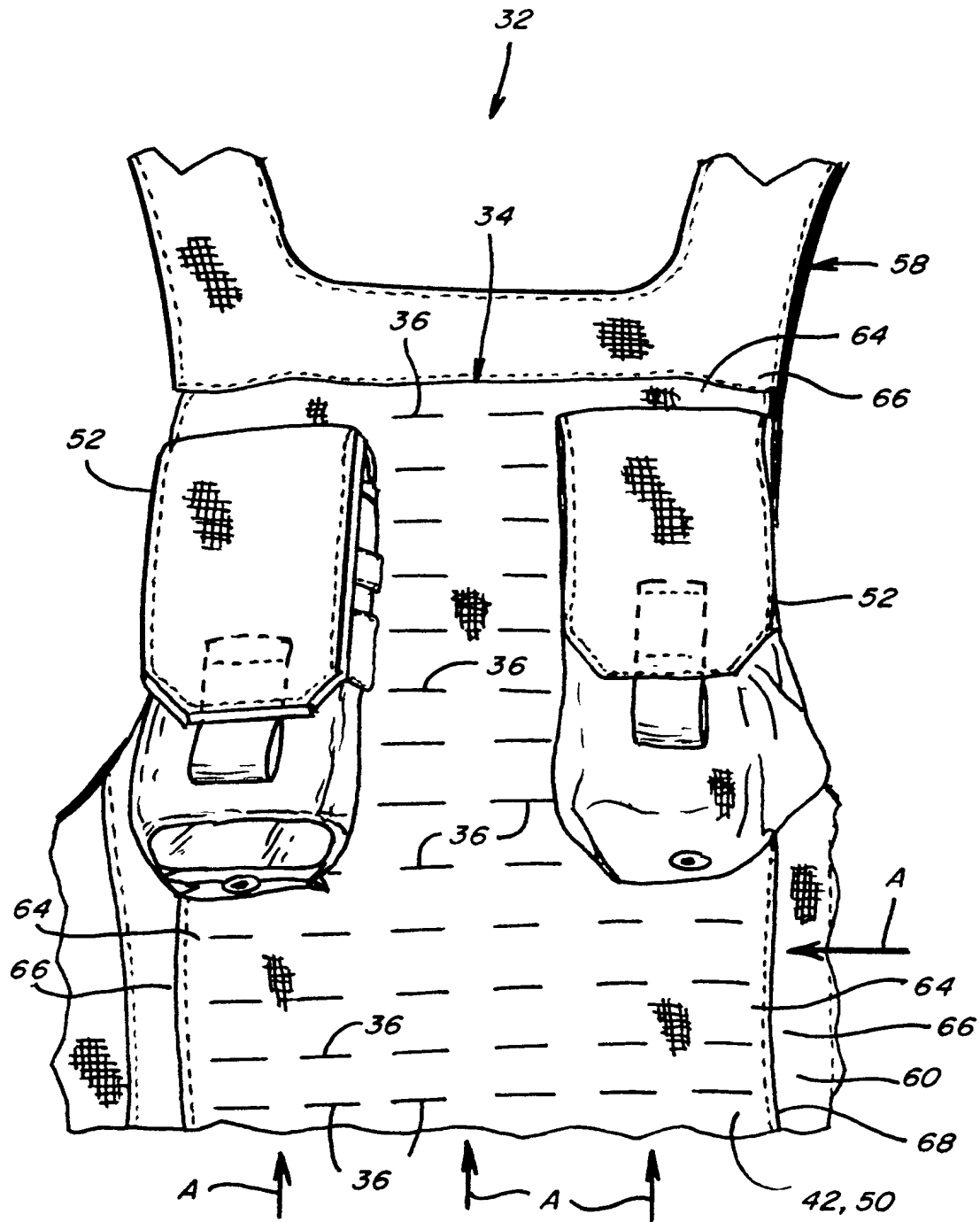


Fig. 9

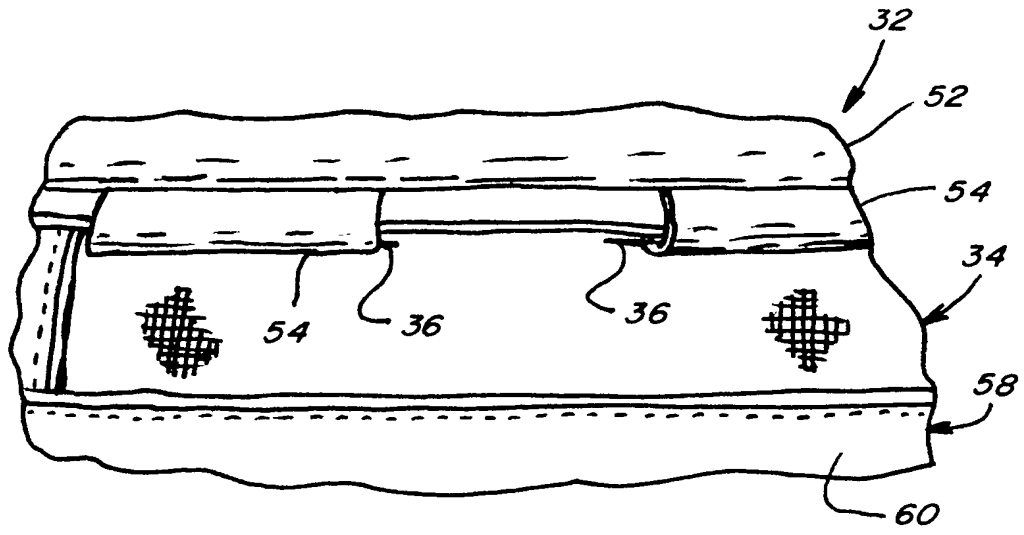


Fig. 10

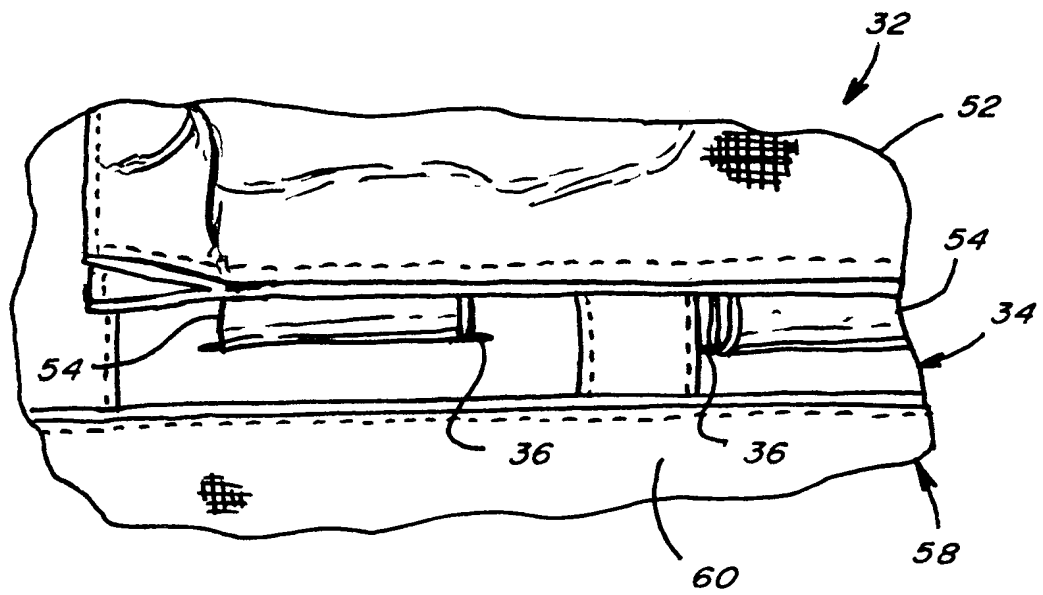


Fig. 11

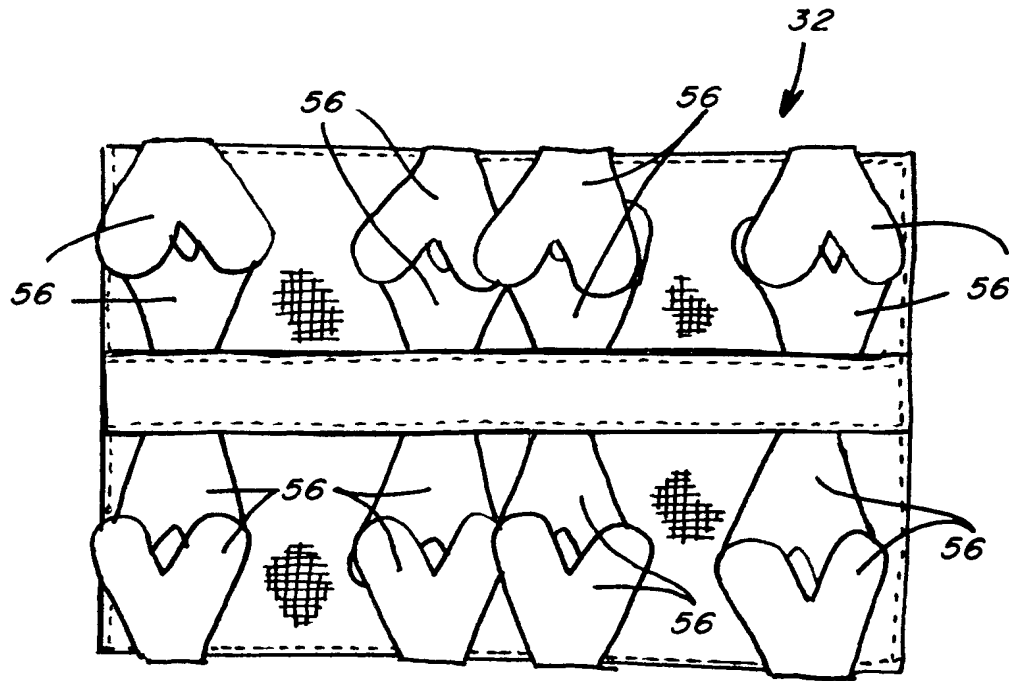
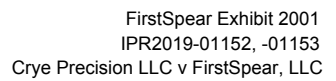


Fig. 12





*Fig. 13*

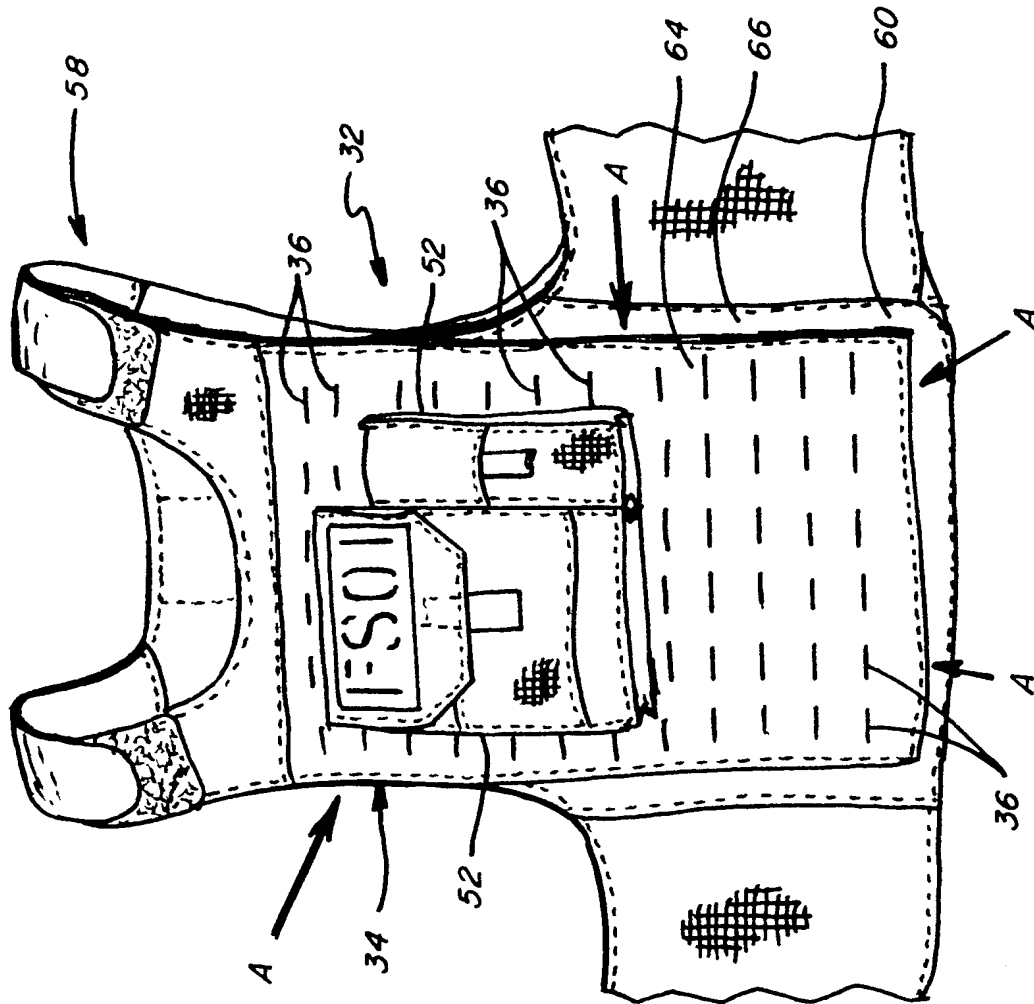
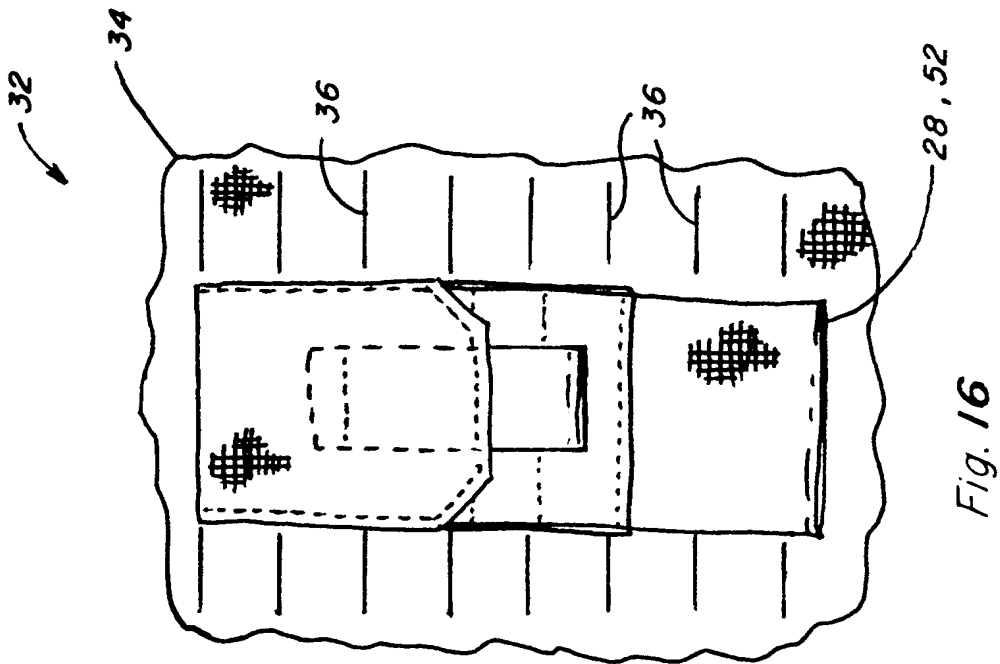
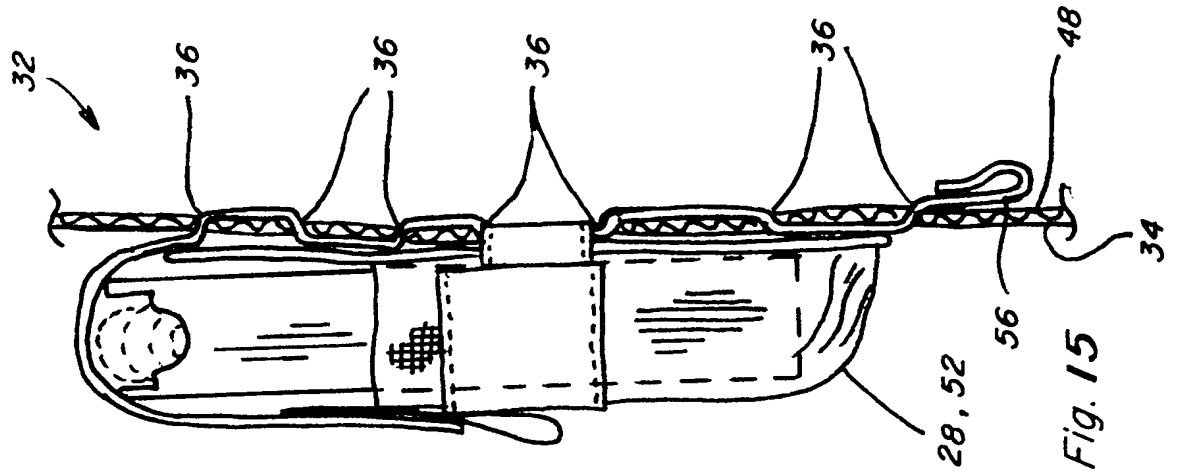


Fig. 14



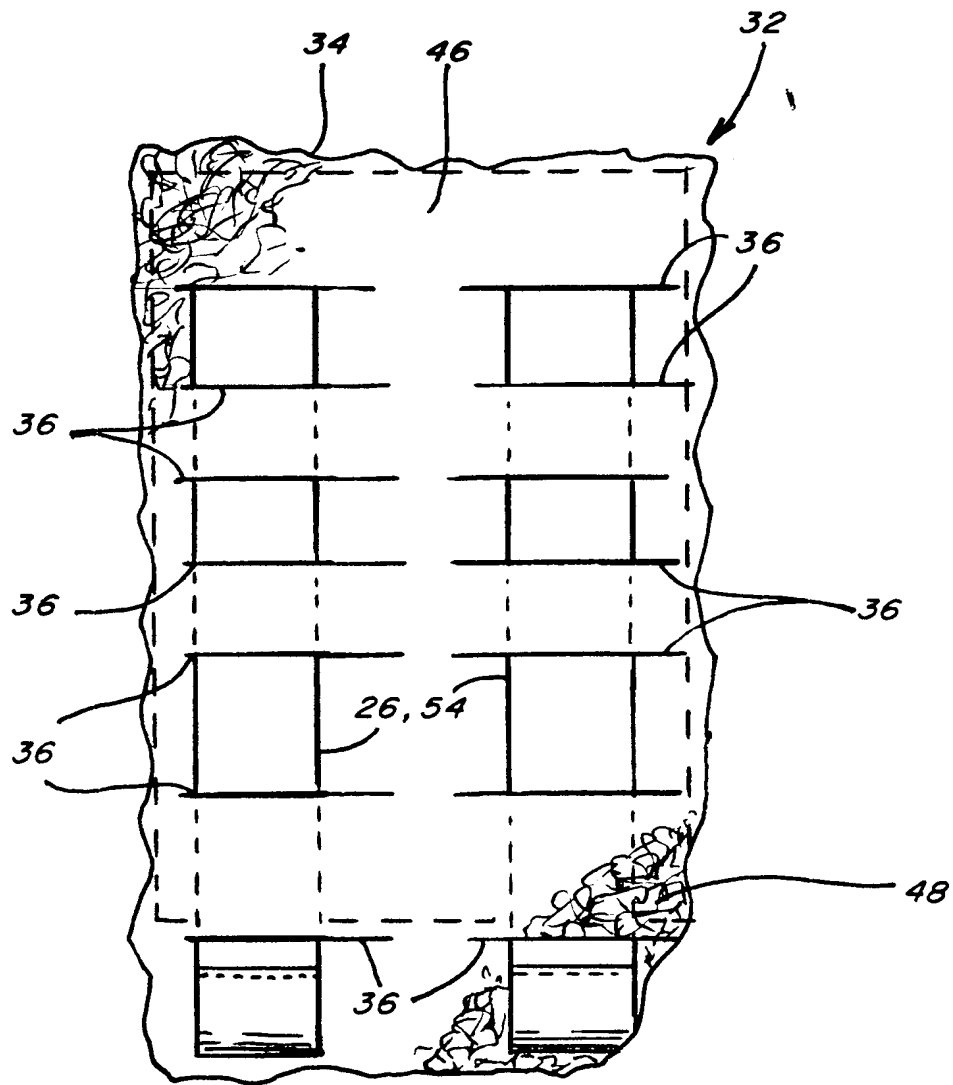
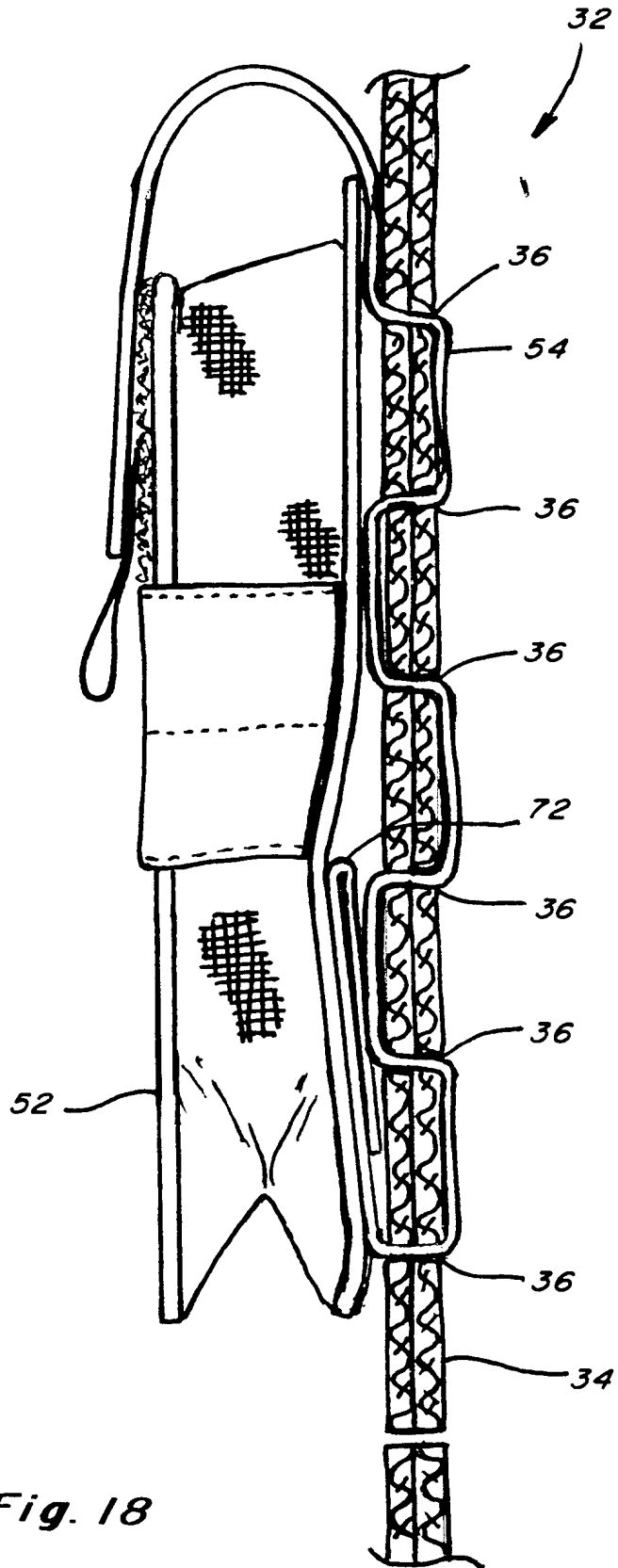
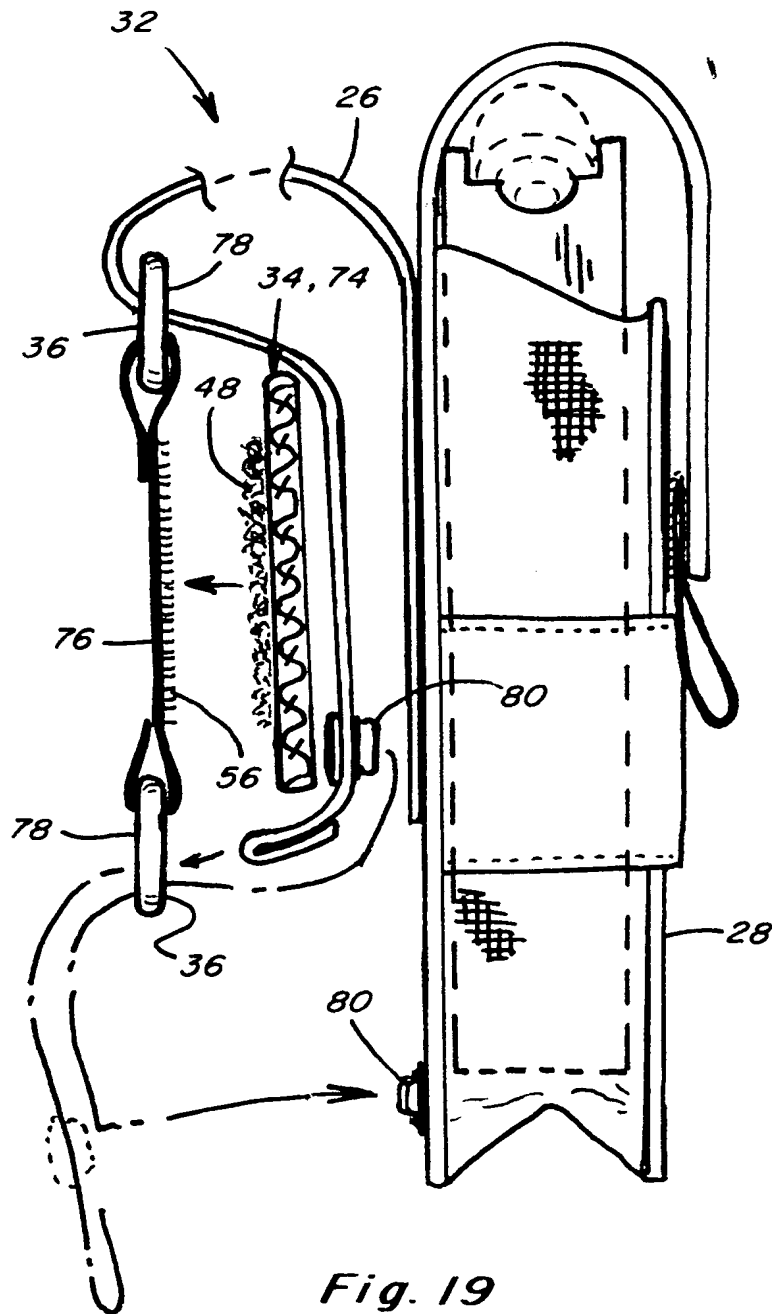


Fig. 17



**Fig. 18**



**Fig. 19**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)**

<b>Title of Invention</b>	Light Weight Modular Pouch Attachment System and Method
-------------------------------	---

As the below named inventor, I hereby declare that:

This declaration is directed to: ☒ The attached application, or  
☐ United States application or PCT international application number \_\_\_\_\_  
filed on \_\_\_\_\_.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

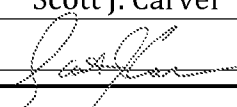
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

**LEGAL NAME OF INVENTOR**

Inventor: Scott J. Carver Date (Optional): 1/29/14

Signature: 

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)****Title of  
Invention**

Light Weight Modular Pouch Attachment System And Method

As the below named inventor, I hereby declare that:

This declaration  
is directed to:

The attached application, or



United States application or PCT international application number \_\_\_\_\_

filed on \_\_\_\_\_

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001  
by fine or imprisonment of not more than five (5) years, or both.**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

**LEGAL NAME OF INVENTOR**

Inventor: Michael E. Cole

Date (Optional):

1/29/14

Signature:

*Michael E. Cole*

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Sheet No. 7

**Box No. VIII (iv) DECLARATION: INVENTORSHIP** (only for the purposes of the designation of the United States of America)  
*The declaration must conform to the following standardized wording provided for in Section 214: see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iv). If this box is not used, this sheet should not be included in the request.*

**Declaration of Inventorship (Rules 4.17(iv) and 516a.1(a)(iv))  
 for the purposes of the designation of the United States of America:**

I hereby declare that I believe I am the original, first and sole (if only one inventor is listed below) or joint (if more than one inventor is listed below) inventor of the subject matter which is claimed and for which a patent is sought.

This declaration is directed to the international application of which it forms a part (if filing declaration with application).

This declaration is directed to international application No. PCT/..... (if furnishing declaration pursuant to Rule 26ter).

I hereby declare that my residence, mailing address, and citizenship are as stated next to my name.

I hereby state that I have reviewed and understand the contents of the above-identified international application, including the claims of said application. I have identified in the request of said application, in compliance with PCT Rule 4.10, any claim to foreign priority, and I have identified below, under the heading "Prior Applications," by application number, country or Member of the World Trade Organization, day, month and year of filing, any application for a patent or inventor's certificate filed in a country other than the United States of America, including any PCT international application designating at least one country other than the United States of America, having a filing date before that of the application on which foreign priority is claimed.

Prior Applications: .....

I hereby acknowledge the duty to disclose information that is known by me to be material to patentability as defined by 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: Michael E. Cole

Residence: Ste. Genevieve, Missouri  
 (city and either US state, if applicable, or country)

Mailing Address: 19336 Lime Kiln Road, Ste. Genevieve, Missouri 63370

Citizenship: US

Inventor's Signature: [Signature] Date: 8/4/12  
 (The signature must be that of the inventor, not that of the agent)

Name: Scott J. Carver

Residence: Imperial, Missouri MADEIRA, MD  
 (city and either US state, if applicable, or country)

Mailing Address: 811 Rose Hill Road, Imperial, Missouri 63052

Citizenship: US

Inventor's Signature: [Signature] Date: 2/8/12  
 (The signature must be that of the inventor, not that of the agent)

☐ This declaration is continued on the following sheet, "Continuation of Box No. VIII (iv)".

# PCT

## REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

PCT/US12/50001

International Application No.

08-08-2012

08 AUG 2012

International Filing Date

PCT INTERNATIONAL APPLICATION RO/US

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference  
(if desired) (12 characters maximum) DN 3875PCT

**Box No. I TITLE OF INVENTION**

LIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM AND METHOD

**Box No. II APPLICANT**

☐ This person is also inventor

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

FirstSpear  
2275 Cassens Drive, Suite 135  
Fenton, Missouri 63026  
US

Telephone No.

(636) 349-4820

Facsimile No.

(636) 326-5557

Applicant's registration No. with the Office

**E-mail authorization:** Marking one of the check-boxes below authorizes the receiving Office, the International Searching Authority, the International Bureau and the International Preliminary Examining Authority to use the e-mail address indicated in this Box to send, notifications issued in respect of this international application to that e-mail address if those offices are willing to do so.

☐ as advance copies followed by paper notifications; or ☐ exclusively in electronic form (no paper notifications will be sent).

E-mail address:

State (that is, country) of nationality:

US

State (that is, country) of residence:

US

This person is applicant for the purposes of:

☐ all designated States

☒ all designated States except the United States of America

☐ the United States of America only

☐ the States indicated in the Supplemental Box

**Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)**

☒ Further applicants and/or (further) inventors are indicated on a continuation sheet.

**Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**

The person identified below is hereby/has been appointed to act on behalf / of the applicant(s) before the competent International Authorities as:

☒ agent

☐ common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

MATTHEWS, Stephen R.  
Matthews Edwards LLC  
514 Earth City Plaza, Suite 131  
Earth City, Missouri 63045  
US

Telephone No.

(314) 241-4427

Facsimile No.

(314) 291-3407

Agent's registration No. with the Office

34,384

**E-mail authorization:** Marking one of the check-boxes below authorizes the receiving Office, the International Searching Authority, the International Bureau and the International Preliminary Examining Authority to use the e-mail address indicated in this Box to send, notifications issued in respect of this international application to that e-mail address if those offices are willing to do so.

☒ as advance copies followed by paper notifications; or ☐ exclusively in electronic form (no paper notifications will be sent).

E-mail address: mail@matthewsedwards.com

☐ **Address for correspondence:** Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

**Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)**

*If none of the following sub-boxes is used, this sheet should not be included in the request.*

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

COLE, Michael E.  
19336 Lime Kiln Road  
Ste. Genevieve, Missouri 63670

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:  
US

State (that is, country) of residence:  
US

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

CARVER, Scott J.  
731 Carman Meadows  
Manchester, Missouri 63021

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:  
US

State (that is, country) of residence:  
US

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on another continuation sheet.

<b>Box No. V DESIGNATIONS</b>				
<p>The filing of this request <b>constitutes under Rule 4.9(a) the designation</b> of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents.</p> <p>However,</p> <p><input type="checkbox"/> DE Germany is <b>not designated</b> for any kind of national protection</p> <p><input type="checkbox"/> JP Japan is <b>not designated</b> for any kind of national protection</p> <p><input type="checkbox"/> KR Republic of Korea is <b>not designated</b> for any kind of national protection</p> <p><i>(The check-boxes above may only be used to exclude (irrevocably) the designations concerned if, at the time of filing or subsequently under Rule 26bis.1, the international application contains in Box No. VI a priority claim to an earlier national application filed in the particular State concerned, in order to avoid the ceasing of the effect, under the national law, of this earlier national application.)</i></p>				
<b>Box No. VI PRIORITY CLAIM</b>				
The priority of the following earlier application(s) is hereby claimed:				
Filing date of earlier application <i>(day/month/year)</i>	Number of earlier application	Where earlier application is:		
		national application: country or Member of WTO	regional application: regional Office	international application: receiving Office
item (1)  08 August 2011 (08.08.11)	61/521,309	US		
item (2)				
item (3)				
<input type="checkbox"/> Further priority claims are indicated in the Supplemental Box.				
<input type="checkbox"/> The <b>International Bureau</b> is requested to obtain from a digital library, a certified copy of the earlier application(s) <i>(if the earlier application(s) is available to it from a digital library)</i> identified above as:* <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <input type="checkbox"/> all items           <input type="checkbox"/> item (1)           <input type="checkbox"/> item (2)           <input type="checkbox"/> item (3)           <input type="checkbox"/> other, see Supplemental Box         </div>				
<input checked="" type="checkbox"/> The <b>receiving Office</b> is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) <i>(if the earlier application(s) was filed with the Office which for the purposes of this international application is the receiving Office)</i> or to obtain a certified copy of the earlier application(s) from a digital library and transmit a copy of it to the International Bureau <i>(if the earlier application(s) is available to the receiving Office from a digital library)</i> , identified above as:* <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <input checked="" type="checkbox"/> all items           <input type="checkbox"/> item (1)           <input type="checkbox"/> item (2)           <input type="checkbox"/> item (3)           <input type="checkbox"/> other, see Supplemental Box         </div>				
<p>* Where the certified copy of the earlier application(s) is not stored in a digital library under the number of the earlier application indicated above but under the application number of another application which also claims priority from it, indicate that number in the supplemental sheet (item 4).</p>				
<p><b>Restore the right of priority:</b> the receiving Office is requested to restore the right of priority for the earlier application(s) identified above or in the Supplemental Box as item(s) (_____). <i>(See also the Notes to Box No. VI; further information must be provided to support a request to restore the right of priority.)</i></p>				
<p><b>Incorporation by reference:</b> where an element of the international application referred to in Article 11(1)(iii)(d) or (e) or a part of the description, claims or drawings referred to in Rule 20.5(a) is not otherwise contained in this international application but is completely contained in an earlier application whose priority is claimed on the date on which one or more elements referred to in Article 11(1)(iii) were first received by the receiving Office, that element or part is, subject to confirmation under Rule 20.6, incorporated by reference in this international application for the purposes of Rule 20.6.</p>				
<b>Box No. VII INTERNATIONAL SEARCHING AUTHORITY</b>				
<p><b>Choice of International Searching Authority (ISA)</b> <i>(if more than one International Searching Authority is competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):</i></p> <p>ISA/ <u>US</u></p>				

Continuation of Box No. VII <b>USE OF RESULTS OF EARLIER SEARCH, REFERENCE TO THAT SEARCH</b>		
<input type="checkbox"/> The ISA indicated in Box No. VII is requested to take into account the results of the earlier search(es) indicated below ( <i>see also Notes to Box VII; use of results of more than one earlier search</i> ).		
Filing date ( <i>day/month/year</i> )	Application Number	Country ( <i>or regional Office</i> )
<input type="checkbox"/> <b>Statement (Rule 4.12(ii)):</b> this international application is the same, or substantially the same, as the application in respect of which the earlier search was carried out except, where applicable, that it is filed in a different language.		
<input type="checkbox"/> <b>Availability of documents:</b> the following documents are available to the ISA in a form and manner acceptable to it and therefore do not need to be submitted by the applicant to the ISA (Rule 12bis.1(f)): <div style="margin-left: 20px;"> <input type="checkbox"/> a copy of the results of the earlier search,*  <input type="checkbox"/> a copy of the earlier application,  <input type="checkbox"/> a translation of the earlier application into a language which is accepted by the ISA,  <input type="checkbox"/> a translation of the results of the earlier search into a language which is accepted by the ISA,  <input type="checkbox"/> a copy of any document cited in the results of the earlier search. (<i>If known, please indicate below the document(s) available to the ISA</i>):           </div>		
<input type="checkbox"/> <b>Transmit copy of results of earlier search and other documents</b> ( <i>where the earlier search was not carried out by the ISA indicated above but by the same Office as that which is acting as the receiving Office</i> ): the <b>receiving Office</b> is requested to prepare and transmit to the ISA (Rule 12bis.1(c)): <div style="margin-left: 20px;"> <input type="checkbox"/> a copy of the results of the earlier search,*  <input type="checkbox"/> a copy of the earlier application,  <input type="checkbox"/> a copy of any document cited in the results of the earlier search.           </div>		
<p>* Where the results of the earlier search are neither available from a digital library nor transmitted by the receiving Office, the applicant is required to submit them to the receiving Office (Rule 12bis.1(a)) (<i>See item 11. in the check-list and also Notes to Box No. VII</i>).</p>		
Filing date ( <i>day/month/year</i> )	Application Number	Country ( <i>or regional Office</i> )
<input type="checkbox"/> <b>Statement (Rule 4.12(ii)):</b> this international application is the same, or substantially the same, as the application in respect of which the earlier search was carried out except, where applicable, that it is filed in a different language.		
<input type="checkbox"/> <b>Availability of documents:</b> the following documents are available to the ISA in a form and manner acceptable to it and therefore do not need to be submitted by the applicant to the ISA (Rule 12bis.1(f)): <div style="margin-left: 20px;"> <input type="checkbox"/> a copy of the results of the earlier search,*  <input type="checkbox"/> a copy of the earlier application,  <input type="checkbox"/> a translation of the earlier application into a language which is accepted by the ISA,  <input type="checkbox"/> a translation of the results of the earlier search into a language which is accepted by the ISA,  <input type="checkbox"/> a copy of any document cited in the results of the earlier search. (<i>If known, please indicate below the document(s) available to the ISA</i>):           </div>		
<input type="checkbox"/> <b>Transmit copy of results of earlier search and other documents</b> ( <i>where the earlier search was not carried out by the ISA indicated above but by the same Office as that which is acting as the receiving Office</i> ): the <b>receiving Office</b> is requested to prepare and transmit to the ISA (Rule 12bis.1(c)): <div style="margin-left: 20px;"> <input type="checkbox"/> a copy of the results of the earlier search,*  <input type="checkbox"/> a copy of the earlier application,  <input type="checkbox"/> a copy of any document cited in the results of the earlier search.           </div>		
<p>* Where the results of the earlier search are neither available from a digital library nor transmitted by the receiving Office, the applicant is required to submit them to the receiving Office (Rule 12bis.1(a)) (<i>See item 11. in the check-list and also Notes to Box No. VII</i>).</p>		
<input type="checkbox"/> Further earlier searches are indicated on a continuation sheet.		
<b>Box No. VIII DECLARATIONS</b>		
The following <b>declarations</b> are contained in Boxes Nos. VIII (i) to (v) ( <i>mark the applicable check-boxes below and indicate in the right column the number of each type of declaration</i> ):		Number of declarations
<input type="checkbox"/> Box No. VIII (i)	Declaration as to the identity of the inventor :	
<input checked="" type="checkbox"/> Box No. VIII (ii)	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent :	1
<input checked="" type="checkbox"/> Box No. VIII (iii)	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application :	1
<input checked="" type="checkbox"/> Box No. VIII (iv)	Declaration of inventorship (only for the purposes of the designation of the United States of America) :	1
<input type="checkbox"/> Box No. VIII (v)	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty :	

Box No. IX CHECK LIST for EFS-Web filings - this sheet is only to be used when filing an international application with RO/US via EFS-Web			
This international application contains the following:	Number of sheets	This international application is <b>accompanied by</b> the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):	Number of items
(a) request form PCT/RO/101 (including any declarations and supplemental sheets) . . . . .	8	1. <input checked="" type="checkbox"/> fee calculation sheet . . . . .	1
(b) description (excluding any sequence listing part of the description, see (f), below) . . . . .	21	2. <input checked="" type="checkbox"/> original separate power of attorney . . . . .	1
(c) claims . . . . .	6	3. <input type="checkbox"/> original general power of attorney . . . . .	
(d) abstract . . . . .	1	4. <input type="checkbox"/> copy of general power of attorney; reference number: . . . . .	
(e) drawings (if any) . . . . .	16	5. <input type="checkbox"/> statement explaining lack of signature . . . . .	
(f) sequence listing part of the description in the form of an image file (e.g. PDF) . . . . .		6. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s) . . . . .	
<b>Total number of sheets</b> (including the sequence listing part of the description if filed as an image file) . . . . .	52	7. <input type="checkbox"/> Translation of international application into (language): . . . . .	
(g) sequence listing part of the description		8. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material . . . . .	
<input type="checkbox"/> filed in the form of an Annex C/ST.25 text file		9. <input type="checkbox"/> (only where item (f) is marked in the left column) copy of the sequence listing in electronic form (Annex C/ST.25 text file) not forming part of the international application but furnished only for the purposes of international search under Rule 13ter	
<input type="checkbox"/> WILL BE filed separately on physical data carrier(s), on the same day and in the form of an Annex C/ST.25 text file		10. <input type="checkbox"/> (only where item (f) is marked in the left column) a statement confirming that "the information recorded in electronic form submitted under Rule 13ter is identical to the sequence listing as contained in the international application" as filed via EFS-Web: . . . . .	
Indicate type and number of physical data carrier(s) . . . . .		11. <input type="checkbox"/> copy of results of earlier search(es) (Rule 12bis.1(a)) . . . . .	
		12. <input type="checkbox"/> other (specify): . . . . .	
Figure of the drawings which should accompany the abstract: FIG. 1		Language of filing of the international application: English	

## Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

/ Stephen R Matthews /

Stephen R. Matthews, #34,384  
Attorney for Applicants

For receiving Office use only		For International Bureau use only	
1. Date of actual receipt of the purported international application: 08 AUG 2012 (08.08.12)		2. Drawings:	
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:		<input type="checkbox"/> received:	
4. Date of timely receipt of the required corrections under PCT Article 11(2):		<input type="checkbox"/> not received:	
5. International Searching Authority (if two or more are competent): ISA / US		6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid	

Date of receipt of the record copy by the International Bureau:
---

**Box No. VIII (ii) DECLARATION: ENTITLEMENT TO APPLY FOR AND BE GRANTED A PATENT**

*The declaration must conform to the standardized wording provided for in Section 212; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (ii). If this Box is not used, this sheet should not be included in the request.*

Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51 bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate:

In relation to the international application,

FirstSpear is entitled to apply for and be granted a patent by virtue of the following:

FirstSpear is entitled as employer of the inventors,

COLE, Michael E.

CARVER, Scott J.

☐ This declaration is continued on the following sheet, "Continuation of Box No. VIII (ii)".

**Box No. VIII (iii) DECLARATION: ENTITLEMENT TO CLAIM PRIORITY**

*The declaration must conform to the standardized wording provided for in Section 213; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iii). If this Box is not used, this sheet should not be included in the request.*

Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(ii) and 51bis.1(a)(iii)):

FirstSpear is entitled to claim priority of earlier application  
61/521,309 filed in the United States by virtue of the following:

FirstSpear is entitled as employer of the inventors,

COLE, Michael E.

CARVER, Scott J.

☐ This declaration is continued on the following sheet, "Continuation of Box No. VIII (iii)".





# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

*August 15, 2012*

**THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE.**

**APPLICATION NUMBER: 61/521,309**

**FILING DATE: August 08, 2011**

**RELATED PCT APPLICATION NUMBER: PCT/US12/50001**

**THE COUNTRY CODE AND NUMBER OF YOUR PRIORITY APPLICATION, TO BE USED FOR FILING ABROAD UNDER THE PARIS CONVENTION, IS US61/521,309**



Certified by

*David J. Kappas*

Under Secretary of Commerce  
for Intellectual Property  
and Director of the United States  
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Doc Code: **TR.PROV**

Document Description: Provisional Cover Sheet (SB16)

PTO/SB/16 (11-08)

Approved for use through 09/30/2010 OMB 0651-0032

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### Provisional Application for Patent Cover Sheet

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c)

#### Inventor(s)

Inventor 1

Remove

Given Name	Middle Name	Family Name	City	State	Country i
Michael	E.	Cole	Ste. Genevieve	MO	US

Inventor 2

Remove

Given Name	Middle Name	Family Name	City	State	Country i
Scott	J.	Carver	Manchester	MO	US

All Inventors Must Be Listed – Additional Inventor Information blocks may be generated within this form by selecting the **Add** button.

Add

#### Title of Invention

LIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM AND METHOD

Attorney Docket Number (if applicable)

DN 3875 provisional

#### Correspondence Address

Direct all correspondence to (select one):

☒ The address corresponding to Customer Number

☐ Firm or Individual Name

Customer Number

02128

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

☒ No.

☐ Yes, the name of the U.S. Government agency and the Government contract number are:

## Entity Status

Applicant claims small entity status under 37 CFR 1.27

- ☒ Yes, applicant qualifies for small entity status under 37 CFR 1.27  
☐ No

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Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

## Signature

Please see 37 CFR 1.4(d) for the form of the signature.

Signature	/ Stephen R Matthews /			Date (YYYY-MM-DD)	2011-08-08
First Name	Stephen	Last Name	Matthews	Registration Number (If appropriate)	34384

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. This form can only be used when in conjunction with EFS-Web. If this form is mailed to the USPTO, it may cause delays in handling the provisional application.**

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**The Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that : (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Description

LIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM AND METHOD

5 Technical Field

**[0001]** The present invention relates generally to a system and method for removably attaching pouches and other accessories to a garment or other device, and more particularly, which is lighter in weight compared to  
10 existing systems.

Background Art

**[0002]** Modular pouch attachment systems and methods are well known. Advantages include an ability to attach  
15 pouches and accessories to a platform and easily remove them; rearrange or configure them; and exchange for other pouches or accessories.

**[0003]** Reference, Johnson, U.S. Patent No. 7,047,570, issued on May 23, 2006, entitled Cut Away vest, which  
20 shows a representative prior art pouch attachment system. Typically, as shown in FIGS. 3A and 3B of the 7,047,570 patent, reproduced here as FIGS. 1 and 2, such known systems utilize one or more elongate woven webs or straps, sewn or otherwise affixed to at longitudinally  
25 spaced locations to a panel comprising fabric layers, forming a side by side pattern of loops. If multiple webs or straps are used, they are laterally spaced apart, e.g., vertically, so as to extend horizontally across a surface of the garment or other device, at  
30 vertically spaced intervals, such that the loops of the webs will be vertically aligned. A pouch or other accessory will include one or more elongate straps configured to be inserted through the aligned loops. The straps will typically each be attached at one end to  
35 the pouch or accessory, and have an opposite free end. The backside of the pouch or other accessory will

typically include additional loops positioned to be disposed in alternating relation to the loops on the panel, such that the straps can be alternately woven through the loops on the panel and the back of the pouch or accessory, for attaching the pouch or accessory to the panel. The free end of the attachment straps can then be secured, using a snap, hook and loop fastener, or the like, to the back of the pouch or accessory.

5  
[0004] A shortcoming observed with the known  
10 attachment systems and methods is that they are relatively heavy.

#### Brief Description Of The Drawings

[0005] FIG. 1 is a fragmentary perspective view of a  
15 prior art attachment system, showing a MOLLE style pouch;

[0006] FIG. 2 is a fragmentary sectional view of the attachment system and pouch of FIG. 1;

[0007] FIG. 3 is an exploded perspective view of one  
20 embodiment of an attachment system of the invention;

[0008] FIG. 4 is a rearview of a standard MOLLE style pouch for use with the system of FIG. 3;

[0009] FIG. 5 is an exploded perspective view of another embodiment of an attachment system of the  
25 invention, including attachment tabs having hooks of a hook and loop system thereon and a rear fabric of loop pile on a back side of a platform of the system;

[0010] FIG. 6 is an enlarged view of the attachment system of FIG. 5 showing tabs of a pouch inserted  
30 through slits through a platform of the system;

[0011] FIG. 7 is an enlarged view of the attachment system of FIGS. 5 and 6 showing additional tabs of the pouch extending through slits of the platform;

**[0012]** FIG. 8 is another enlargement of the system of FIGS. 6 and 7, showing a tab of the pouch inserted through a slit of the platform;

5 **[0013]** FIG. 9 is a rear view of the platform of the system of FIGS. 5 and 6, showing tabs extending through selected slits of the platform and attached by the hooks of the tabs to loop pile on the back side of the platform;

10 **[0014]** FIG. 10 is a rear view of the platform of the system of FIGS. 5 and 6, showing alternative V tabs extending through selected slits and having hooks attached to loop pile on the back side of the platform;

15 **[0015]** FIG. 11 is a front view of the platform of the system of FIGS. 5 and 6, showing a representative prior art MOLLE style pouch attached thereto by passage through slits of the platform of the system;

**[0016]** FIG. 12 is a side view of the platform and pouch of FIG. 11;

20 **[0017]** FIG. 13 is a bottom view of the platform and pouch shown in Figs. 11 and 12;

**[0018]** FIG. 14 is a rear view of the platform shown in FIGS. 11, 12, and 13;

25 **[0019]** FIG. 15 is a side view of the system of FIGS. 5 and 6, showing attachment of a representative light weight pouch of the invention to the platform of the invention using hook tabs on the pouch engaged with loop pile on the back side of the platform;

**[0020]** FIG. 16 is a side view of the representative pouch of the system of FIG. 15, showing tabs thereof;

30 **[0021]** FIG. 17 is a rear view showing the back side of the pouch of FIG. 16;

**[0022]** FIG. 18 is a bottom view of the pouch and platform of the system of FIG. 15, showing attachment of the pouch using the hook tabs and loop pile;

**[0023]** FIG. 19 is a top view of the pouch and platform of FIGS. 15 and 18, showing the attachment of the pouch;

**[0024]** FIG. 20 is a rear view of the platform of FIGS. 16 through 19, showing the attachment of the tabs to the loop pile;

**[0025]** FIG. 21 is a side view of the platform of the system of FIGS. 5 through 20, incorporated into a vest, and having a standard MOLLE style pouch attached thereto;

**[0026]** FIG. 22 is a rear view of a light weight pouch of the invention;

**[0027]** FIG. 23 is a side view of the light weight pouch of FIG. 22;

**[0028]** FIG. 24 is a front view of a vest including a platform of the invention, and having a standard MOLLE pouch attached thereto according to the invention; and

**[0029]** FIG. 25 is another front view of the vest including the platform of the invention, having another standard MOLLE pouch attached thereto according to the invention.

#### Detailed Description Of The Invention

**[0030]** According to a preferred aspect of the invention, attachment systems and methods which are lighter in weight compared to known systems, are disclosed.

**[0031]** Referring to FIGS. 3 and 4, a first embodiment of a system of the invention is shown, including a platform which eliminates webbing straps and their associated weight. The platform accomplishes this by comprising a pattern of slits or cuts therethrough at locations for receiving the straps of a prior art pouch (MOLLE style shown) or accessory, for weaving through the slits and webbing loops of the pouch or accessory.



**[0032]** Essentially, according to steps of a method of the invention, the straps would be inserted through selected upper slits of the platform to the back side of the platform, then inserted through selected lower slits of the platform to the front side thereof, then through webbing loops on the back side of the pouch or accessory. The straps can then be inserted through still lower slits of the platform to the back side, then through still lower slits to the front side, and through webbing loops on the back side of the pouch or accessory, for further attachment, one or more additional times, depending on the length of the straps and platform, and available number of slits.

**[0033]** The free end of the straps can then be attached to the back side of the pouch or accessory, using snaps, hook and loop fasteners, or other means provided.

**[0034]** As a preferred aspect of the system of the invention of FIGS. 3 and 4, the platform can comprise one or more layers of a fabric material, such as, but not limited to, a 500 denier nylon, and/or a sheet or film of other material such as, but not limited to, a plastics film or sheet, optionally as a laminate, of sufficient overall strength and stiffness to hold one or more pouches thereto.

**[0035]** Advantages include a need for less material, and thus less weight, a reduced side profile, ability to provide a smoother face on the profile, and the ability to use prior art pouches such as MOLLE style pouches.

**[0036]** Referring to FIGS. 5 through 20, according to another embodiment of the invention, the platform of the attachment system comprises a back side having a component of a suitable fastening system thereon, such as, but not limited to, a loop pile of a hook and loop fastening system. This can be provided in a layered or

laminated, fused, or glued construction with a suitable face fabric, for example, but not limited to, a 500 denier nylon, and a rear fabric, preferably of a loop pile of a hook and loop fastening system. The platform  
5 will have an array of slits or openings therethrough, preferably, but not limited to, in a pattern as shown.

**[0037]** As an advantage, the slits are adapted for receiving straps of one or more MOLLE or other known system pouches or accessories. The straps can be woven  
10 through the slits and webbing loops on the back side of a pouch or appliance of a MOLLE system for attachment of the MOLLE pouch or appliance to the platform, as shown in FIGS. 11 through 14.

**[0038]** As another aspect of the invention, the system  
15 can include pouches, appliances and the like, having a light weight attachment system. This will preferably include another component of the fastening system, here, one or more tabs having hooks releasably attachable to the loop pile on the back side of the platform. The  
20 tabs are configured to be inserted through the slits of the platform and can have any of a variety of shapes, such as, but not limited to, an elongate strap shape (FIGS. 5, 9, 16, 17, 20), or a V shape (FIGS. 10, 22).

**[0039]** In use, the tabs are inserted into selected  
25 slits, and the hooks thereof attached to loop pile on the back side of the platform. The V shape provides increased holding strength with a shorter overall length. Tabs can be located at the top, bottom, middle, and/or sides of a pouch appliance or other article to be  
30 attached to the platform. As examples, FIGS. 6 and 8 show tabs attached to the top and bottom of a pouch.

**[0040]** FIG. 9 shows the back side of the platform, with top, bottom and middle tabs through respective slots therethrough and attached thereto. It can be  
35 noted that the middle tabs are Y shaped so as to have

two hook surfaces extending in different direction and attached to the loop fabric.

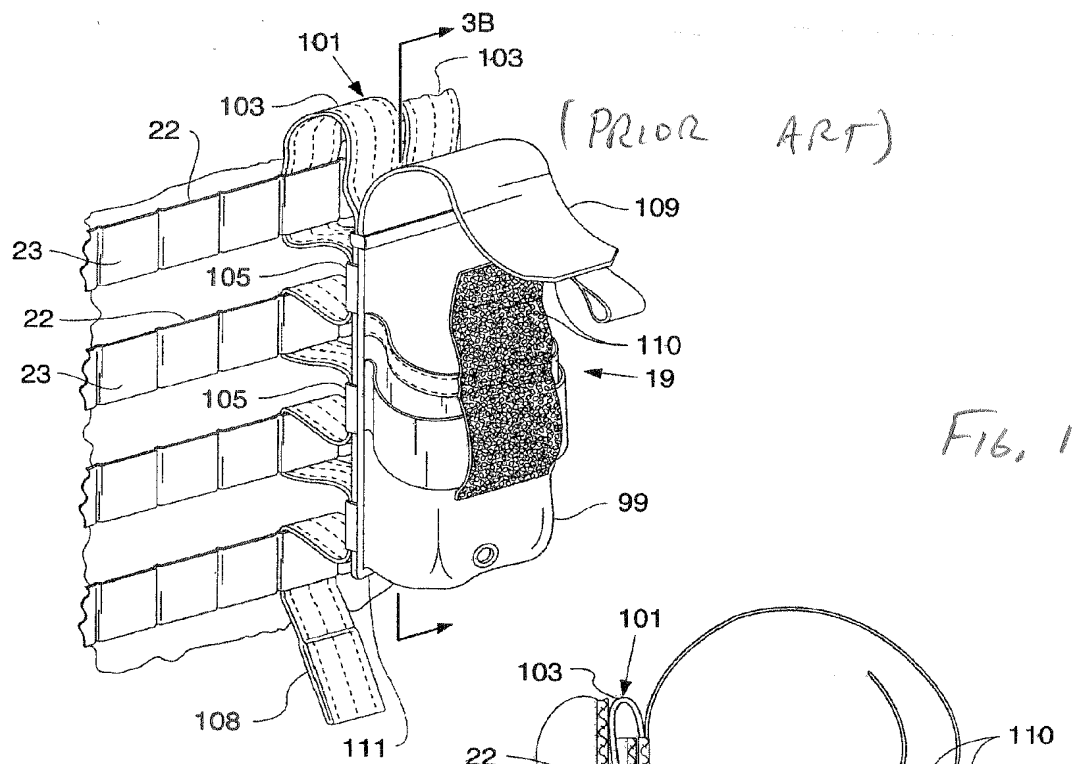
5     **[0041]**     FIG. 10 shows V tabs inserted through slits and attached to the loop fabric back side of the platform.

**[0042]**     FIGS. 11 through 14 illustrate the ability to attach MOLLE style pouches to the platform by a weaving route.

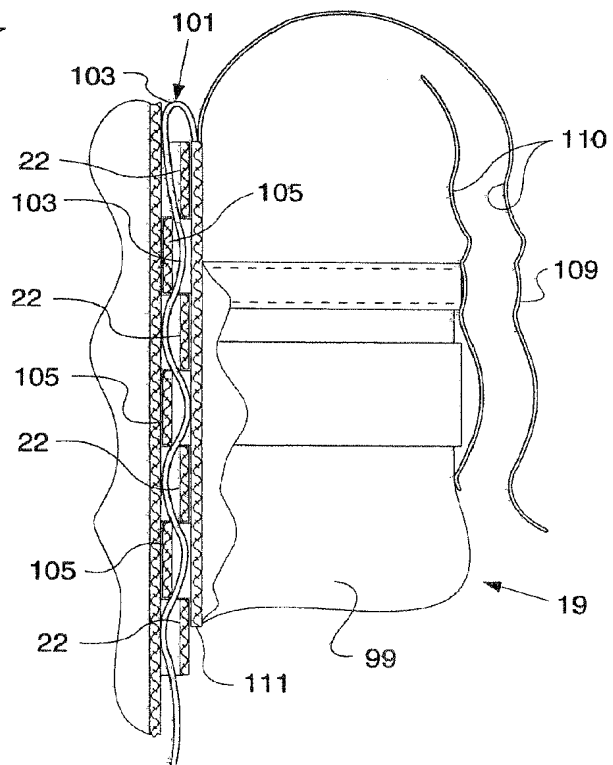
10    **[0043]**     FIGS. 15 through 20 show a light weight pouch with top, bottom, and middle tabs, the middle tabs being Y style for attachment in two directions to the platform.

**[0044]**     FIGS. 21 and 24 show a vest incorporating a platform of the invention, and attachment of a light weight pouch thereto. FIG. 22 shows V tabs of the light weight pouch. FIG. 25 shows two pouches attached to the platform of the vest in the just described manner.

20    **[0045]**     Here, it can be observed that relatively long pouches can be provided with shorter tabs of the invention, for easy attachment and removal, without requiring complex weaving of long straps through loops on both the platform and the pouch itself. The tabs are merely inserted through the selected slots, folded or bent over from the side or another direction, and  
25    attached to the back side of the platform, which is made easy due to the relatively short length of tabs that can be used with good holding strength. The system of the invention also requires less material, is of less weight, and has a reduced profile when viewed from the  
30    side. This allows the face of the platform to be smoother. This embodiment also allows use of existing MOLLE style pouches.



(PRIOR ART)



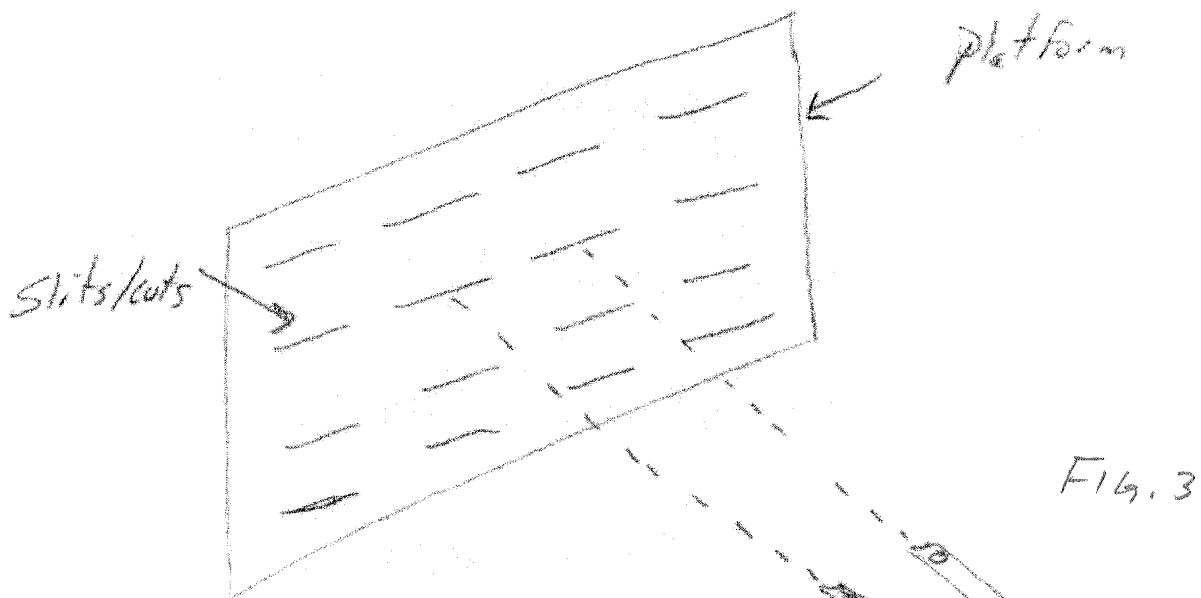


FIG. 3

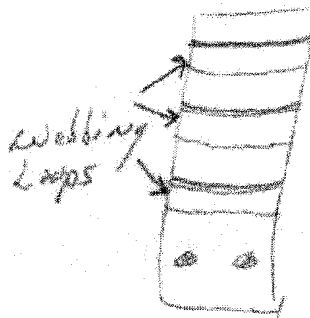


FIG. 4

(PRIOR ART)

Back Rear

Back Front

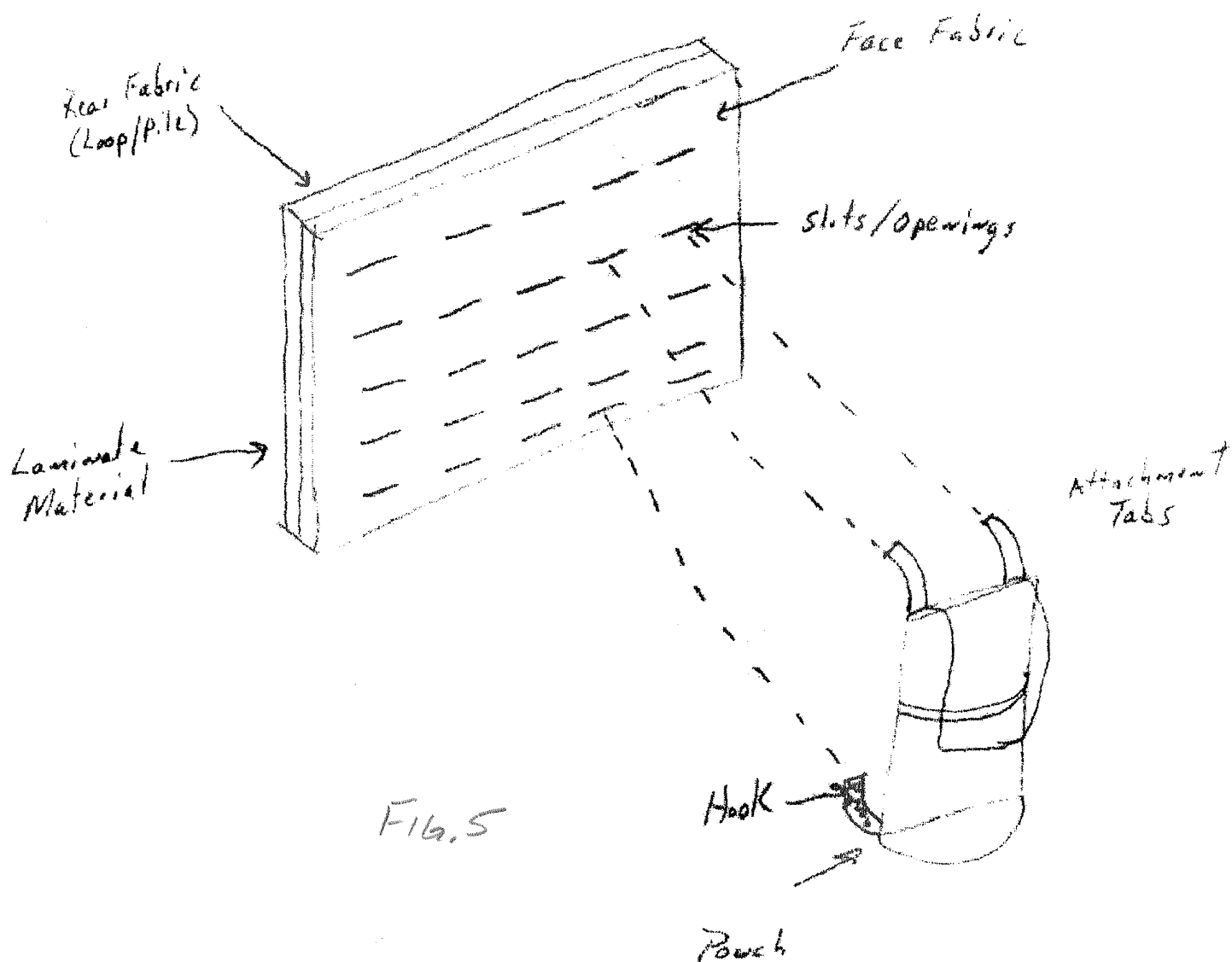


Fig. 6

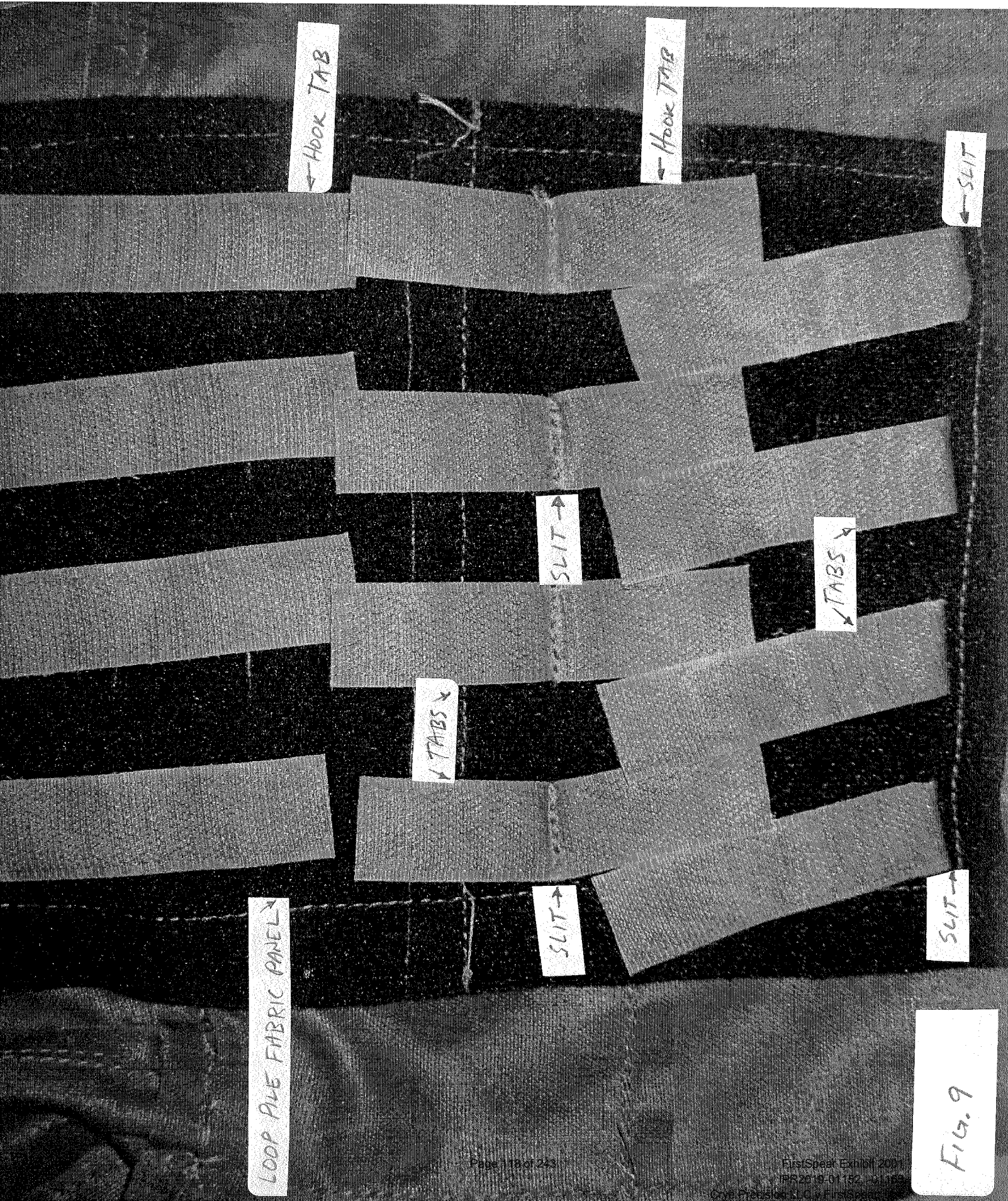


FIG. 7

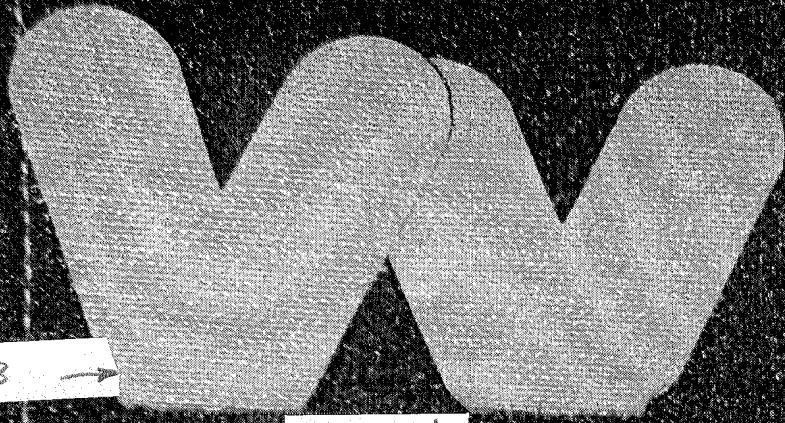


Fig. 8









V TAB →

↑ SLIT ↑

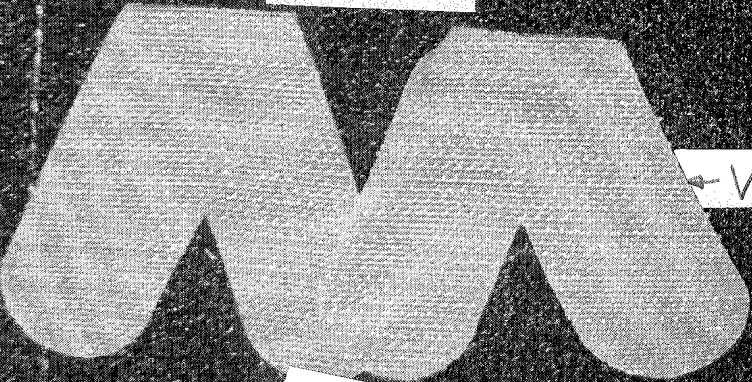
SLIT ↓

SLIT →

↑ SLIT ↑

LOOP PILE FABRIC PANEL

↓ SLIT ↓



← V TAB

↓ SLIT ↓



Standard MOLLE style pouch attached to  
fabric/velcro laminate w/ laser cut slits

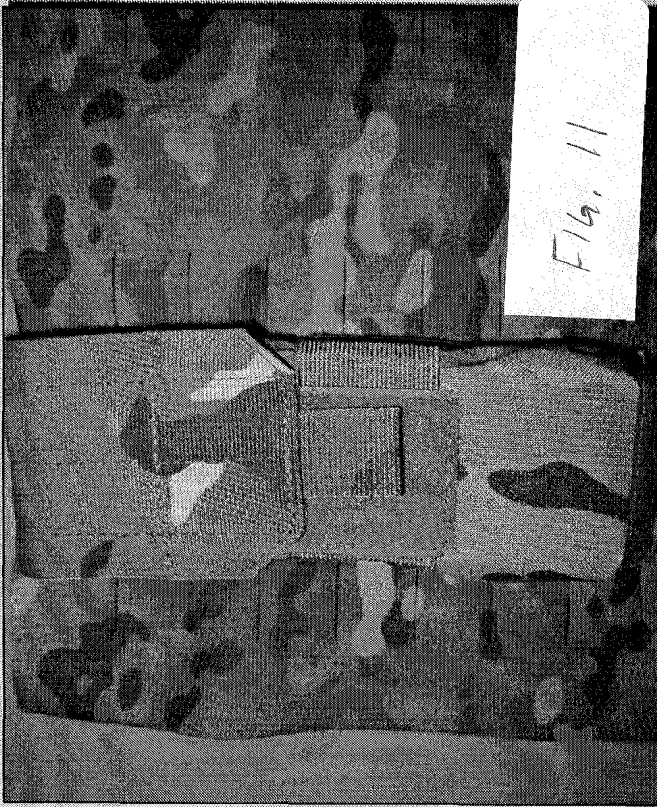


Fig. 11



Fig. 12

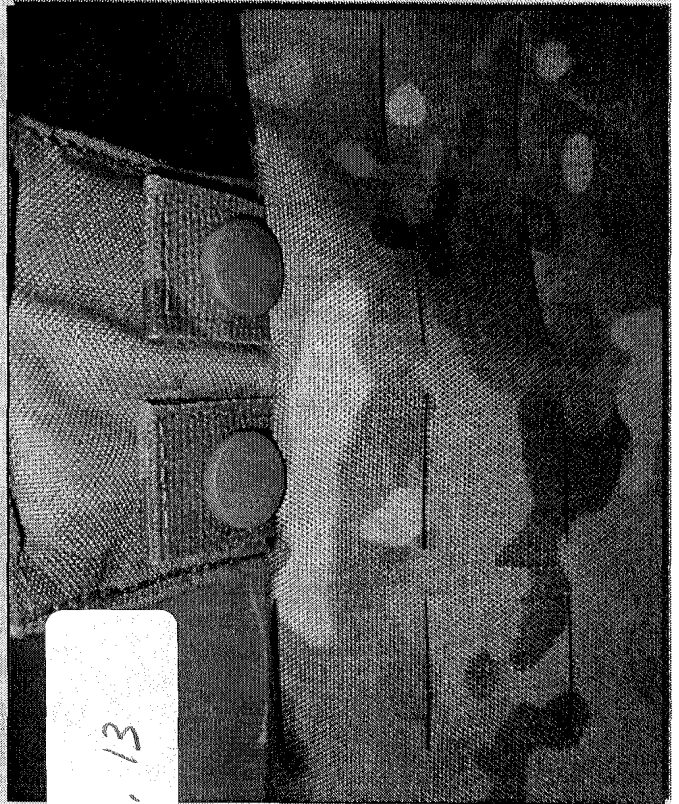


Fig. 13

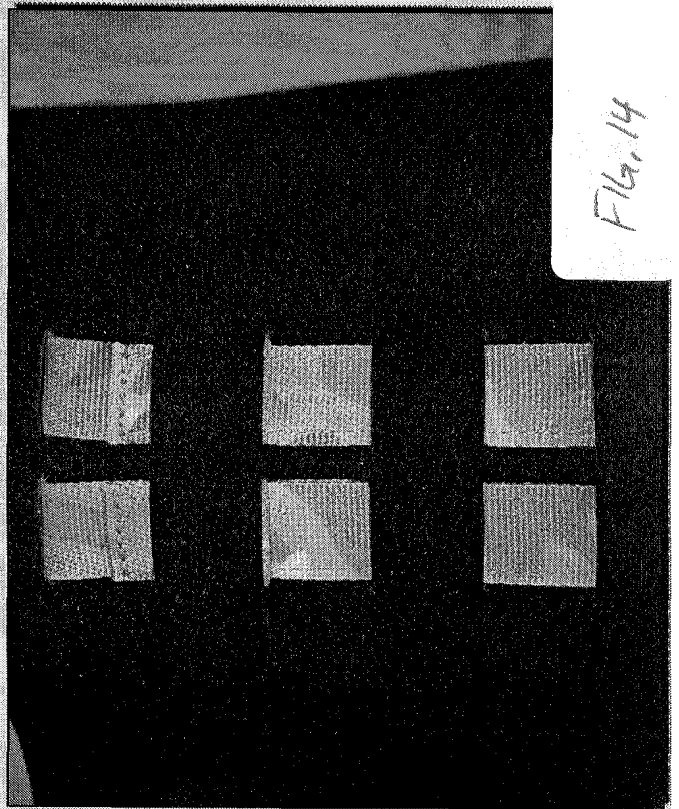


Fig. 14



Lightweight pouch attached to fabric/velcro laminate  
w/ laser cut slits

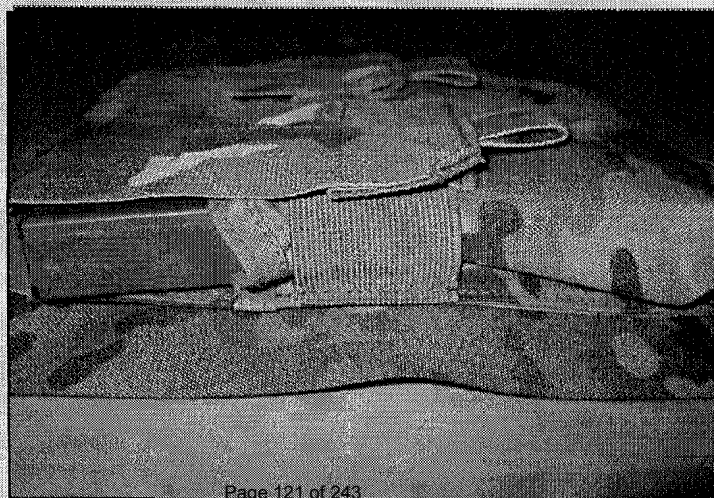


Fig. 15



Fig. 16

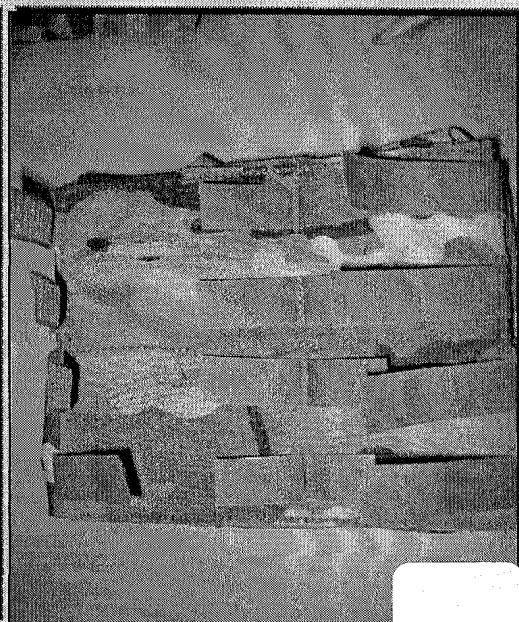


Fig. 17



Fig. 18

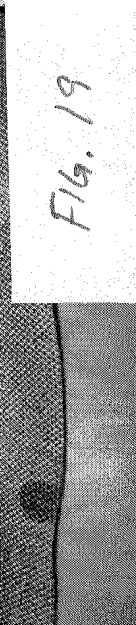


Fig. 19

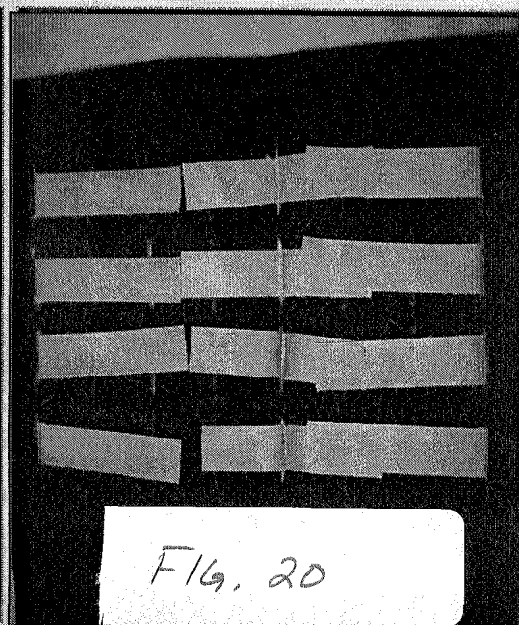


Fig. 20



Side view of standard MOLLE style pouch attached through laser cut slits in 500D nylon w/ loop fabric laminate.



Fig. 21

Rear view of light weight style pouch.

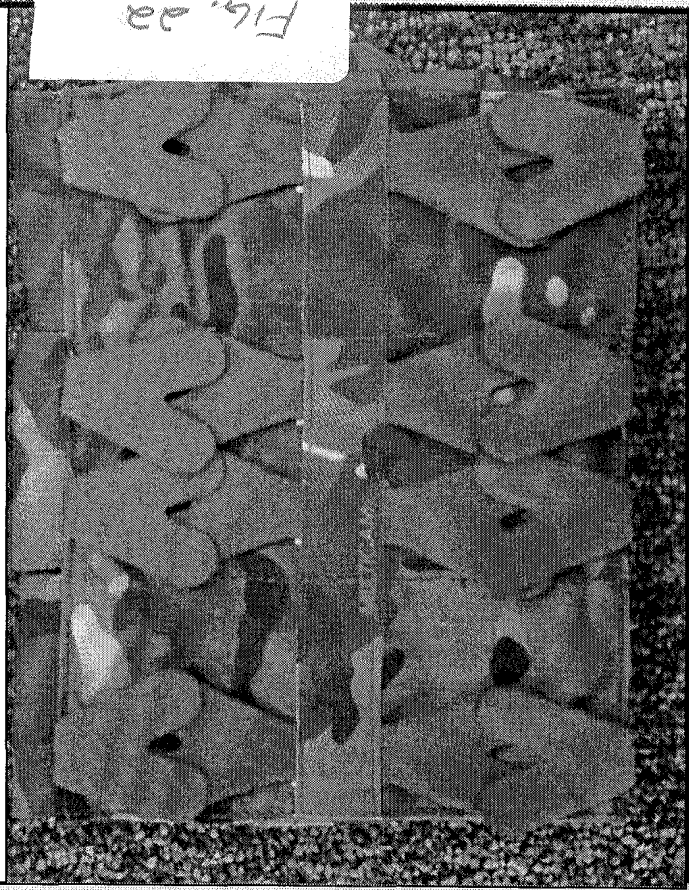


Fig. 22

Side view of light-weight style pouch attached through laser cut slits in 500D nylon w/ loop fabric laminate.

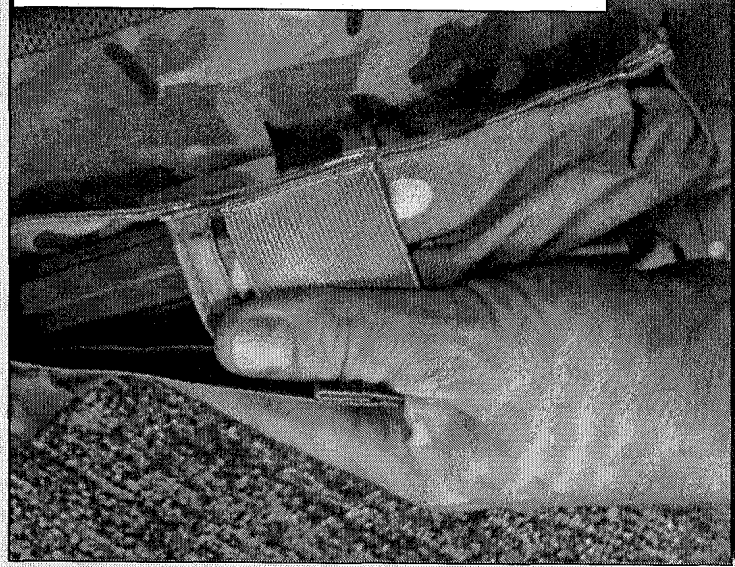


Fig. 23



Vest Front w// laser cut slits in 500D nylon w// w// loop fabric laminate. Standard MOLLE style admmim pouch attached to front.



FIG. 24

Vest Back w// laser cut slits in 500D nylon w// loop fabric laminate. Standard MOLLE style M4 pouch attached (left). Light-weight M4 pouch with velcro-style hook attached (right)

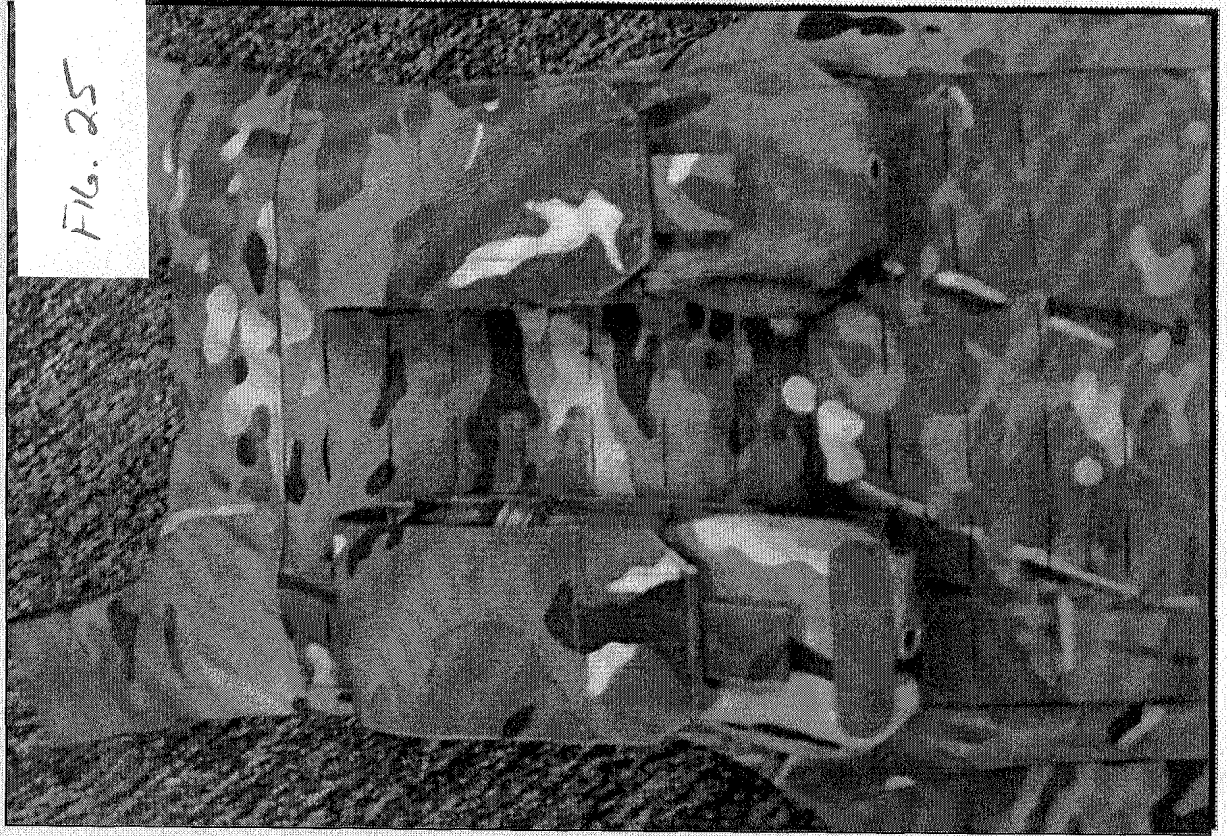


FIG. 25

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	10691742
<b>Application Number:</b>	61521309
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2054
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<b>First Named Inventor/Applicant Name:</b>	Michael E. Cole
<b>Customer Number:</b>	02128
<b>Filer:</b>	Stephen Roy Matthews/Barbara Kuntz
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<b>Attorney Docket Number:</b>	DN 3875 provisional
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IPR2019-01152, -01153



File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Provisional Cover Sheet (SB16)	3875provpatentapplicationcover sheet.pdf	1059789	no	3
			305c2a2a6be9391445503/c6d26be0802ff478e7		
Warnings:					
Information:					
2	Specification	3875provap.pdf	28594	no	7
			8beb09135453458076642cd1ba267578ba25efb09		
Warnings:					
Information:					
3	Drawings-other than black and white line drawings	3875provdwings.pdf	13078403	no	12
			18c8d180e3aeb756fffe576d215c3f76221b0c55		
Warnings:					
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4	Fee Worksheet (SB06)	fee-info.pdf	30029	no	2
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## **DOCUMENT MADE AVAILABLE UNDER THE PATENT COOPERATION TREATY (PCT)**

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Claims

What is claimed is:

1           1.    An attachment system, comprising:  
2           a platform having a front side, an opposite  
3 back side, and a plurality of slits through the platform  
4 arranged in a predetermined pattern of vertically  
5 aligned and spaced apart rows, configured for receiving  
6 elements for attaching at least one holder to the  
7 platform, wherein the platform is supported by and  
8 comprises an element of a carrier configured to be worn  
9 on a user's body for carrying the at least one holder at  
10 a desired location on the user's body;  
11          characterized by the back side of the platform  
12 including a fastening component of a hook and loop  
13 fastening system thereon adjacent to the slits and being  
14 disposed in opposing relation to a surface of the  
15 carrier or a backing element forming a generally flat  
16 cavity therebetween, the platform and the carrier or  
17 backing element having generally coextensive peripheral  
18 edge portions bounding and substantially enclosing the  
19 flat cavity providing a barrier to entry of particulates  
20 thereabout, at least one of the coextensive edge  
21 portions being openable to allow insertion of fingers of  
22 a hand into the flat cavity, and the slits being defined  
23 and bound by opposing edges, respectively, disposed  
24 sufficiently close together when in a free state,  
25 providing a barrier to passage of particulates  
26 therebetween.

1           2.    The attachment system of claim 1, wherein  
2 the fastening component of the hook and loop fastening  
3 system comprises a loop pile fabric.

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1                   3.    The attachment system of claim 2, wherein  
2   the front side of the platform comprises a woven or a  
3   non-woven fabric.

1                   4.    The attachment system of claim 3, wherein  
2   the loop pile fabric and the woven fabric are laminated,  
3   adhered, or fused together, or comprise a composite of a  
4   smooth fabric on one surface and a pile fabric on an  
5   opposite surface.

1                   5.    The attachment system of claim 3, wherein  
2   each of the edges bounding the slits comprises a  
3   hardened fusion of the loop pile fabric and the woven  
4   fabric.

1                   6.    The attachment system of claim 5, wherein  
2   the edges are laser fused.

1                   7.    The attachment system of claim 5, further  
2   comprising a holder including at least one tab having  
3   hook components of the hook and loop fastening system  
4   thereon, and wherein the edges bounding the slits are  
5   sufficiently resiliently flexible to allow passage of  
6   the tabs therethrough, respectively, for fastening to  
7   the loop pile fabric while biasing against the tabs  
8   forming a barrier to passage of particulates thereabout,  
9   respectively.

1                   8.    The attachment system of claim 7, wherein  
2   the tab has a V shape.

1                   9.    The attachment system of claim 1,  
2   comprising a holder including at least one tab extending  
3   therefrom having a free end portion including a  
4   fastening component of a hook and loop fastening system

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5 thereon attachable to the fastening component of the  
6 hook and loop fastening system on the back side of the  
7 platform, the at least one tab being sized for insertion  
8 through any of the slits, respectively, such that edges  
9 of the platform bounding the slit will contact the tab  
10 forming a barrier to passage of particulates thereabout.

1           10. The attachment system of claim 9, wherein  
2 the holder comprises a pouch.

1           11. The attachment system of claim 9, wherein  
2 the carrier comprises a vest, a cummerbund, or a  
3 component of a cummerbund or a vest.

1           12. The attachment system of claim 9, wherein  
2 the tab has a V shape.

1           13. The attachment system of claim 1, wherein  
2 adjacent ones of the rows of slits are spaced a  
3 predetermined distance apart, and the at least one tab  
4 has a length equal to about twice the predetermined  
5 distance or less.

1           14. An attachment system for removably  
2 attaching at least one holder to a carrier configured  
3 for wear on a human body, the carrier having at least  
4 one outer surface oriented to face away from a body on  
5 which the carrier is worn, the attachment system  
6 comprising:  
7           a platform supported in an upstanding  
8 orientation on the carrier in covering relation to at  
9 least a portion of the outer surface of the carrier to  
10 bound and enclose a generally flat cavity therebetween,  
11 the platform having a front side facing outwardly, an  
12 opposite back side facing the cavity, and a plurality of

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13 slits through the platform arranged in a predetermined  
14 pattern of vertically aligned and spaced apart rows, the  
15 back side including a fastening component of a hook and  
16 loop fastening system thereon adjacent to the slits;  
17 at least one holder configured for holding an  
18 article or object, having at least one flat, flexible  
19 tab extending therefrom including a fastening component  
20 of a hook and loop fastening system thereon attachable  
21 to the fastening component of the back side of the  
22 platform, the at least one tab being configured for  
23 passage through any of the slots, respectively, into the  
24 flat cavity, for attaching the fastening component  
25 thereof to the fastening component on the back side, for  
26 releasably securing the holder adjacent to the front  
27 side of the platform.

1 15. The attachment system of claim 14,  
2 wherein the fastening component on the back side of the  
3 platform comprises a loop pile fabric.

1 16. The attachment system of claim 15,  
2 wherein the front side of the platform comprises a woven  
3 or non-woven fabric attached to the loop pile fabric.

1 17. The attachment system of claim 16,  
2 wherein the loop pile fabric and the woven or non-woven  
3 fabric are attached by lamination, adhesive, or fusion,  
4 or comprise a composite of a smooth fabric on one  
5 surface and a pile fabric on an opposite surface.

1 18. The attachment system of claim 16,  
2 wherein each of the slits is bound by opposing edges of  
3 the loop pile fabric and the woven fabric fused  
4 together.

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1           19. The attachment system of claim 14,  
2   wherein the at least one tab has a V shape.

1           20. The attachment system of claim 19,  
2   wherein the holder comprises a pouch and includes a  
3   plurality of the V shape tabs at spaced locations  
4   therealong.

1           21. An attachment system for supporting  
2   holders on a carrier, including a generally vertical  
3   platform including a front side having a plurality of  
4   slits arranged in a predetermined pattern of vertically  
5   aligned and spaced apart rows, configured for receiving  
6   one or more elongate straps in a vertical interlocking  
7   manner for supporting a holder against the front side,  
8           characterized by the front side being  
9   substantially smooth, the platform having a back side  
10   opposite the front side and opposing a surface of the  
11   carrier enclosing a generally flat pocket therebetween  
12   generally coextensive with the platform, a closure along  
13   an edge of the platform for preventing entry of  
14   particulates into the pocket and configured to be  
15   openable sufficiently to allow insertion of at least  
16   fingers of a hand into the cavity therethrough, and the  
17   slits extending through the platform to the cavity and  
18   being defined and bounded by edges configured as a  
19   barrier to passage of particulates through the slits  
20   while allowing passage of flat straps therethrough for  
21   interlockingly securing a holder against the front side  
22   and maintaining the barrier to passage of particulates  
23   through the slits about the straps, and the back side of  
24   the platform at least partially comprising a first  
25   fastening component of a hook and loop fastening system.

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1                   22. The attachment system of claim 21,  
2 further characterized by at least one holder supported  
3 adjacent to the front side of the platform by at least  
4 one substantially flat, flexible tab extending through  
5 one of the slits with the edges defining the slit  
6 maintaining the barrier about the tab, and the tab  
7 having a second fastening component of a hook and loop  
8 fastening system attached to the second fastening  
9 component in the pocket securing the holder to the  
10 platform.

1                   23. The attachment system of claim 22,  
2 wherein the second fastening component is detachable  
3 from the first component by opening the closure and  
4 inserting fingers into the pocket for grasping and  
5 detaching the fastening components.





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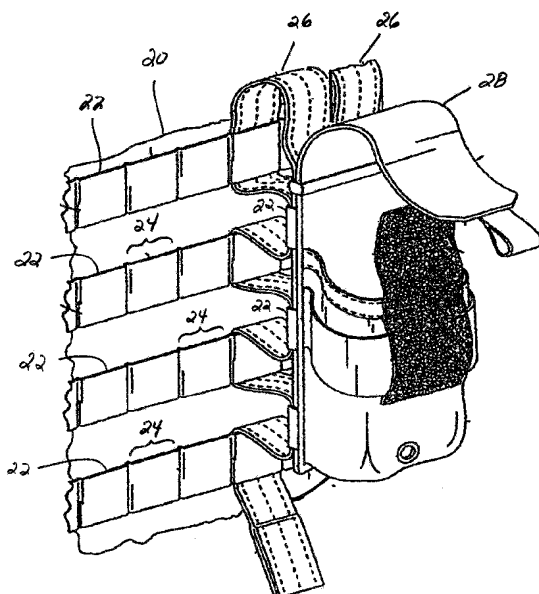
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[Continued on next page]

(54) Title: LIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM AND METHOD



PRIOR ART

(57) Abstract: An attachment system for supporting holders on a carrier, including a platform with a front side having slits in a pattern of vertically aligned and spaced apart rows, for receiving one or more elongate straps in a vertical interlocking manner for supporting a holder against the front side, a back side opposing a surface of the carrier enclosing a generally flat pocket, the slits extending through the platform, defined and bounded by edges cooperable to form a barrier to passage of particulates through the slits while allowing passage of flat straps or tabs for interlockingly securing a holder against the front side and maintaining the barrier to passage of particulates through the slits about the straps, and the back side of the platform including a first fastening component of a hook and loop fastening system and the tabs including a second component fastenable to the first to secure the tabs.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *of inventorship (Rule 4.17(iv))*

**Declarations under Rule 4.17:**

**Published:**

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— *with international search report (Art. 21(3))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

-1-

DescriptionLIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM AND METHOD

5   **[0001]**       This application claims the benefit of U.S. Provisional Application No. 61/521,309, filed August 8, 2011.

Technical Field

10   **[0002]**       The present invention relates generally to a system and method for removably attaching pouches and other accessories to a carrier, such as a vest or other garment, or other device, and more particularly, which is light weight, non-metallic, resists accumulation of,  
15   and degradation of operation from, particulates such as dirt dust and the like, is quiet in operation, and is compatible with some known systems.

Background Art

20   **[0003]**       The disclosure of U.S. Provisional Application No. 61/521,309, filed August 8, 2011, is hereby incorporated herein in its entirety by reference.

**[0004]**       Modular pouch attachment systems and methods for carrier garments, hereinafter sometimes referred to  
25   by the term carrier or carriers, such as, but not limited to, vests, cummerbunds, belts, and the like, for carrying holders such as, but not limited to, pouches for holding items and accessories on a person's body, are well known. Advantages include an ability to attach  
30   pouches and accessories to a platform and easily remove them; rearrange or configure them; and exchange for other pouches or accessories.

**[0005]**       Reference, Kirk et al., U.S. Patent No. 5,724,707, issued on March 10, 1998; and Johnson, U.S.  
35   Patent No. 7,047,570, issued on May 23, 2006, which show representative commercially available pouch attachment

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systems and methods. Typically, as shown in FIGS. 3A and 3B of the 7,047,570 patent, reproduced here as FIGS. 1 and 2, such known systems utilize one or more elongate woven webs or straps, sewn or otherwise affixed to at  
5 longitudinally spaced locations to a panel comprising fabric layers, forming a side by side pattern of loops. If multiple webs or straps are used, they are laterally spaced apart, e.g., vertically, so as to extend horizontally across a surface of the garment or other  
10 device, at vertically spaced intervals, such that the loops of the webs will be vertically aligned. A pouch or other accessory will include one or more elongate straps configured to be inserted through the aligned loops. The straps will typically each be attached at  
15 one end to the pouch or accessory, and have an opposite free end. The backside of the pouch or other accessory will typically include additional loops positioned to be disposed in alternating relation to the loops on the panel, such that the straps can be alternately woven  
20 through the loops on the panel and the back of the pouch or accessory, for attaching the pouch or accessory to the panel. The free end of the attachment straps can then be secured, using a snap, hook and loop fastener, or the like, to the back of the pouch or accessory.

25 **[0006]** Stated advantages in U.S. Patent No. 5,724,707 of the known pouch attachment systems such as just discussed, include that they are light weight, quiet to use, and stronger than earlier known systems, including known systems using hook and loop type fasteners.

30 Shortcomings of hook and loop fasteners mentioned in U.S. Patent No. 5,724,707 include heavy weight, noisiness, low strength, and failure under dirty and dusty conditions. Although past known carriers utilizing hook and loop fasteners have suffered from  
35 these disadvantages, inherent advantages of hook and

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loop fasteners such as ease and familiarity of use, and non-metallic construction, still make them attractive. The non-metallic attribute is particularly desirable for military applications wherein the carrier is subject to explosions which can cause metallic objects to fragment and possibly injure wearers. As a result, it is still sought to find a manner of use hook and loop type fasteners for attachment of holders and the like, particularly for military carrier applications.

10 **[0007]** Therefore, what is sought is an attachment system and method that utilizes the advantageous attributes of hook and loop fastening systems, but which overcomes one or more of the known disadvantages thereof, set forth above.

15

#### Summary Of The Invention

**[0008]** What is disclosed is an attachment system and method for carrier garments such as, but not limited to, vests, cummerbunds, belts, shirts, jackets, pants, and the like, that utilizes the advantageous attributes of hook and loop fastening systems, but which overcomes one or more of the known disadvantages thereof set forth above.

25 **[0009]** According to a preferred aspect of the invention, the attachment system utilizes a platform having a front side, an opposite back side, and a plurality of slits through the platform arranged in a predetermined pattern of vertically aligned and spaced apart rows, configured for receiving elements for attaching at least one holder to the platform. As a non-limiting example, adjacent ones of the slits can be spaced vertically apart to correspond to the vertical spacing of loops of currently used MOLLE systems. The platform is supported by and comprises an element of, an attachment or accessory to, a carrier configured to be

35

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worn on a user's body, for carrying at least one holder at a desired location on the user's body, e.g., front, back, or side. The platform can be permanently affixed, e.g., by stitching, or incorporated into the carrier, or  
5 removably attached, e.g., via hook and loop fasteners, belts, snaps, zippers, or the like, in covering relation to an outwardly facing surface of the carrier or a backing element such as, but not limited to, a fabric layer or sheet.

10 **[0010]** According to another aspect of the invention, a back side of the platform faces and covers the outer surface of the carrier or backing element and includes a first fastening component of a hook and loop fastening system thereon adjacent to, e.g., around or beside, the  
15 slits, and disposed in opposing relation to the carrier or backing element surface. This forms a generally flat pocket or cavity between the opposing surface and the back side, into which a user can insert his or her fingers for attaching and detaching objects to/from the  
20 fastening component, and/or weaving straps through the slits. This is advantageous as the carrier surface or backing element protects the component of the hook and loop fastener, and with the fastener component located on the back side and in the pocket or cavity, noise  
25 generated when detaching from the fastener is contained and muted or muffled so as to be suitable for applications where silence when configuring the system, e.g., adding, removing, moving holders, is required. Also preferably, the platform and the carrier or backing  
30 element have generally coextensive peripheral edge portions bounding and at least substantially or effectively enclosing the flat pocket or cavity behind the platform, providing a cover or barrier to entry of particulates such as dirt and dust into the cavity.  
35 Operationally, at least one of the coextensive edge

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portions is open or openable, e.g., via a hook and loop fastening system, buttons, overlapping flaps, etc., to allow the insertion of at least fingers of a hand into the cavity for attaching, detaching, weaving, etc.. In this latter regard, the platform can have any required extent, e.g., the height and width of a person's midsection or chest, and the opening or openings should be sufficiently large and/or positioned to enable a person to reach a desired location within the cavity for attaching and detaching straps or tabs extending through any of the slits.

**[0011]** Each of the slits through the platform is defined and bound by opposing edges, respectively, disposed sufficiently close together when in a free state, to provide an effective barrier to prevent or substantially reduce passage of particulates such as dust and dirt to the fastening system component on the back side of the platform. As a result of this and the enclosing of the pocket or cavity behind the platform, degradation of operation of the fastening system component from accumulated particulate contaminants, e.g., dirt and dust, is sufficiently limited to allow usage of the carrier for intended uses and durations of use, such as military missions.

**[0012]** According to another preferred aspect of the invention, the first fastening component located on the back side of the platform comprises a loop pile fabric layer, which can be of commercially available composition and construction such as available under the trademark "Velcro". The front side can comprise a woven fabric such as a nylon or the like, which is preferably non-stretch, and the fabric layers are joined together by lamination using adhesives, gluing, or fusion. As another preferred aspect, the fabric layers comprising the edges bounding the slits are fused together, e.g.,

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using a laser cutting process for forming the slits, so as to be hardened but at least semi-flexible to allow insertion of flat straps and tabs through the slits, and such that the edges will not fray or wear significantly under expected use. Also preferably, the edges will have sufficient resilient flexibility so as to be capable of conforming at least generally about anticipated items to extend through the slits such as straps or flat tabs that may be attached to the fastening system component within the pocket.

**[0013]** According to another preferred aspect of the invention, the system includes at least one holder including at least one tab having a second component of the hook and loop fastening system thereon, e.g., hooks for use with the pile loop fabric, such as commercially available under the trade name "Velcro". The tabs are substantially flat, so as to be easily insertable through the slits, and a user can position and attach the tabs to the back side of the platform using fingers inserted into the pocket or cavity behind the platform. Similarly, the user can insert the fingers into the pocket to detach the tabs to allow removal or repositioning of the holder.

**[0014]** The tabs attached to the holders can be straight and sized for passage through the slits, or can be V shape, in which case they can be folded or bent as required to pass through the slits and attach to the back side. In this regard, as another advantage of one embodiment of the tabs, they are relatively short, for instance, but not limited to, not exceeding the vertical distance between two adjacent slits of the pattern, even for holders that have a length equal to the distance between 4, 6, or more slits. The tabs can be constructed of a thin nylon film, and with the short length, this provides substantially reduced weight



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compared to the much longer conventional heavy nylon fabric MOLLE straps. For strength, when inserted through the slits, the tabs are bent over for attachment to the back side, so that the hook and loop fasteners are loaded in shear, and are not subject to direct pulling away from the back side of the platform. The V shape tabs are advantageous in this regard as they provide up to double the attachment capability in a still relatively short, lightweight tab.

5 [0015] As another advantage, the tabs of the present system can be merely inserted through the slits and attached to the back side of the platform, whereas a MOLLE strap would be woven through interlocking loops on both the platform and back of the holder. For longer holders, the short tabs can be provided at spaced locations along the length of the holder, and are insertable and attachable through correspondingly located slits of the platform. The slits are also configured and sized to accommodate multiple tabs, so that a holder can be attached to the platform both above and below a particular slit. This results in an attachment capability that requires less time and is easier to do in the dark and when relying on feel or gloves are used, compared to conventional MOLLE systems. Also, because loops on the back of holders are eliminated, additional weight advantage is achieved.

15 [0016] As an alternative, the tabs can be provided in a length comparable to that of a conventional MOLLE strap, and the back side of a holder can include slits also, to allow weaving and interlocking the holder to the platform using the longer tabs, which will have the second component of the hook and loop fastening system only at an appropriate location on the ends of the tabs. Alternatively, an enlarged tuck tab can be provided on the end of the longer tab, and the tuck tab inserted

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into an adjacent slit on either the platform or the holder, to secure the holder. In this embodiment, another advantage achieved is that this attachment system can be backwards compatible with existing MOLLE platforms, enabling using the holders with both the platform of the invention and MOLLE platforms.

**[0017]** As another preferred aspect of the invention, the edges bounding the slits of the platform are sufficiently resiliently flexible to allow passage of the tabs therethrough, respectively, for fastening to the loop pile fabric while biasing against the tabs forming at least a partial barrier to passage of particulates thereabout, to further prevent degradation of the hook and loop fastening system. In this regard, the lack of stretch and manner of attachment of the platform allows it to support a relatively large number of holders without pulling away from the supporting carrier, while being sufficiently flexible to accommodate normal body movements such as twisting and bending of the wearer.

**[0018]** As another advantage of the attachment system of the invention, the tightness of attachment of a holder to the platform is a function of the location of attachment of the tabs to the back side. The tabs can be attached to the back side of the platform tightly with little slack, in a manner so as to limit or prevent relative movements of the holder relative to the platform, which may be desirable for some applications wherein low noise is desired or required, or, if desired, with slack to loosely hold the holder to the front side.

**[0019]** As another preferred aspect of the invention, representative holders contemplated for use with the invention include pouches for carrying batteries for electronic equipment, magazines for ammunition and

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weapons, radio, medical, clothing, food, and the like and the pouch portion of the holder can be of conventional fabric construction. Because weaving of straps through loops on the platform is not necessary, loops on the back of the holder can be eliminated, resulting in significant weight saving without loss of carrying capability or other performance. If desired, the back side of the holders can include a mating pattern of slits to allow interweaving of the tabs between the platform and holder, or the use of separate MOLLE style straps for attachment, if desired.

**[0020]** As a hybrid embodiment of the system of the invention for use with conventional MOLLE straps, the slits are provided on a backing element which includes the second component of the hook and loop fastening system. The backing element is attached to the back side of the platform using the hook and loop fastening system, and the MOLLE straps are inserted through the slits and either pass over the front side of the platform or the back of the backing element, for securing the attached holder to the platform. This embodiment is particularly useful for vertically narrower applications such as belts, and allows carrying longer MOLLE holders such as magazine pouches, on a narrow belt, without relative shifting and movement.

#### Brief Description Of The Drawings

**[0021]** FIG. 1 is a fragmentary perspective view of a prior art attachment system, showing a MOLLE style pouch;

**[0022]** FIG. 2 is a fragmentary sectional view of the attachment system and pouch of FIG. 1;

**[0023]** FIG. 3 is an exploded perspective view of one embodiment of an attachment system of the invention

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showing a representative holder of the system which is a pouch;

**[0024]** FIG. 4 is a rearview of a standard MOLLE style pouch for use with the system of FIG. 3;

5 **[0025]** FIG. 5 is an exploded perspective view of another embodiment of an attachment system of the invention, including attachment tabs having hooks of a hook and loop system thereon and a rear fabric of loop pile on a back side of a platform of the system;

10 **[0026]** FIG. 6 is an enlarged view of a pouch of the attachment system of FIG. 5 having additional tabs;

**[0027]** FIG. 7 shows tabs of the pouch of FIG. 6 being inserted through slits of the platform of FIG. 5, shown in place on a representative carrier, and insertion of  
15 fingers behind the platform for attaching the tabs to the back side of the platform;

**[0028]** FIG. 8 is another enlargement of the system of FIGS. 6 and 7, showing tabs of pouches inserted through slits of the platform and hooks of the tabs attached to  
20 pile on the back side;

**[0029]** FIG. 9 is fragmentary perspective view of a carrier incorporating the attachment system of the invention, showing two holders attached to the front side of the platform of the system;

25 **[0030]** FIG. 10 is fragmentary side view of a representative platform of the system of FIGS. 5 and 6, showing one manner of attachment of tabs, illustrating a tight fit;

**[0031]** FIG. 11 is fragmentary side view of a  
30 representative platform of the system of FIGS. 5 and 6, showing another manner of attachment of tabs, illustrating a loose fit;

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[0032] FIG. 12 is a rear view of a holder of the system of the invention, showing alternative V shape tabs;

5 [0033] FIG. 13 is a rear view of a platform of the system showing the V shape tabs of FIG. 12 inserted through slits of the platform and having hooks attached to loop pile on the back side of the platform;

[0034] FIG. 14 is a front view of a platform of the system of the invention on a representative carrier,  
10 showing representative holders attached thereto by passage of tabs on the backs of the holders through slits of the platform of the system;

[0035] FIG. 15 is a side view of a platform of the system, showing a pouch having longer tabs such as  
15 illustrated in FIG. 3, woven through the slits and attached to the platform by the hook and loop fasteners on the end of the tabs;

[0036] FIG. 16 is a front view of the platform and pouch of FIG. 15;

20 [0037] FIG. 17 is a rear view of the platform and tabs of FIG. 15, weaving and attachment of the tabs;

[0038] FIG. 18 is a side view of a platform of the system of the invention, showing attachment of an alternative holder having an elongate tab with a tuck  
25 tab on the end; and

[0039] FIG. 19 is a side assembly view of an alternative embodiment of the invention having slits on a removable backing element attachable to a platform of the invention, and weaving of a conventional MOLLE style  
30 strap through the slits for attachment of a pouch to the platform.

#### Detailed Description Of The Invention

[0040] Referring to the drawings, in FIGS. 1, 2 and  
35 4, elements of a conventional prior art MOLLE style

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attachment system are illustrated. Essentially, the system includes a panel 20 on which straps 22 are sewn or otherwise affixed at longitudinally spaced locations forming a side by side pattern of vertically aligned loops 24. Elongate straps 26 attached to a holder 28, which here is illustrated as a pouch, are interlocked or woven through vertically aligned ones of loops 24 on panel 20, and straps 22 on the back side of holder 28 to attach the holder to panel 20. A fastener, e.g., a snap or button, is often provided on the end of the elongate strap 26 for attachment to an associated fastener on the holder. As discussed above, straps 22 and 26 are relatively heavy, and this weaving and interlocking process is time consuming and requires dexterity. For this and other reasons, an alternative to the widely used MOLLE system is desired.

**[0041]** Referring to FIGS. 3, 5, and 6 through 13, and improved attachment system 32, constructed and operable according to the teachings of the present invention, which can be constructed in a more light weight manner and has other advantages compared to known MOLLE systems, is shown.

**[0042]** Referring to FIGS. 3 and 5, a first embodiment of system 32 of the invention is shown, including a platform 34 which eliminates webbing straps and their associated weight. The platform 34 accomplishes this by comprising a pattern of cuts or slits 36 therethrough arranged in a vertically spaced pattern, at locations generally corresponding to be locations and spacings of the loops of a conventional prior art MOLLE style attachment system as shown in FIGS. 1, 2 and 4. As will be discussed, this provides the advantage of enabling use with various holders, e.g., pouch or accessory, of those prior art systems which are in wide spread use.

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**[0043]** Essentially, according to steps of a method of the invention, straps 26 of a MOLLE style holder would be interlocked and woven through the slits 36 of the platform 34 of present system 32, by being inserted through selected upper slits 36 of the platform 34 to the back side of the platform, then inserted through selected lower slits 36 of the platform to the front side thereof, then through webbing straps 22 or loops on the back side of the pouch or accessory. The straps 26 can then be inserted through still lower slits 36 of the platform to the back side, then through still lower slits 36 to the front side, and through webbing loops on the back side of the pouch or accessory, for further attachment, one or more additional times, depending on the length of the straps and platform, and available number of slits. The free end of the straps 26 can then be attached to the back side of the pouch or accessory, using snaps, hook and loop fasteners, or other means provided.

**[0044]** As a preferred aspect of the system of the invention of FIGS. 3 and 5, as illustrated in FIG. 5, the platform 34 can comprise one or more layers of a fabric material, such as, but not limited to, a 500 denier nylon, and/or a sheet or film of other material such as, but not limited to, a plastics film or sheet, e.g., a synthetic rubber compound such as a chloroprene or polychloroprene commercially available from DuPont under the trade name Neoprene, optionally as a laminate, of sufficient overall strength to hold one or more holders such as pouches thereto, while being sufficiently flexible to move with the body of a wearer, such as to accommodate bending and twisting of the torso of the body. For this purpose, at least layer 42 is of a strong material which does not stretch significantly under anticipated loads exerted thereagainst. Other

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exemplary materials that can be used providing the desired properties can include, but are not limited to, a woven or knitted nylon fabric; woven or knitted loop fabric; woven or knitted polyester fabric; woven or  
5 knitted par-aramid synthetic fiber fabric, e.g., such as commercially available under the trade name Kevlar; woven or knitted ultra-high-molecular-weight polyethylene, e.g., such as commercially available under the trade names Dyneema and Spectra; and non-woven para-  
10 aramid nylon, a non-woven polyethylene, or other non-woven composition fabric. The lamination can be accomplished in any suitable manner, such as, but not limited to, using a laminating adhesive such as a curable polyurethane applied from water or hot melt. As  
15 another alternative, platform 34 can comprise a single composite fabric having a smooth face for the front surface, and a loop pile or hook component of a hook and loop fastening system for the back surface.

**[0045]** The slits 36 can be formed in any manner  
20 suitable for the anticipated application, as a non-limiting example, by knife or die cutting, using a button hole machine, or more preferably, by laser cutting. In regard to laser cutting, an advantage achieved is that the edges 38 and 40 (FIG. 7) of the  
25 laminated layers bounding and defining the slits 36 can be fused together, to increase stiffness and reduce sagging, reduce or eliminate fraying, and increase wear and abrasion resistance at that location, while still being sufficiently pliable or bendable to facilitate  
30 opening and insertion of a strap, or a tab of the invention to be discussed, therethrough. As an additional advantage, edges 38 and 40 can be cut so as to be very closely or intimately spaced, to serve as a barrier to entry or passage of particulate contaminants  
35 such as dust and dirt through the slits, to reduce



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accumulation of the contaminants in an area behind the platform. And, the edges 38 and 40 can be constructed so as to at least generally conform or bias itself about a strap or tab inserted therethrough, so as to maintain the barrier against penetration of particulates when in use.

**[0046]** Additional advantages of the attachment system of the invention include a need for less material, and thus less weight, a reduced side profile, ability to provide a smoother face on the profile of platform 34, and the illustrated ability to use prior art holders such as MOLLE style pouches.

**[0047]** Referring more particularly to FIGS. 8 and 13, platform 34 of the attachment system 32 comprises a back side 48 having a first component of a suitable fastening system thereon, such as, but not limited to, a loop pile fabric 48 of a hook and loop fastening system such as available under the trademark Velcro. This can be provided as layer 44 in a layered or laminated, fused, glued, or composite construction with a suitable face fabric layer 42, for example, but not limited to, a 500 denier nylon, on a front side 50 of platform 34. Additionally, one or more intermediate layers can be provided, such as a non-woven layer of a non-stretchable material to provide added strength and shape retention, if desired.

**[0048]** As another aspect of the invention, the system 32 of the invention can include holders 52, in the form of pouches, appliances and the like, which are also of a light weight construction, to further reduce the weight of the attachment system compared to known MOLLE systems. This will preferably include another component of the fastening system used, here, one or more tabs 54 having hooks 56 of a hook and loop fastening system, releasably attachable to the loop pile fabric 48 on the

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back side 46 of platform 34. The tabs 54 are configured to be inserted through the slits 36 of the platform and can have any of a variety of shapes, such as, but not limited to, an elongate strap shape (FIGS. 3, 5, 6, 7, 8), or a V shape (FIGS. 12, 13).

**[0049]** In use, the tabs 54 are inserted into selected slits 36, and the hooks 56 thereof attached to loop pile fabric 48 on the back side 46 of the platform. For strength, when inserted through slits 36, the tabs 54 are bent over for attachment to the back side 46, so that the hook and loop fasteners are loaded in shear, and are not subject to direct pulling away from the back side of the platform. The V shape tabs provide increased holding strength with a shorter overall length and can be folded or bent for insertion through the slits. Tabs 56 can be located at the top, bottom, middle, and/or sides of a holder 52 such as the pouch, appliance or other article to be attached to the platform. As examples, FIG. 3 illustrates tabs 56 on just the top of a holder 52; FIG. 5 illustrates tabs at the top and bottom; and FIGS. 6 and 7 illustrate tabs attached to the top, middle and bottom of a pouch.

**[0050]** FIG. 8 shows the back side 46 of a representative platform 34 of the invention, with top, bottom and middle tabs 54 of a pouch (FIGS. 6 and 7) through respective slits 36 therethrough and attached to loop pile fabric 48. In FIG. 13, V shape tabs have two hook surfaces extending in different direction and attached to the loop fabric.

**[0051]** As another advantage of the attachment system of the invention, the tightness of attachment of a holder or holders 52 to platform 34 is a function of the location of attachment of tabs 54 to back side 46. As illustrated in FIG. 10, tabs 54 can be attached to the back side of the platform tightly with little slack, in

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a manner so as to limit or prevent relative movements of the holder relative to the platform, which may be desirable for some applications, e.g., wherein low noise is desired or required. In FIG. 11, tabs 54 are

5 illustrated attached to the back side of the platform more loosely with greater slack, to allow movement of the holder on the front side, which may increase comfort and freedom of movement for the user.

**[0052]** Referring also to FIG. 14, in use on a carrier

10 58 to be worn on a part of a persons body, which carrier can comprise, but is not limited to, a vest, cummerbund, backpack, shirt, pants, belt, etc., platform 34 is preferably attached, connected, or incorporated into the carrier in a manner such that the platform 34, holder or

15 holders 52, and items carried in the holders, e.g., ammunition magazines, batteries, radios, medical supplies, tools, etc., are supported in the desired manner on the wearing person's body. This can be accomplished by attaching, e.g., fastening or sewing,

20 one or several peripheral edges of platform 34 to carrier 58 such that platform 34 overlays or covers all or a portion of an outer surface 60 of the carrier. As a result, back side 46 of platform 34 faces and covers all or a portion of surface 60, forming and enclosing a

25 cavity or pocket 62 therebetween. Platform 34 has a peripheral edge 64 thereabout that overlays a peripheral edge 66 of outer surface 60, and which is attached to surface about the periphery of the platform, but at least one open edge portion or openable closure 68

30 (FIGS. 7 and 9) is preferably provided to allow a person to insert at least the fingers of a hand 70 through the closure when open, as denoted by arrow A and into pocket 62 for accessing tabs 54 or straps inserted through slits 36, for attaching and detaching the hook and loop

35 fasteners. Closure 68 can comprise for example, but is

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not limited to, a hook component of a hook and loop fastening system attachable to the loop pile fabric of back side 46, snaps, a zipper, overlapping flaps, tied or laced strings or cords, a draw cord, or the like.

5 The opening or openable closure 68 can be located along any suitable edge of the platform as denoted by arrow A in various of the FIGS., which provides sufficient attachment strength for supporting desired holders and carried items, while serving also as a barrier to entry  
10 of particulates into pocket 62. Location of the components of the attachment system 32 within pocket 62 also provides a cover for muffling or silencing sounds generated when detaching the tabs. And, the attachment in this manner is advantageous as it can be performed  
15 easily by feel.

**[0053]** As noted above, an advantage of the system of the invention is backward compatibility with existing MOLLE and similar systems to enable use of MOLLE style holders 28 having long straps 26, and also holders 52 of  
20 the present system having longer tabs 54 with hooks 56 at the ends such as shown in FIG. 3. This is illustrated in FIGS. 15, 16 and 17, where straps 26 or long tabs 54 are woven through slits 36 through platform 34 and interlocked with straps (if provided) on the back  
25 of holder 28. If tabs 54 are used, the hooks 56 on the ends are then attached to the pile fabric 48 on the back side 46 of the platform.

**[0054]** Referring also to FIG. 18, as another variant, a holder 52 having longer tabs 54 with a semi-rigid tuck  
30 tab 72 on the end can be woven through slits 36 through platform 34 of system 32, and the tuck tab tucked between the back side of the holder and the front side of the platform, or into an aperture in the back of the holder or a slit for supporting the holder on the front  
35 side of the platform. In this regard, it should be

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noted and understood that as an option, any holder for use with the system can include slits through the back side thereof for weaving of straps or the longer tabs therethrough for attachment as an alternative to using multiple tabs at spaced locations along the length of the holder. Further in this regard, it is contemplated that the tuck tabs 72 will have a length appropriate for self-retention between the holder and platform, or receipt in an aperture or slit on the back of the holder or on the platform. As a representative example, a tuck tab 72 can have a length equal to at least about the vertical distance between two or three slits 36, or 1 to 2 inches.

**[0055]** Referring also to FIG. 19, as another embodiment of the system 32 of the invention, particularly having utility for attachment of longer MOLLE style holders 28 such as magazine pouches to shorter platforms 34, such as can be incorporated into or used as a belt 74, platform 34, e.g., in the form of a belt 74 includes the first component of the hook and loop fastening system, e.g., loop pile fabric 48, on its back side, and the second component, e.g., loops 56, is provided on a separate backing element 76 including slits 36 at upper and lower ends thereof, for instance, extending through flat rings 78 attached, e.g., by sewing. Backing element 76 can be of suitable material such as a non-stretchable fabric, plastics, or metal, and rings 78 can be fabric, plastics, or metal also. In use, backing element 76 will be attached to the back side of platform 34 via the hook and loop fasteners, and strap 26 inserted through slits 36 of rings 78, so as to pass between the back side of the holder 28 and front side of platform 34. A snap or other component of a fastener 80 on the end of the strap can then be fastened to its associated component on the holder 28 to secure

-20-

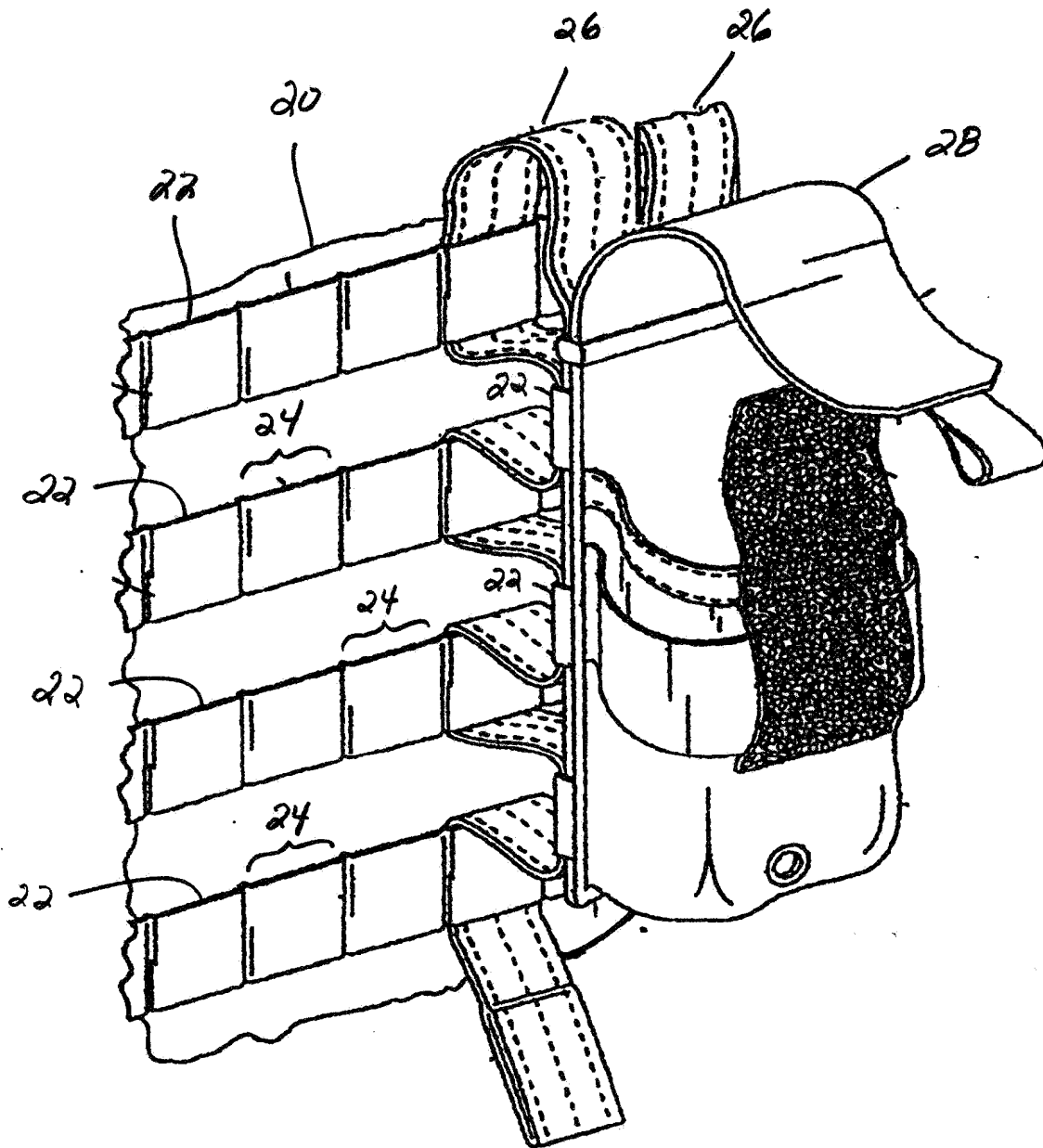
the holder to the platform. Here, it should be noted that the size of slits 36 will be advantageously provided to be just marginally larger or smaller in thickness compared to the strap 26 so that frictional forces exist therebetween, such that holder 28 will be held in a fixed position on the platform (belt).

**[0056]** Here, it can be observed that relatively long pouches can be provided with shorter tabs of the invention, for easy attachment and removal, without requiring complex weaving of long straps through loops on both the platform and the pouch itself. The tabs are merely inserted through the selected slots, folded or bent over from the side or another direction, and attached to the back side of the platform, which is made easy due to the relatively short length of tabs that can be used with good holding strength. The system of the invention also requires less material, is of less weight, and has a reduced profile when viewed from the side. This allows the face of the platform to be smoother.

**[0057]** In light of all the foregoing, it should thus be apparent to those skilled in the art that there has been shown and described a novel modular pouch attachment system for carriers such as vests, belts, and the like. However, it should also be apparent that, within the principles and scope of the invention, many changes are possible and contemplated, including in the details, materials, and arrangements of parts which have been described and illustrated to explain the nature of the invention. Thus, while the foregoing description and discussion addresses certain preferred embodiments or elements of the invention, it should further be understood that concepts of the invention, as based upon the foregoing description and discussion, may be readily incorporated into or employed in other embodiments and

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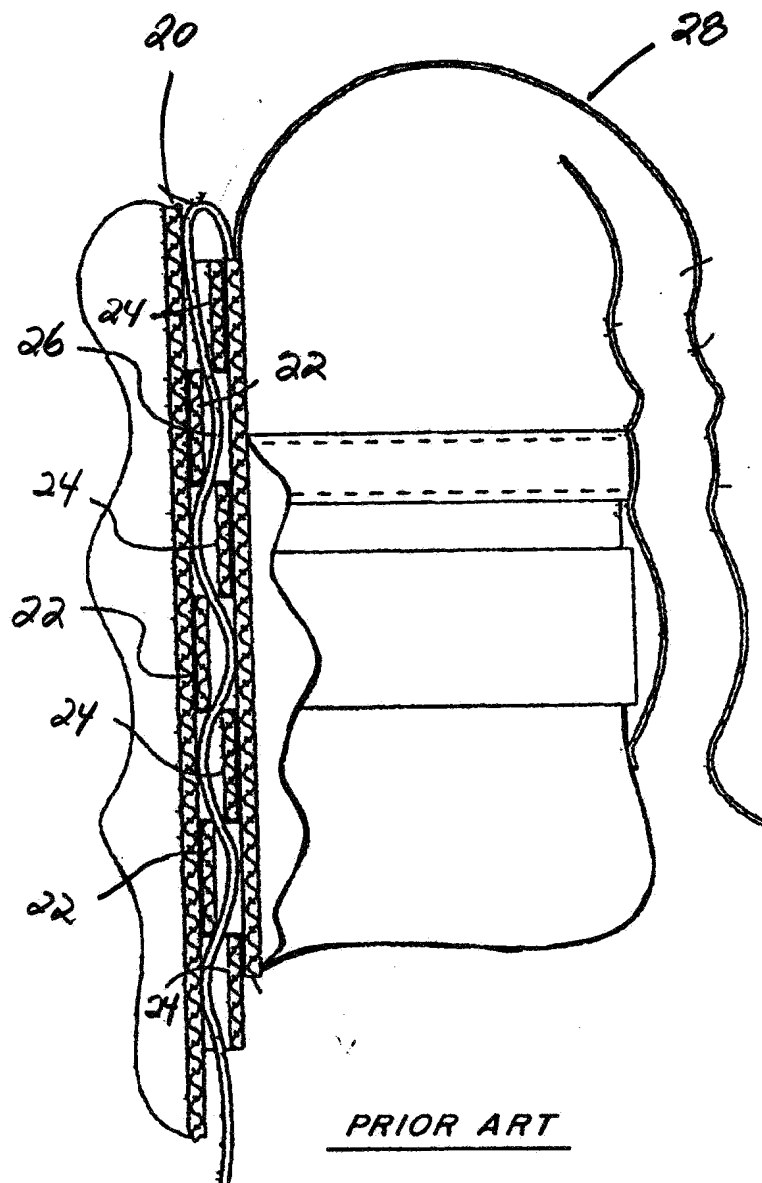
constructions without departing from the scope of the invention. Accordingly, the following claims are intended to protect the invention broadly as well as in the specific form shown, and all changes, modifications, variations, and other uses and applications which do not depart from the spirit and scope of the invention are deemed to be covered by the invention, which is limited only by the claims which follow.



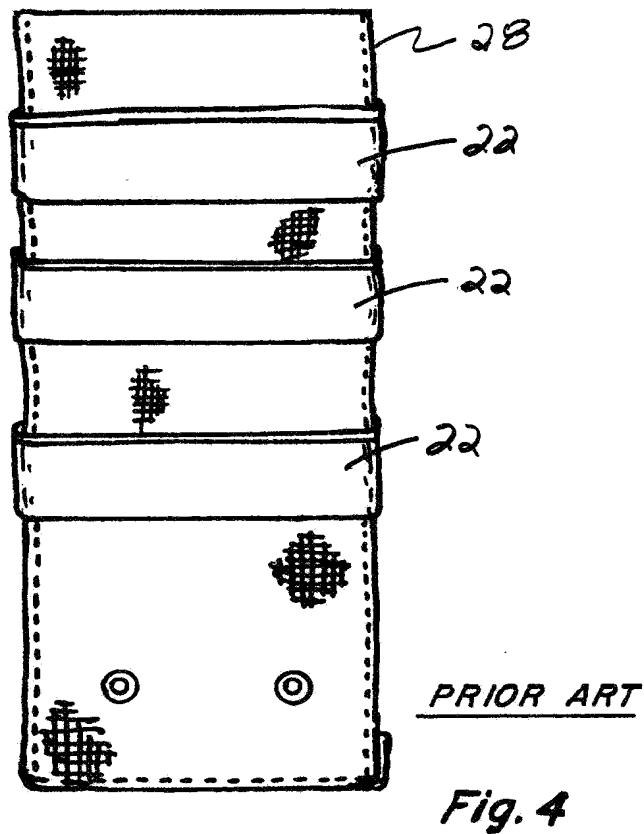
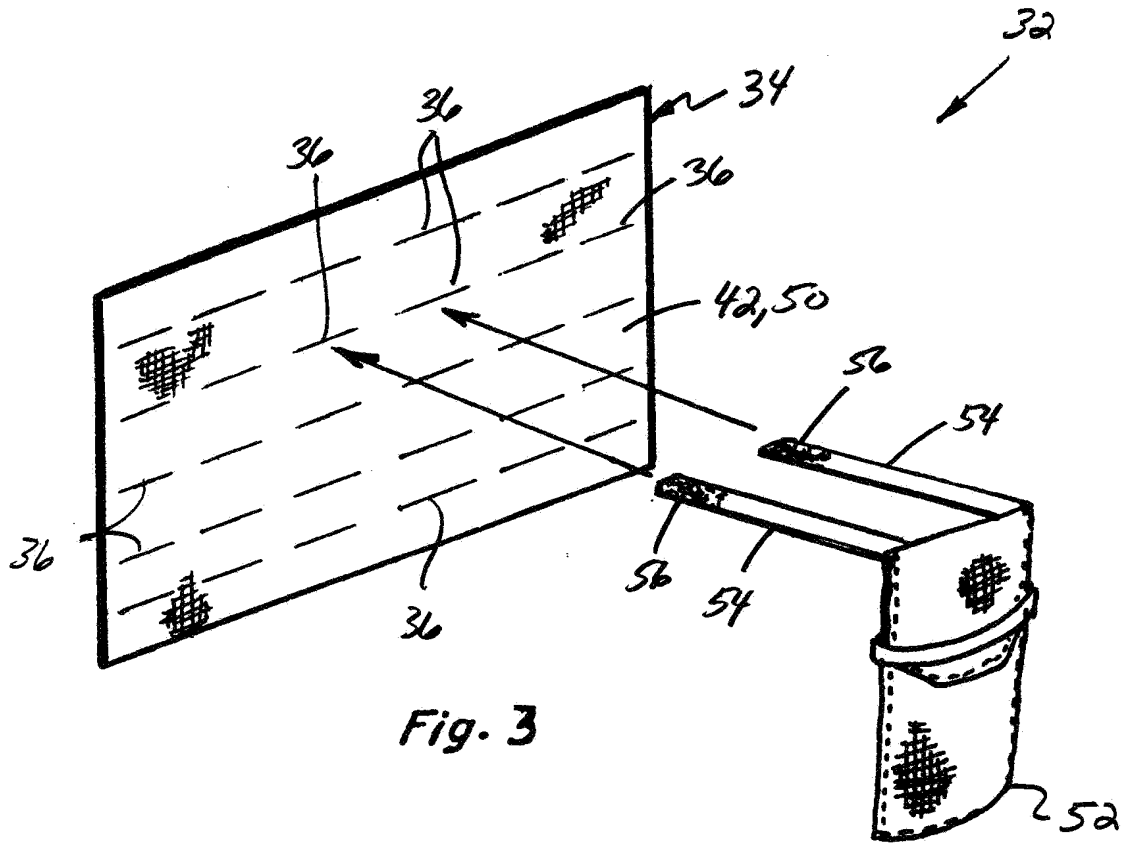
PRIOR ART

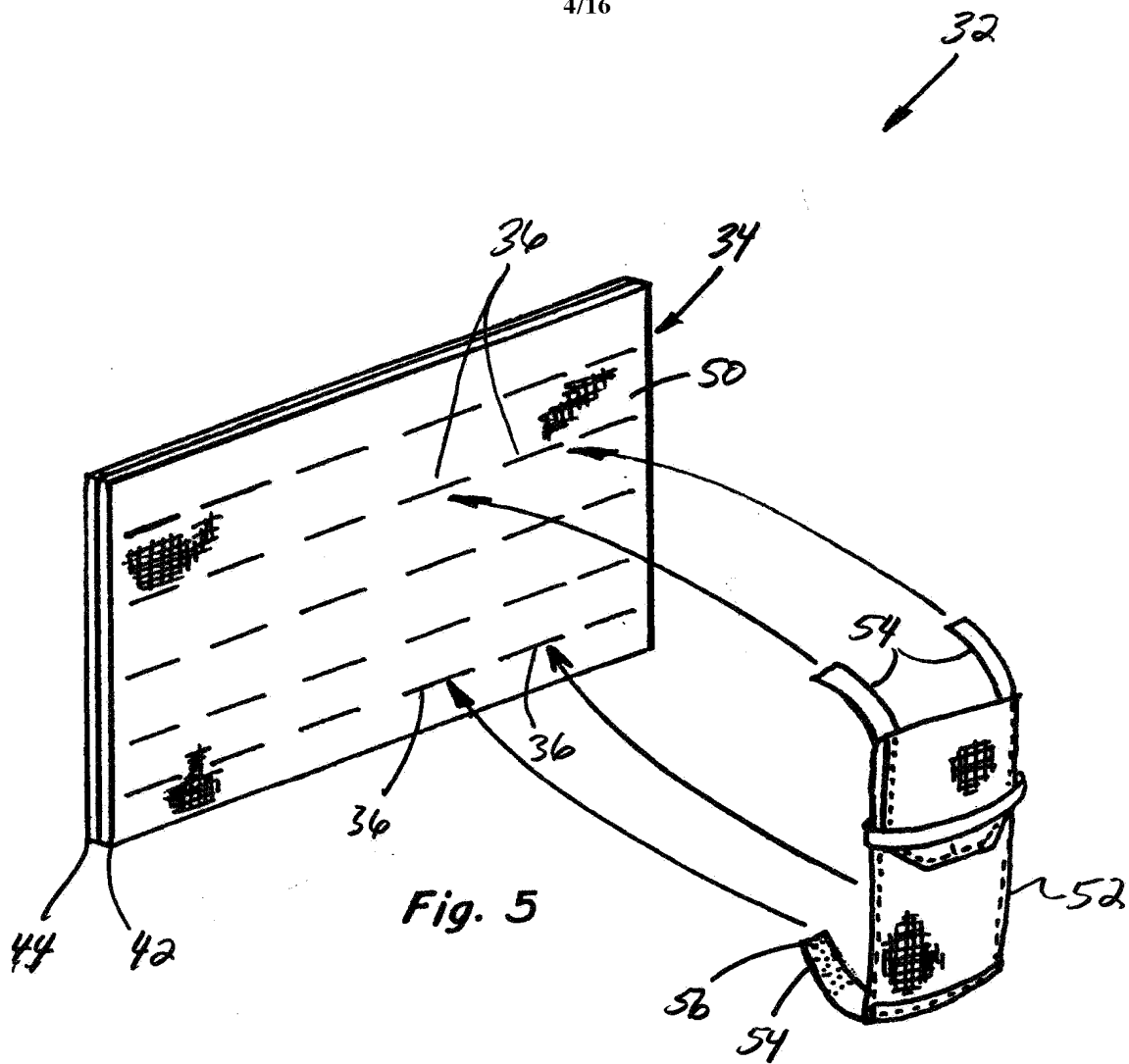
*Fig. 1*





*Fig. 2*





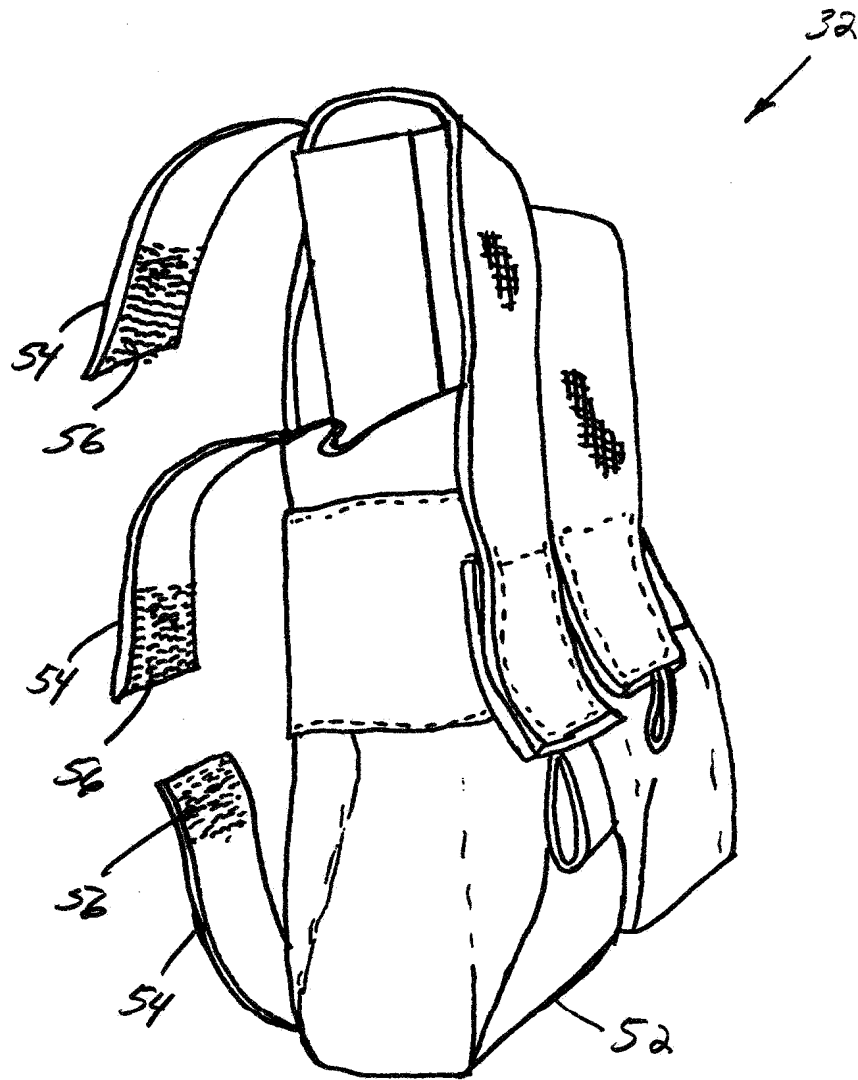


Fig. 6

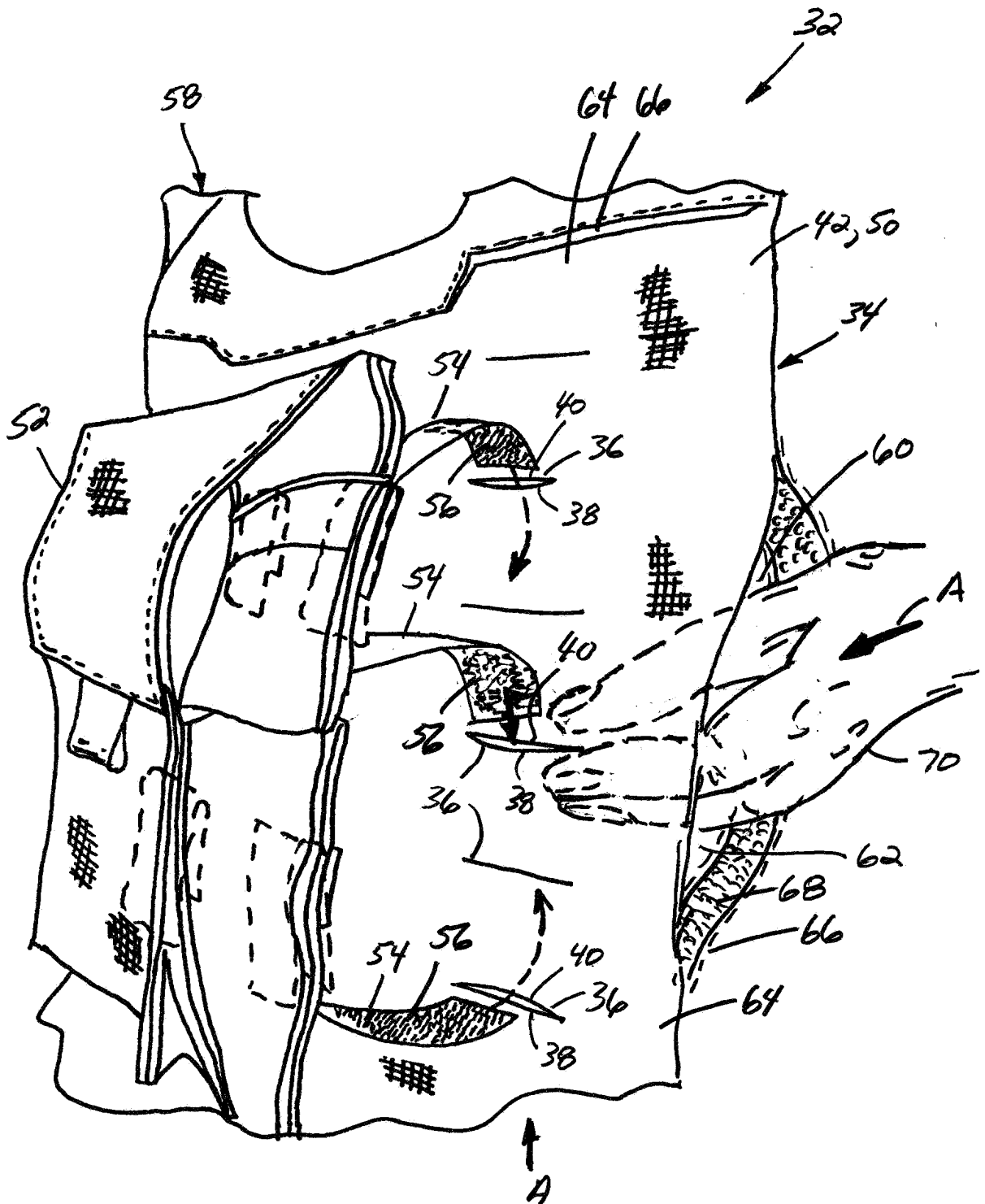
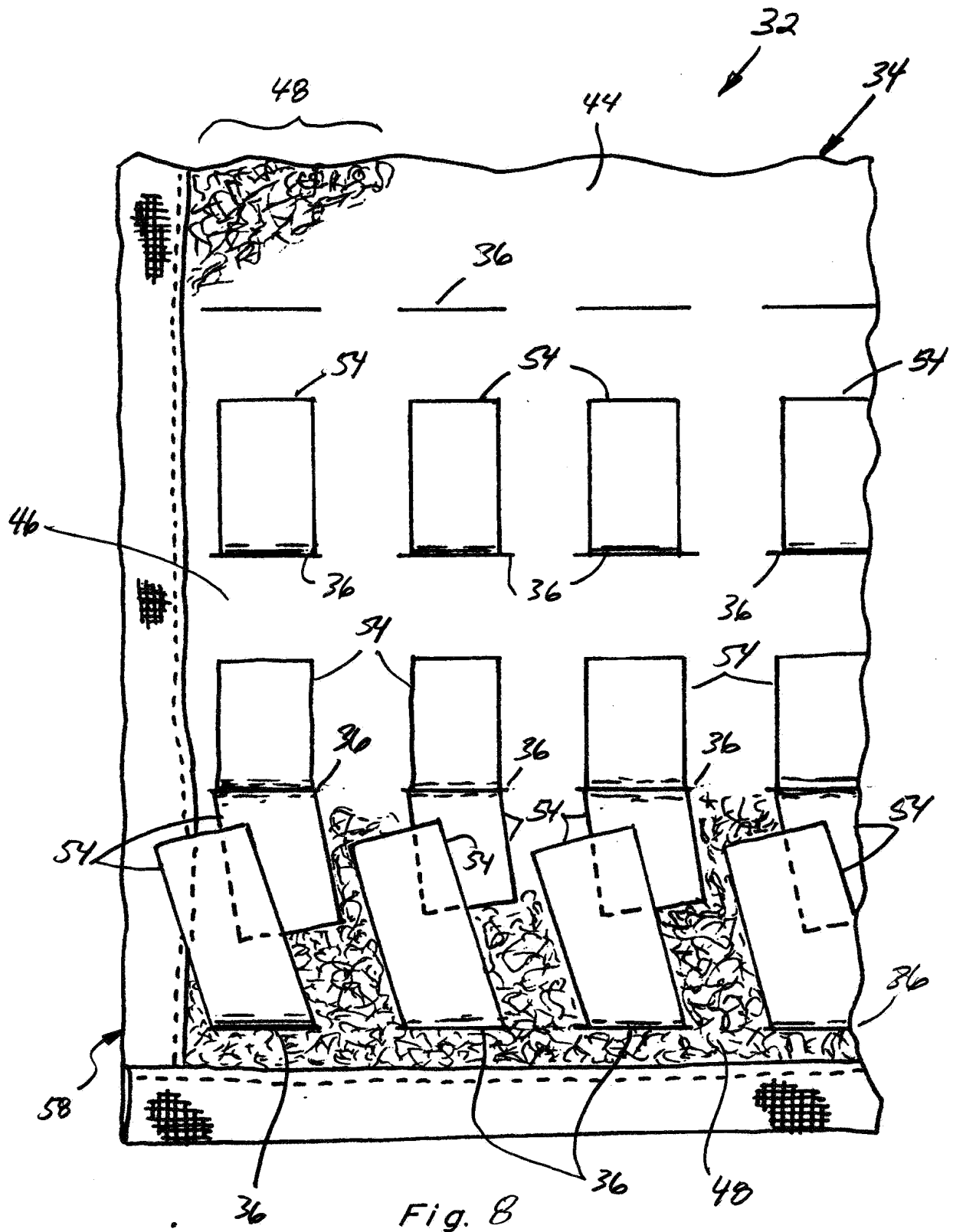
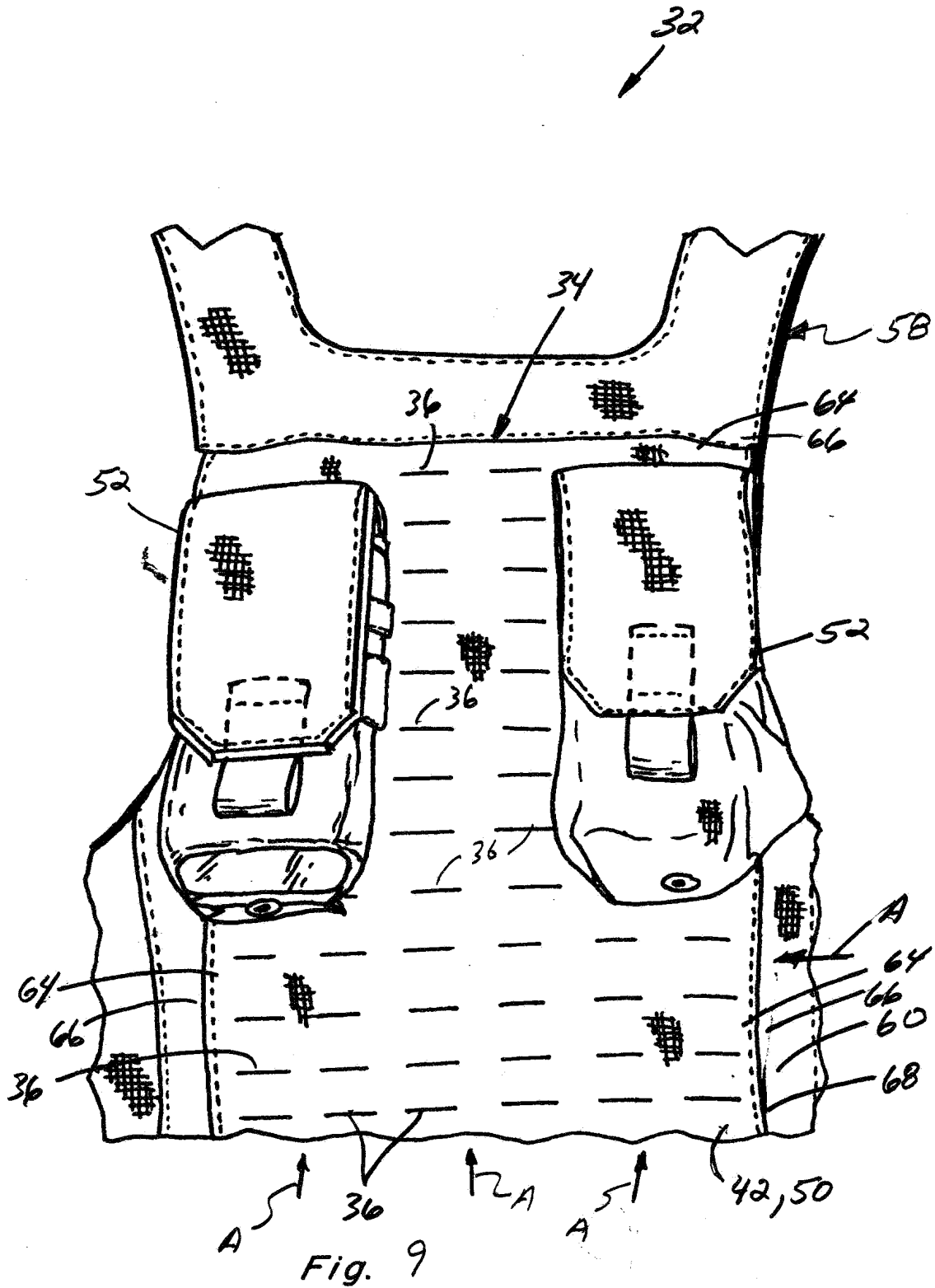


Fig. 7



*Fig. 8*



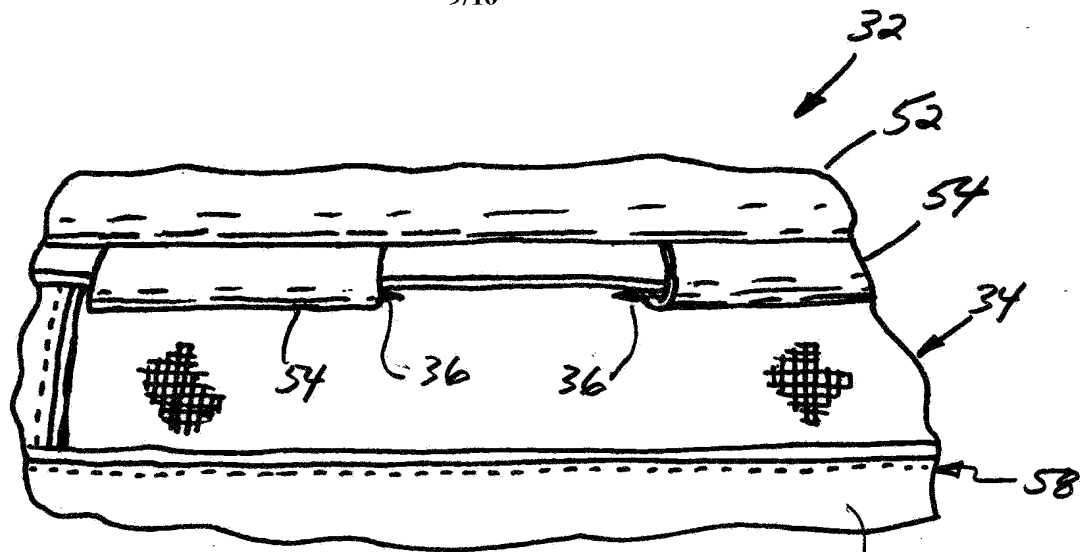


Fig. 10

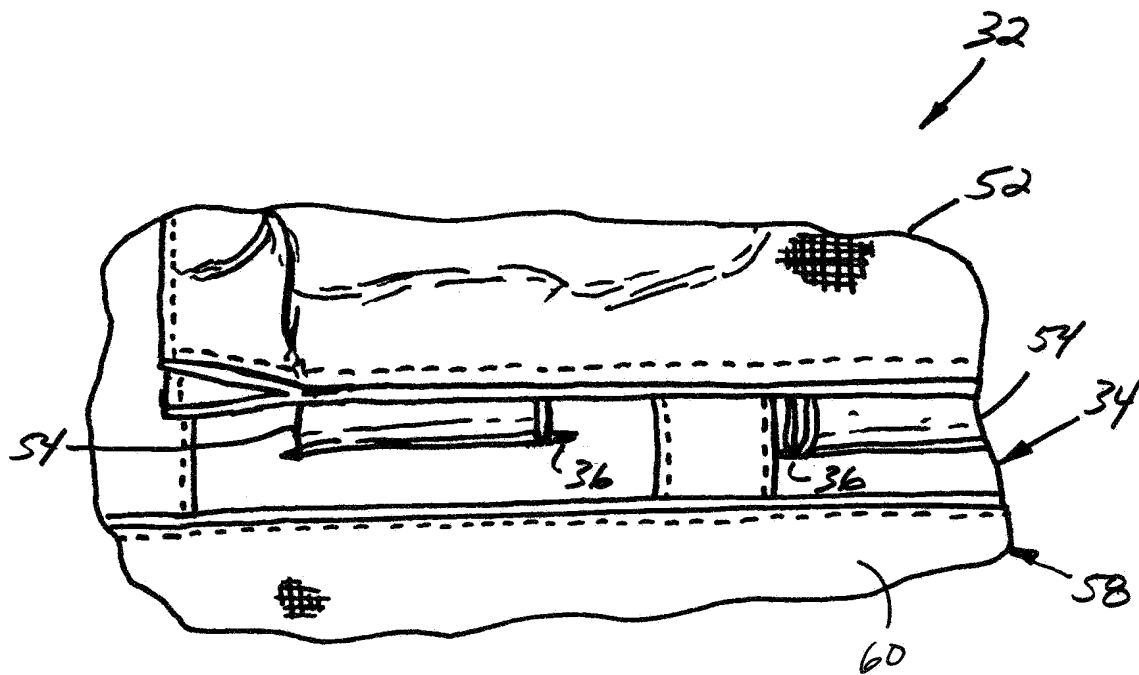


Fig. 11



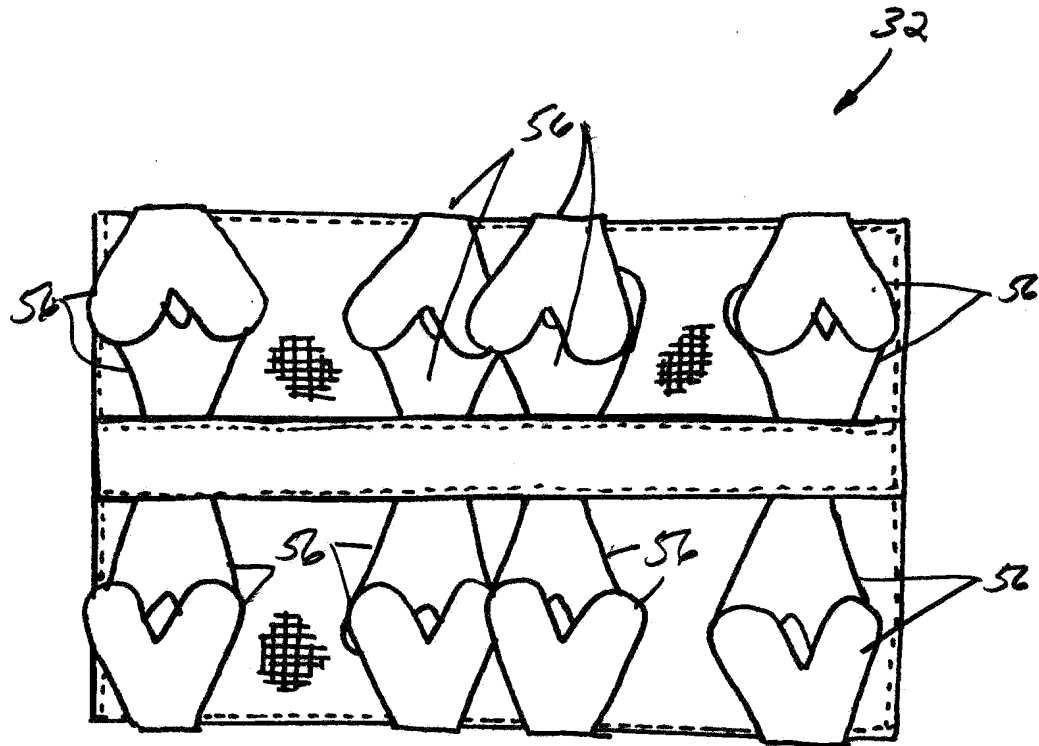
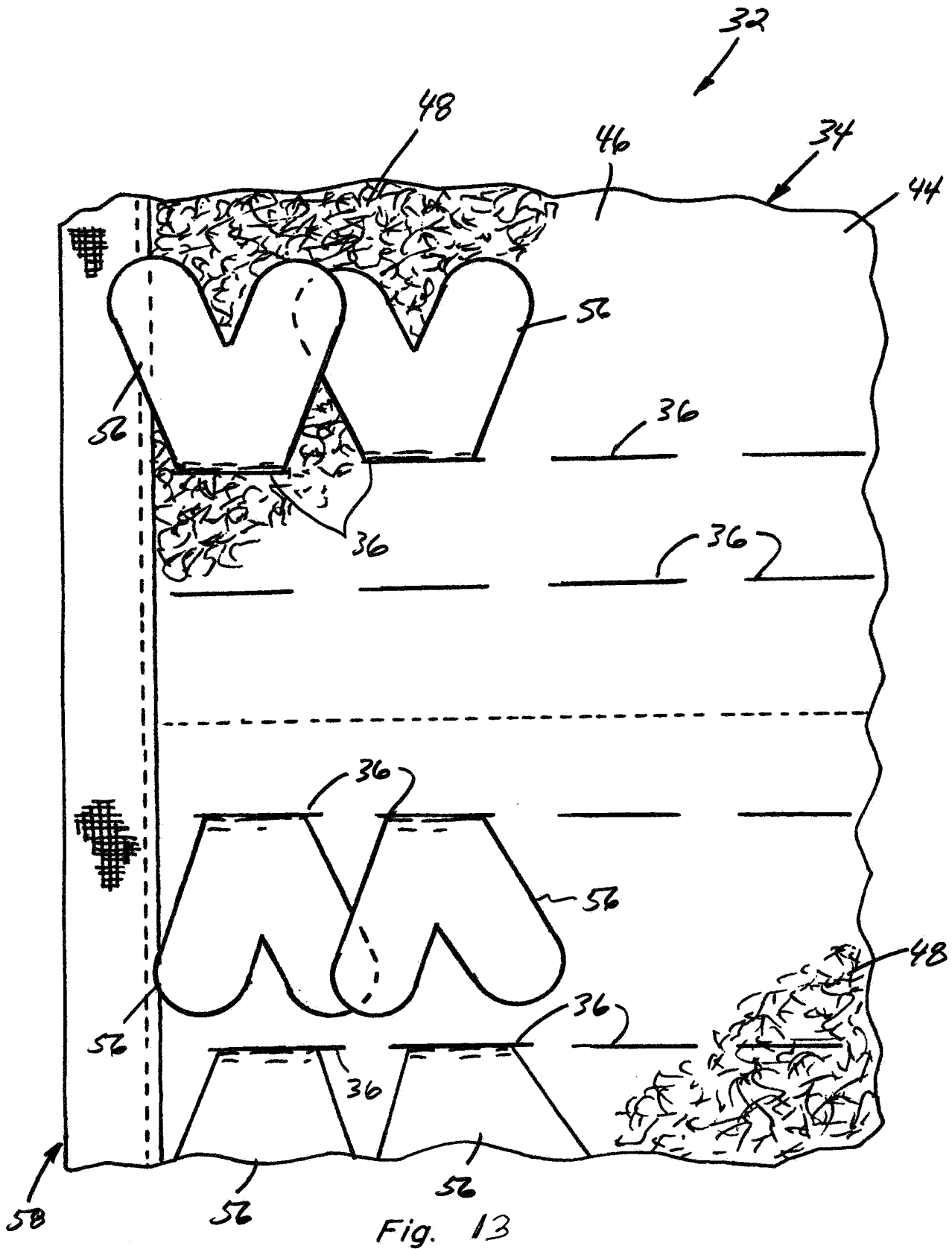
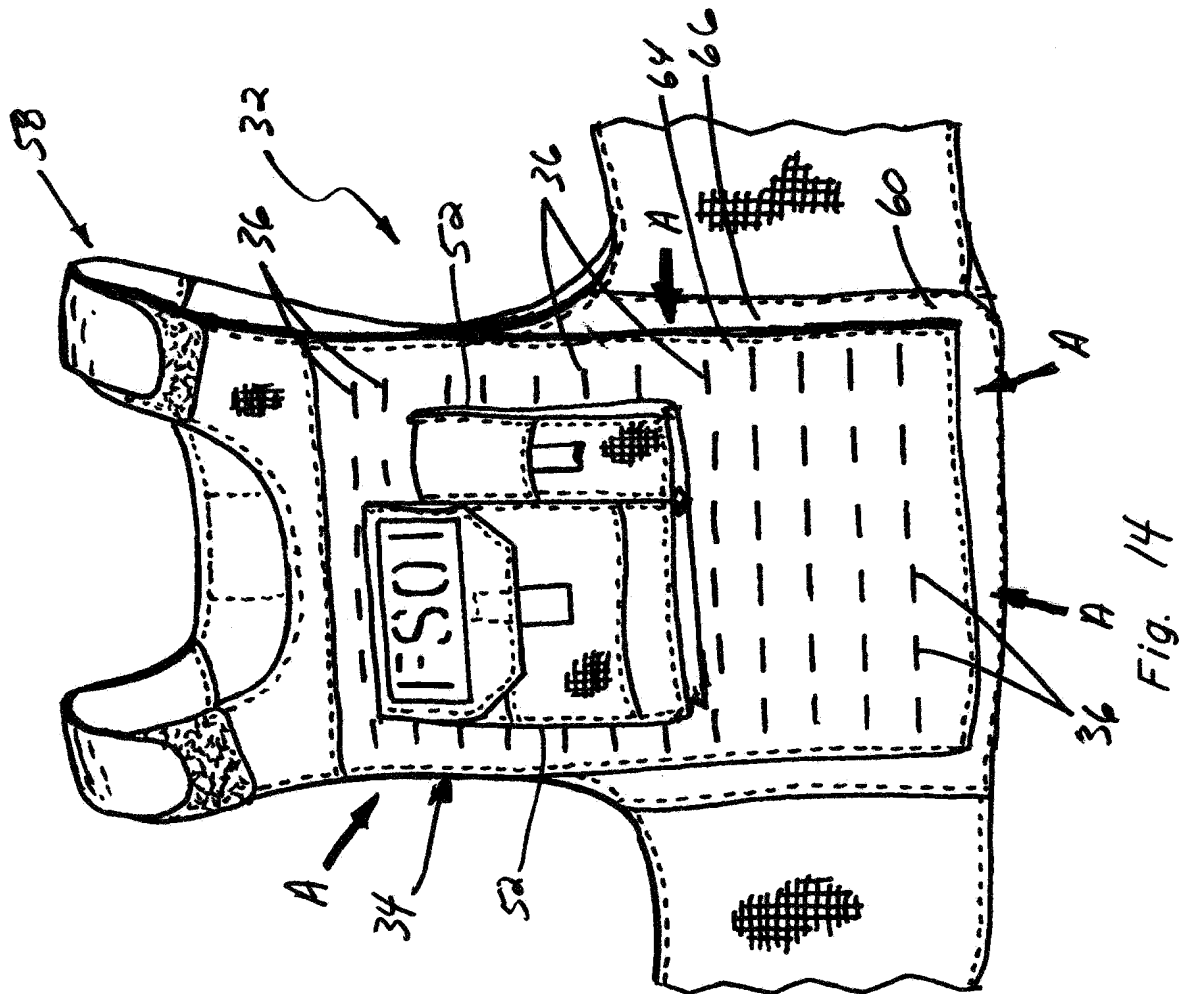
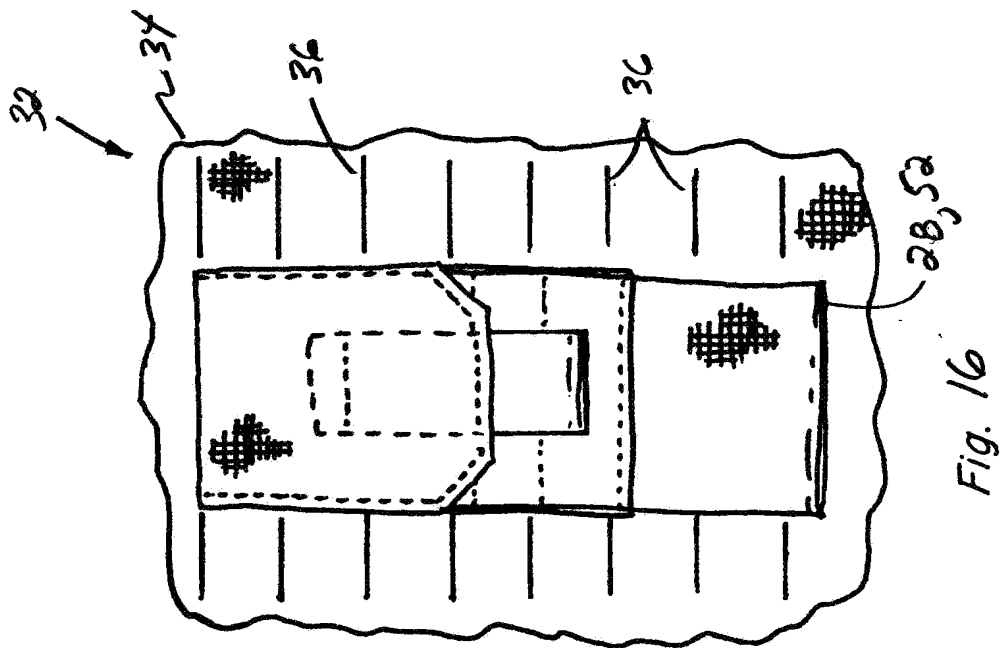
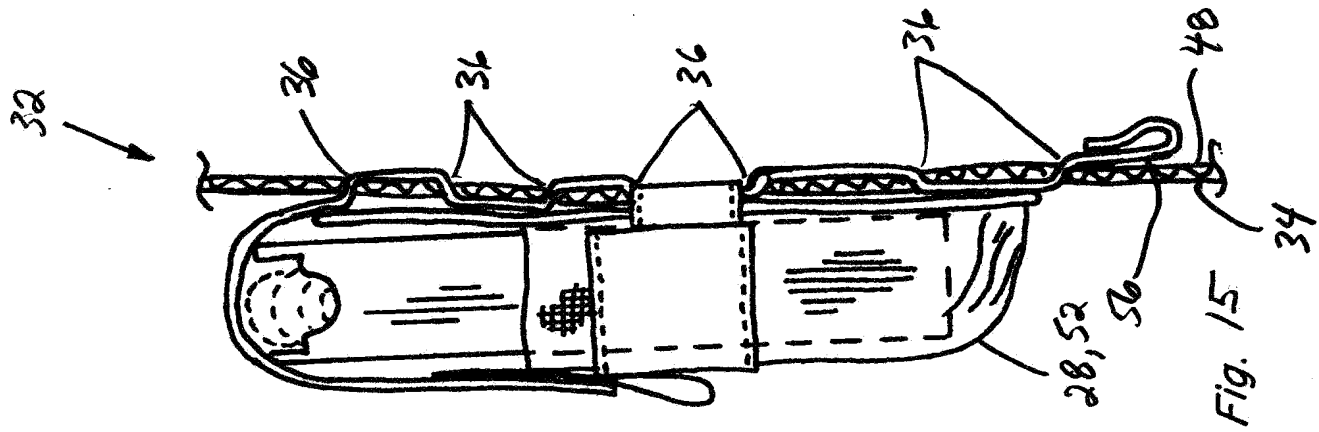


FIG. 12







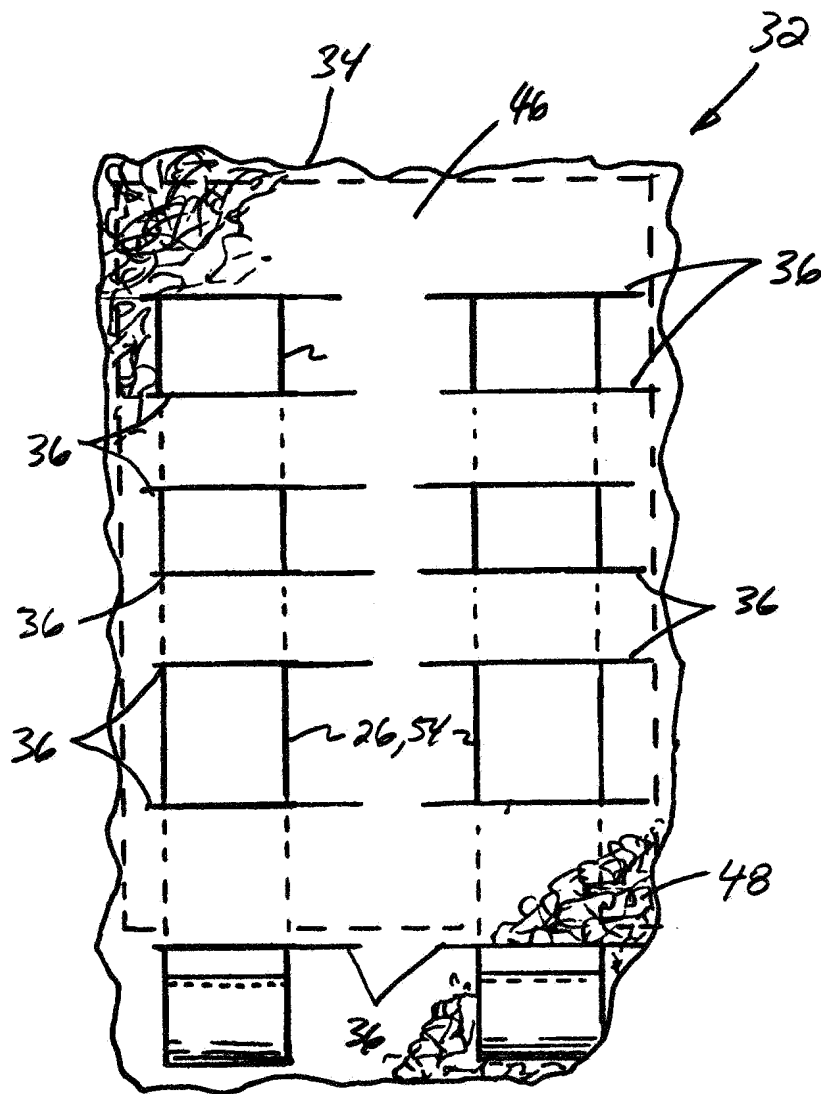


Fig. 17

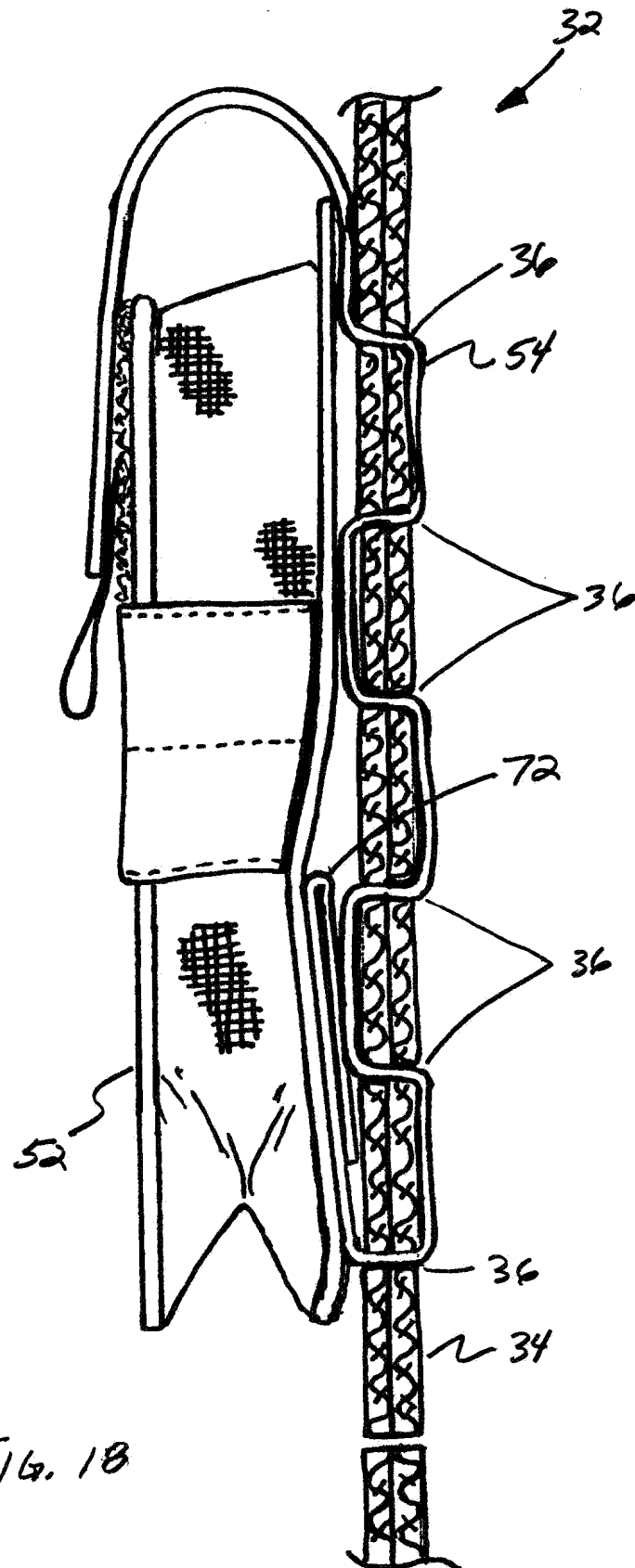


Fig. 18

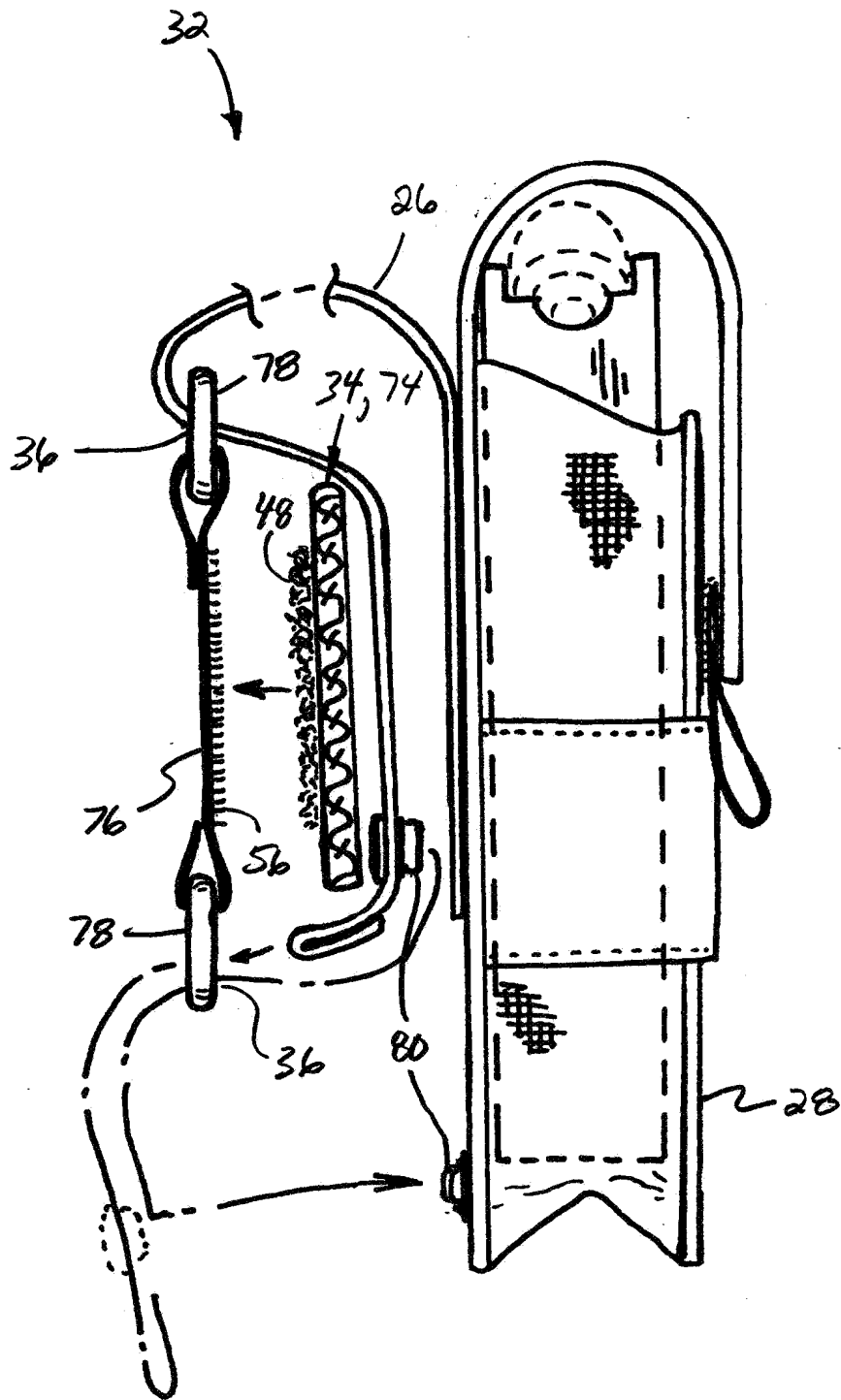


FIG. 19



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United States Patent and Trademark Office  
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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
14/237,468	02/06/2014		680	DN 3875 PCT/US	23	3

CONFIRMATION NO. 7080

FILING RECEIPT



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EARTH CITY, MO 63045

Date Mailed: 08/21/2015

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

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**Applicant(s)**

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Scott J. Carver, Manchester, MO;

**Assignment For Published Patent Application**

FirstSpear, LLC, Fenton, MO

**Power of Attorney:** The patent practitioners associated with Customer Number 02128

**Domestic Priority data as claimed by applicant**

This application is a 371 of PCT/US12/50001 08/08/2012  
which claims benefit of 61/521,309 08/08/2011

**Foreign Applications** for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

*Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.*

**If Required, Foreign Filing License Granted:** 08/19/2015

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/237,468**

**Projected Publication Date:** 11/26/2015

**Non-Publication Request:** No

**Early Publication Request:** No



**\*\* SMALL ENTITY \*\***

**Title**

Light Weight Modular Pouch Attachment System And Method

**Preliminary Class**

**Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No**

**PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

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**Title 35, United States Code, Section 184**  
**Title 37, Code of Federal Regulations, 5.11 & 5.15**

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**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875						Application or Docket Number 14/237,468			
<b>APPLICATION AS FILED - PART I</b>									
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY			
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)		
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	140		N/A			
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	60		N/A			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A			
TOTAL CLAIMS (37 CFR 1.16(j))	23	minus 20 = *	3	x 40 =					
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3	minus 3 = *		x 210 =					
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00					
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00					
			TOTAL	680		TOTAL			
* If the difference in column 1 is less than zero, enter "0" in column 2.									
<b>APPLICATION AS AMENDED - PART II</b>									
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus **	=	x =		x =		
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x =		x =		
	Application Size Fee (37 CFR 1.16(s))								
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
			TOTAL ADD'L FEE			TOTAL ADD'L FEE			
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus **	=	x =		x =		
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x =		x =		
	Application Size Fee (37 CFR 1.16(s))								
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
			TOTAL ADD'L FEE			TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.									



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U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
14/237,468	Michael E. Cole	DN 3875 PCT/US

2128  
MATTHEWS EDWARDS LLC  
514 EARTH CITY PLAZA  
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INTERNATIONAL APPLICATION NO.	
PCT/US12/50001	
I.A. FILING DATE	PRIORITY DATE
08/08/2012	08/08/2011

**CONFIRMATION NO. 7080**  
**371 ACCEPTANCE LETTER**



\*OC000000076981607\*

Date Mailed: 08/21/2015

**NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495**

The applicant is hereby advised that the United States Patent and Trademark Office, in its capacity as a Designated / Elected Office (37 CFR 1.495), has ACCEPTED the above identified international application for national patentability examination in the United States Patent and Trademark Office.

The United States Application Number assigned to the application is shown above and the relevant dates are:

02/06/2014  
DATE OF RECEIPT OF 35 U.S.C. 371(c)(1),  
(c)(2) and (c)(4) REQUIREMENTS

02/06/2014  
DATE OF COMPLETION OF ALL  
35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. **THE DATE APPEARING ON THE FILING RECEIPT AS THE " FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 (c)(1), (c)(2) and (c)(4) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE.** *The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363).*

The following items have been received:

- Indication of Small Entity Status
- Copy of the International Application filed on 02/06/2014
- Copy of the International Search Report filed on 02/06/2014
- Information Disclosure Statements filed on 02/06/2014
- Inventor's Oath or Declaration filed on 02/06/2014
- Request for Immediate Examination filed on 02/06/2014
- U.S. Basic National Fees filed on 02/06/2014
- Application Data Sheet (37 CFR 1.76) filed on 02/06/2014

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

JUELETHIA A PALMER

Telephone: (571) 272-9050



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/237,468	02/06/2014	Michael E. Cole	DN 3875 PCT/US

**CONFIRMATION NO. 7080**

## PUBLICATION NOTICE



\*OC00000078919274\*

2128  
MATTHEWS EDWARDS LLC  
514 EARTH CITY PLAZA  
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EARTH CITY, MO 63045

**Title:**Light Weight Modular Pouch Attachment System And Method

**Publication No.**US-2015-0335140-A1

**Publication Date:**11/26/2015

## NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at [www.uspto.gov](http://www.uspto.gov). The direct link to access the publication is currently <http://www.uspto.gov/patft/>.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at [www.uspto.gov](http://www.uspto.gov) using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently <http://pair.uspto.gov/>. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/237,468	02/06/2014	Michael E. Cole	DN 3875 PCT/US	7080

2128 7590 12/21/2015  
MATTHEWS EDWARDS LLC  
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EARTH CITY, MO 63045

EXAMINER
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SKURDAL, COREY NELSON

ART UNIT	PAPER NUMBER
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3782

NOTIFICATION DATE	DELIVERY MODE
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12/21/2015

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mail@matthewsedwards.com

<b>Office Action Summary</b>	<b>Application No.</b> 14/237,468	<b>Applicant(s)</b> COLE ET AL.	
	<b>Examiner</b> COREY SKURDAL	<b>Art Unit</b> 3782	<b>AIA (First Inventor to File) Status</b> No

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/6/14.  
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims\*

- 5) ☒ Claim(s) 1-23 is/are pending in the application.  
5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-23 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

\* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 2/6/14 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

#### Certified copies:

- a) ☒ All    b) ☐ Some\*\*    c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 3) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)<br>Paper No(s)/Mail Date ____. | 4) <input type="checkbox"/> Other: ____.  |

The present application is being examined under the pre-AIA first to invent provisions.

### **DETAILED ACTION**

The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-23 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over WO 2009/051619 A2 to McBride et al. (hereinafter 'McBride') in view of US 5,263,618 A (Talavera).

Regarding claim 1, McBride discloses an attachment system, comprising a platform (118) having a front side (outer side), an opposite back side (adjacent surface 32), and a plurality of openings through the platform arranged in a predetermined pattern of vertically aligned and spaced apart rows, configured for receiving elements for attaching at least one holder to the platform (see pg 13, ln 20 to pg 14, ln 2; Fig 1 - pattern of vertically aligned and spaced apart rows of keyhole openings 126 removably receive an appropriate load or supply - load or supply considered to be elements which would have been capable of attaching at least one holder to the platform), wherein the platform is supported by and comprises an element of a carrier (platform 118 is supported by and comprises an element of a carrier 110 with front panel 14 that includes outer surface 32 - see pg 9, ln 2-5 and ln 12-14) configured to be worn on a



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user's body for carrying the at least one holder at a desired location on the user's body (see pg 13, ln 20 to pg 14, ln 2 and Fig 1,6); a fastening component being disposed in opposing relation to a surface of the carrier or a backing element forming a generally flat cavity there between (flat cavity between platform 118 and panel 14 closed by fastening components 114, 116, 120, 122, 124 - see pg 12, ln 15-24; Fig 1), the platform and the carrier or backing element having generally coextensive peripheral edge portions bounding and providing a barrier to entry of particulates thereabout (retainer straps 116 keep platform 118 closed against adjacent surface 32 tightly enough to provide a barrier to entry of particulates thereabout), at least one of the coextensive edge portions being openable to allow insertion of fingers of a hand into the flat cavity (sides of platform 118 are pressed against, but not attached to surface 32, which would make the sides of the platform capable of being opened sufficiently to allow insertion of fingers of a hand into the flat cavity), and the openings 126 being defined and bound by opposing edges (as seen in Fig 1), respectively, disposed sufficiently close together when in a free state, providing a barrier to passage of particulates there between (small keyholes 126 provide a barrier - see pg 13, ln 20 to pg 14, ln 2 and Fig 1). McBride fails to disclose the openings comprising a plurality of slits through the platform, the fastening component of the platform component being of a hook and loop fastening system thereon adjacent to the slits, the platform and the carrier or backing element having peripheral edge portions substantially enclosing the flat cavity and the slits being defined and bound by opposing edges. McBride further discloses in Fig 9 and pg 14, ln 7-10 a pouch arrangement 136, wherein the fastening component

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138 of the pouch is a hook and loop fastening system having peripheral edge portions substantially enclosing the flat cavity as best seen in Fig 9. It would have been obvious to one of ordinary skill in the art to substitute a fastening component of a hook and loop system around the periphery of platform 118, which fastening component would be adjacent to the openings 126, which openings take up the entire surface area of the platform, wherein the hook and loop system would be in place of the attachment system 30 disclosed by McBride as a simpler to manufacture and simpler to use attachment mechanism. The further reference to Talavera discloses a plurality of slits (92 and 94) through the platform (90), wherein the slits permit a strap 68 to secure holder 88 to a support 12 (see col 3, ln 58 to col 4, ln 2 and Fig 9). In view of Talavera, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the Velcro strap and parallel slit structure of Talavera for the keyhole connections of McBride to better secure objects to the platform of McBride.

Regarding claim 2, McBride in view of Talavera disclose the attachment system of claim 1, wherein Talavera further discloses the fastening component of the hook and loop fastening system comprises a loop pile fabric (see col 2, ln 28-45).

Regarding claim 3, McBride in view of Talavera disclose the attachment system of claim 2, wherein Talavera further discloses the front side of the platform (front side of support 12) comprising a woven or a non-woven fabric (case cloth, see col 2, ln 28-45 and Fig 8, 9). In view of Talavera, it would have been obvious to one of ordinary skill in the art to make the platform 118 of McBride out of case cloth as a softer, quieter support for a military type of wearing apparel, which property would lessen the chance of

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drawing attention to a wearer of the vest, when the vest was being worn near to an enemy combatant.

Regarding claim 4, McBride in view of Talavera disclose the attachment system of claim 3, wherein Talavera further discloses the loop pile fabric and the woven fabric are laminated, adhered, or fused together, or comprise a composite of a smooth fabric (case cloth with identical opposite surfaces 20, 22 - see col 2, ln 28-30 - case cloth is a smooth fabric) on one surface and a pile fabric on an opposite surface (strips 38, 40 of Velcro pile attached to surface 20 - see col 2, ln 40-42).

Regarding claim 5, McBride in view of Talavera disclose the attachment system of claim 3. However, neither McBride nor Talavera disclose wherein each of the edges bounding the slits comprises a hardened fusion of the loop pile fabric and the woven fabric. As for including Velcro right up to the edges bounding the slits, adding Velcro where desired to further strengthen the connection is conventional in the clothing art as evidenced by col 4, ln 3-14 of Talavera. As for laser cutting of Velcro or of fabric, that technique was a well-known technique in the clothing industry at the time the invention was made both to get a clean cut and to get a fused seam that was free of fraying. In view of well-known and conventional techniques in the clothing industry, it would have been obvious to one of ordinary skill in the art to include with the attachment system of McBride in view of Talavera wherein each of the edges bounding the slits comprised a hardened fusion of the loop pile fabric and the woven fabric, so as to strengthen the connection between the holder and the platform of McBride in view of Talavera and to get a clean cut and a fused seam that was free of fraying.

Regarding claim 6, McBride in view of Talavera disclose the attachment system of claim 5. However, neither McBride nor Talavera disclose wherein the edges are laser fused. As for laser fusing of the edges of Velcro or of fabric, that technique was a well-known technique in the clothing industry at the time the invention was made both to get a clean cut and to get a fused seam that was free of fraying. In view of well known and conventional techniques in the clothing industry, it would have been obvious to one of ordinary skill in the art to include with the attachment system of McBride in view of Talavera wherein the edges were laser fused, so as to get a clean cut and a fused seam that was free of fraying.

Regarding claim 7, McBride in view of Talavera disclose the attachment system of claim 5, and Talavera discloses the attachment system as further comprising a holder 88 including at least one tab 68 having hook components 84 of the hook and loop fastening system thereon (see col 3, ln 36-37 and ln 58-65 and Fig 3 and 9), and wherein the edges bounding the slit are sufficiently resiliently flexible to allow passage of the tabs there through (see col 3, ln 58-65 and Fig 9), respectively, for fastening to the loop pile fabric while biasing against the tabs forming a barrier to passage of particulates thereabout, respectively (small slits 92 and 94 with tab 68 extending through the slits would inherently bias against the tab forming a barrier to passage of particulates thereabout).

Regarding claim 8, McBride in view of Talavera disclose the attachment system of claim 7. However, neither McBride nor Talavera disclose wherein the tab has a V shape. As for the tab having a V shape, it is well known in the clothing art to provide a V

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shape for a strap shaped member to pass that member through an opening as evidenced by the conventional tapered or V shaped end of belts passed through a belt buckle. In view of the well-known V shape to pass the end of a strap shaped member through an opening, it would have been obvious to one of ordinary skill in the art to provide wherein the tab of McBride in view of Talavera with a V shape to make the tab easier to pass through the slits of McBride in view of Talavera.

Regarding claim 9, McBride in view of Talavera disclose the attachment system of claim 1, wherein Talavera discloses a holder (pocket 88) including at least one tab (68) extending therefrom having a free end portion including a fastening component of a hook and loop fastening system (84) thereon attachable to the fastening component of the hook and loop fastening system (strips 38 and 40) on the back side of the platform (12), the at least one tab (68) being sized for insertion through any of the slits (92, 94), respectively, such that edges of the platform (12) bounding the slit will contact the tab (68) forming a barrier to passage of particulates thereabout (col 2, ln 34-42; col 3, ln 58 to col 4, ln 2; Fig 3, 9).

Regarding claim 10, McBride in view of Talavera disclose the attachment system of claim 9, wherein Talavera discloses the holder comprises a pouch (pocket 88 is considered to be a pouch because it is a container made of flexible material - see col 3, ln 58-60; Fig 6, 9). McBride also discloses a pouch 136 (pg 14, ln 7-10; Fig 9).

Regarding claim 11, McBride in view of Talavera disclose the attachment system of claim 9, wherein McBride discloses the carrier comprises a vest, a cummerbund, or a

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component of a cummerbund or a vest (see Fig 1,6; pg 9, ln 2-5 and pg 13, ln 20 to pg 14, ln 2).

Regarding claim 12, McBride in view of Talavera disclose the attachment system of claim 9. However, neither McBride nor Talavera disclose wherein the tab has a V shape. As for the tab having a V shape, it is well known in the clothing art to provide a V shape for a strap shaped member to pass that member through an opening as evidenced by the conventional tapered or V shaped end of belts passed through a belt buckle. In view of the well-known V shape to pass the end of a strap shaped member through an opening, it would have been obvious to one of ordinary skill in the art to provide the tab of McBride in view of Talavera with a V shape to make the tab easier to pass through the slits of McBride in view of Talavera.

Regarding claim 13, McBride in view of Talavera disclose the attachment system of claim 1, wherein McBride discloses adjacent ones of the rows of openings are spaced a predetermined distance apart (126, see Fig 1), and Talavera discloses the openings are slits (col 3, ln 58-65), and the at least one tab (68, see Fig 3, 9) has a length equal to about twice the predetermined distance or less (strap 68 as shown in Fig 3 is about twice the distance between slits (92, 94, see Fig 9 and col 3, ln 58 to col 4, ln 2).

Regarding claim 14, McBride discloses an attachment system for removably attaching at least one holder to a carrier (10) configured for wear on a human body (see Fig 1, 6), the carrier having at least one outer surface (32) oriented to face away from a body on which the carrier is worn (pg 9, ln 2-14; pg 13, ln 15 to pg 14, ln 2), the

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attachment system comprising: a platform (118) supported in an upstanding orientation on the carrier in covering relation to at least a portion of the outer surface of the carrier (32) to bound and enclose a generally flat cavity there between (space between 118 and 32, see Fig 1), the platform having a front side facing outwardly (outer surface of 118), an opposite back side facing the cavity (adjacent 32), and a plurality of openings (keyholes 126) through the platform having a predetermined pattern of vertically aligned and spaced apart rows (keyholes 126), the back side including a fastening system (keyholes 126 form a fastening system - see pg 13, ln 20 to pg 14, ln 2). McBride fails to disclose the openings comprising a plurality of slits through the platform, the backside including a fastening component of a hook and loop fastening system thereon adjacent to the slits, at least one holder configured for holding an article or object, having at least one flat, flexible tab extending therefrom including a fastening component of a hook and loop fastening system thereon attachable to the fastening component of the back side of the platform, the at least one tab being configured for passage through any of the slots, respectively, into the flat cavity, for attaching the fastening component thereof to the fastening component on the back side, for releasably securing the holder adjacent to the front side of the platform. Talavera discloses a plurality of slits (92, 94) through the platform (90), a hook and loop fastening system (col 3, ln 58 to col 4, ln 2), at least one holder (pocket 88) configured for holding an article or object, having at least one flat, flexible tab (68) extending therefrom including a fastening component of a hook and loop fastening system (84) thereon attachable to the fastening component of the back side of the platform (96, back side of

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90, see col 3, ln 57 to col 4, ln 2), the at least one tab being configured for passage through any of the slots, respectively, into the flat cavity, for attaching the fastening component thereof to the fastening component on the back side (see Fig 9), for releasably securing the holder adjacent to the front side of the platform (see col 4, ln 3-26). As for including Velcro adjacent to the slits, adding Velcro where desired to further strengthen the connection is conventional in the clothing art as evidenced by col 4, ln 3-14 of Talavera. In view of Talavera, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a plurality of slits through the platform in place of the keyhole openings of McBride and to further have the backside include a fastening component of a hook and loop fastening system thereon adjacent to the slits as a more secure connection for objects to the platform, and to further include at least one holder configured for holding an article or object, having at least one flat, flexible tab extending therefrom including a fastening component of a hook and loop fastening system thereon attachable to the fastening component of the back side of the platform, the at least one tab being configured for passage through any of the slots, respectively, into the flat cavity, for attaching the fastening component thereof to the fastening component on the back side, for releasably securing the holder adjacent to the front side of the platform as an improved structure to securely attaching and holding objects on the platform.

Regarding claim 15, McBride in view of Talavera disclose the attachment system of claim 14, wherein Talavera discloses the fastening component on the back side of the platform (80) comprises a loop pile fabric (col 4, ln 3-14).



Regarding claim 16, McBride and Talavera disclose the attachment system of claim 15, wherein Talavera discloses the front side of the platform (90) comprising a woven or non-woven fabric (case cloth, col 2, ln 27-30) attached to the loop pile fabric (96, see col 4, ln 3-14).

Regarding claim 17, McBride in view of Talavera disclose the attachment system of claim 16, wherein Talavera discloses the loop pile fabric and the woven or non-woven fabric are attached by lamination, adhesive, or fusion, or comprise a composite of a smooth fabric (case cloth with identical opposite surfaces 20, 22 - see col 2, ln 28-30 - .case cloth is a smooth fabric) on one surface and a pile fabric on an opposite surface (strips 38, 40 of Velcro pile attached to surface 20 - see col 2, ln 40-42).

Regarding claim 18, McBride in view of Talavera disclose the attachment system of claim 16. However, neither McBride nor Talavera disclose wherein each of the slits is bound by opposing edges of the loop pile fabric and the woven fabric fused together. As for including Velcro right up to the edges bounding the slits, adding Velcro where desired to further strengthen the connection is conventional in the clothing art as evidenced by col 4, ln 3-14 of Talavera. As for laser cutting of Velcro or of fabric, that technique was a well-known technique in the clothing industry at the time the invention was made both to get a clean cut and to get a fused seam that was free of fraying. In view of well-known and conventional techniques in the clothing industry, it would have been obvious to one of ordinary skill in the art to include with the attachment system of McBride in view of Talavera wherein each of the slits was bound by opposing edges of the loop pile fabric and the woven fabric fused together, so as to strengthen the

connection between the holder and the platform of McBride in view of Talavera and to get a clean cut and a fused seam that was free of fraying.

Regarding claim 19, McBride in view of Talavera disclose the attachment system of claim 14. However, neither McBride nor Talavera disclose wherein the at least one tab has a V shape. As for the tab having a V shape, it is well known in the clothing art to provide a V shape for a strap shaped member to pass that member through an opening as evidenced by the conventional tapered or V shaped end of belts passed through a belt buckle. In view of the well-known V shape to pass the end of a strap shaped member through an opening, it would have been obvious to one of ordinary skill in the art to provide the at least one tab of McBride in view of Talavera with a V shape to make the tab easier to pass through the slits of McBride in view of Talavera.

Regarding claim 20, McBride in view of Talavera disclose the attachment system of claim 19. However, neither McBride nor Talavera disclose wherein the holder comprises a pouch and includes a plurality of the V shape tabs at spaced locations there along. Talavera discloses the holder comprises a pouch (pocket 88 is considered to be a pouch because it is a container made of flexible material - see col 3, ln 58-60; Fig 6, 9). McBride also discloses a pouch 136 (pg 14, ln 7-10; Fig 9). Talavera further discloses a pouch including a plurality of tabs at spaced locations there along (col 2, ln 38-45 and Fig 3, 4). To make each of the tabs V shaped would have been obvious to one of ordinary skill in the art for the reasons set forth in claim 19 above.

Regarding claim 21, McBride discloses an attachment system for supporting holders on a carrier (14), including a generally vertical platform (118) including a front

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side (outer side) having a plurality of openings arranged in a predetermined pattern of vertically aligned and spaced apart rows, configured for receiving one or more objects in a vertical interlocking manner for supporting a holder against the front side (see pg 13, ln 20 to pg 14, ln 2; Fig 1 - pattern of vertically aligned and spaced apart rows of keyhole openings 126 removably receive an appropriate load or supply - load or supply considered to be elements which would have been capable of attaching at least one holder to the platform), characterized by the front side being substantially smooth (see Fig 1), the platform having a back side (side of platform adjacent 32) opposite the front side and opposing a surface of the carrier (14) enclosing a generally flat pocket there between generally coextensive with the platform (flat pocket between platform 118 and panel 14), a closure along an edge of the platform (platform 118 closed against panel 14 by fastening components 114, 116, 120, 122, 124 - see pg 12, ln 15-24; Fig 1) for preventing entry of particulates into the pocket (retainer straps 116 keep platform 118 closed against adjacent surface 32 tightly enough to prevent entry of particulates into the pocket) and configured to be openable sufficiently to allow insertion of at least fingers of a hand into the cavity there through (sides of platform 118 are pressed against, but not attached to surface 32, which would make the sides of the platform capable of being opened sufficiently to allow insertion of fingers of a hand into the flat cavity), and the openings extending through the platform to the cavity and being defined and bounded by edges (as seen in Fig 1) configured as a barrier to passage of particulates through the openings (small keyholes 126 provide a barrier - see pg 13, ln 20 to pg 14, ln 2 and Fig 1) while allowing passage of flat straps there through

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for interlockingly securing a holder against the front side (platform 118 allows straps or other fastening devices, see pg 13, ln 20 to pg 14, ln 2), and the back side of the platform at least partially comprising a first fastening system (see pg 13, ln 25 to pg 14, ln 2 and Fig 1). McBride fails to disclose a plurality of slits, the slits configured for receiving one or more straps and maintaining the barrier to passage of particulates through the slits about the straps, and the back side of the platform comprising a component of a hook and loop fastening system. McBride further discloses in Fig 9 and pg 14, ln 7-10 a pouch arrangement 136, wherein the fastening component 138 of the pouch is a hook and loop fastening system on the back side of the pouch arrangement as best seen in Fig 9. It would have been obvious to one of ordinary skill in that art to substitute a fastening component of a hook and loop system along the back side of platform 118, wherein the hook and loop system would be in place of the attachment system 30 disclosed by McBride as a simpler to manufacture and simpler to use attachment mechanism. The further reference to Talavera discloses a plurality of slits (92 and 94) through the platform (90), wherein the slits permit a strap 68 to secure holder 88 to a support 12 (see col 3, ln 58 to col 4, ln 2 and Fig 9). In view of Talavera, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the Velcro strap and parallel slit structure of Talavera for the keyhole connections of McBride to better secure objects to the platform of McBride, which slits would inherently maintain the barrier to passage of particulates through the slits about a straps.

Regarding claim 22, McBride in view of Talavera disclose the attachment system of claim 21, further characterized by Talavera disclosing at least one holder (pocket 88) supported adjacent to the front side of the platform (90) by at least one substantially flat, flexible tab (68) extending through one of the slits (92, 94) with the edges defining the slit maintaining the barrier about the tab (see col 3, ln 21-25 and ln 58-65 and Fig 9), and the tab having a second fastening component (84) of a hook and loop fastening system attached to the second fastening component in the pocket securing the holder to the platform (strips 38 and 40, see col 2, ln 38-45 and Fig 3).

Regarding claim 23, McBride in view of Talavera disclose the attachment system of claim 22, wherein Talavera discloses the second fastening component (84) is detachable from the first component (38 and 40 of Talavera and also capable of being detachable from hook and loop components taught by McBride) by opening the closure and inserting fingers into the pocket for grasping and detaching the fastening components (see Fig 3 and 4 of Talavera and Fig 1 and 9 of McBride).


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to COREY SKURDAL whose telephone number is (571)272-9588. The examiner can normally be reached on M-Th 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Pickett can be reached on 571-272-4560. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/COREY SKURDAL/  
Examiner, Art Unit 3782

<b>Search Notes</b>  	<b>Application/Control No.</b>  14237468	<b>Applicant(s)/Patent Under Reexamination</b>  COLE ET AL.
	<b>Examiner</b>  COREY SKURDAL	<b>Art Unit</b>  3782

CPC- SEARCHED		
Symbol	Date	Examiner
A45F3/14	12/15/2015	CNS

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
224	250, 578-580, 660, 671-675, 901.2, 901.4, 901.6, 901.8	12/15/2015	CNS
2	102	12/15/2015	CNS

SEARCH NOTES		
Search Notes	Date	Examiner
inventor name search	12/15/2015	CNS

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of	:	Examiner: Corey Nelson Skurdal
	:	
Michael E. Cole	:	Group Art Unit 3782
	:	
Serial No.: 14/237,468	:	Confirmation No. 7080
	:	
Filed: Feb. 6, 2014	:	
	:	
For: LIGHT WEIGHT MODULAR POUCH	:	
ATTACHMENT SYSTEM AND	:	
METHOD	:	

**Last Office Action dated December 21, 2015**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**AMENDMENT**

S I R:

In response to the Office Action dated December 21, 2015, and within the sixth month for response thereto, and upon payment of the appropriate extension of time fee, as noted in the accompanying Petition for Extension of Time to Respond, Applicant herein proposes to amend the above-identified patent application as follows:

**Listing of the Claims** begins on page 2 of this paper.

**Remarks/Arguments** begin on page 8 of this paper.



## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing Of Claims:**

1                   Claim 1 (presently amended). An attachment system, comprising:  
2                   a platform having a front side, an opposite back side, and a plurality  
3 of slits through the platform arranged in a predetermined pattern of vertically  
4 aligned and spaced apart rows, configured for receiving elements for attaching at  
5 least one holder to the platform, wherein the platform is supported by and comprises  
6 an element of a carrier configured to be worn on a user's body with the back side of  
7 the platform facing the carrier and the front side facing outwardly for carrying the at  
8 least one holder at a desired location ~~on the user's body~~ adjacent to the front side;  
9 and  
10                  ~~characterized by the back side of the platform including a fastening~~  
11 ~~component of a hook and loop fastening system thereon adjacent to the slits and~~  
12 being comprised of laminated layers, the back side disposed in opposing relation to a  
13 surface of the carrier or a backing element forming a generally flat cavity  
14 therebetween, the platform and the carrier or backing element having generally  
15 coextensive peripheral edge portions attached together and bounding and  
16 substantially enclosing the flat cavity providing a barrier to entry of particulates  
17 thereabout, ~~at least one of the coextensive edge portions being openable to allow~~  
18 ~~insertion of fingers of a hand into the flat cavity, and the slits being defined and~~  
19 ~~bound by opposing edges of the laminated layers, respectively, disposed sufficiently~~  
20 ~~close together when in a free state, providing a barrier to passage of particulates~~  
21 ~~therebetween~~ each of the edges bounding the slits comprising a hardened fusion of  
22 the laminated layers.

1                   Claim 2 (presently amended). The attachment system of claim 1,  
2   wherein the back side of the platform comprises a fastening component of the a  
3   hook and loop fastening system ~~comprises a loop pile fabric~~.

1                   Claim 3 (original). The attachment system of claim 2, wherein the  
2   front side of the platform comprises a woven or a non-woven fabric.

1                   Claim 4 (presently amended). The attachment system of claim 3,  
2   wherein the fastening component comprises a loop pile fabric, and the loop pile  
3   fabric and the woven fabric are laminated, adhered, or fused together, or comprise a  
4   composite of a smooth fabric on one surface and a pile fabric on an opposite surface.

1                   Claim 5 (presently amended). The attachment system of claim ~~3~~ 1,  
2   wherein ~~each of the edges bounding the slits comprises a hardened fusion of the loop~~  
3   ~~pile fabric and the woven fabric, at least one of the coextensive edge portions being~~  
4   is openable to allow insertion of fingers of a hand into the generally flat cavity.

1                   Claim 6 (presently amended). The attachment system of claim ~~5~~ 1,  
2   wherein the edges of the laminated layers are laser fused.

1                   Claim 7 (presently amended). The attachment system of claim ~~5~~ 4,  
2   further comprising a holder including at least one tab having hook components of  
3   the hook and loop fastening system thereon, and wherein the edges bounding the  
4   slits are sufficiently resiliently flexible to allow passage of the tabs therethrough,  
5   respectively, for fastening to the loop pile fabric while biasing against the tabs  
6   forming a barrier to passage of particulates thereabout, respectively.

1                   Claim 8 (original). The attachment system of claim 7, wherein the  
2   tab has a V shape.

1                   Claim 9 (presently amended). The attachment system of claim ~~4~~ 2,  
2   comprising a holder including at least one tab extending therefrom having a free end  
3   portion including a fastening component of a hook and loop fastening system  
4   thereon attachable to the fastening component of the hook and loop fastening system  
5   on the back side of the platform, the at least one tab being sized for insertion through  
6   any of the slits, respectively, such that edges of the platform bounding the slit will  
7   contact the tab forming a barrier to passage of particulates thereabout.

1                   Claim 10 (original). The attachment system of claim 9, wherein the  
2   holder comprises a pouch.

1                   Claim 11 (original). The attachment system of claim 9, wherein the  
2   carrier comprises a vest, a cummerbund, or a component of a cummerbund or a vest.

1                   Claim 12 (original). The attachment system of claim 9, wherein the  
2   tab has a V shape.

1                   Claim 13 (original). The attachment system of claim ~~4~~ 9, wherein  
2   adjacent ones of the rows of slits are spaced a predetermined distance apart, and the  
3   at least one tab has a length equal to about twice the predetermined distance or less.

1                   Claim 14 (original). An attachment system for removably attaching  
2   at least one holder to a carrier configured for wear on a human body, the carrier  
3   having at least one outer surface oriented to face away from a body on which the  
4   carrier is worn, the attachment system comprising:  
5                   a platform supported in an upstanding orientation on the carrier in  
6   covering relation to at least a portion of the outer surface of the carrier to bound and  
7   enclose a generally flat cavity therebetween, the platform having a front side facing

8 outwardly, an opposite back side facing the cavity, and a plurality of slits through  
9 the platform arranged in a predetermined pattern of vertically aligned and spaced  
10 apart rows, the back side including a fastening component of a hook and loop  
11 fastening system thereon adjacent to the slits;  
12 at least one holder configured for holding an article or object, having  
13 at least one flat, flexible tab extending therefrom including a fastening component of  
14 a hook and loop fastening system thereon attachable to the fastening component of  
15 the back side of the platform, the at least one tab being configured for passage  
16 through any of the slots, respectively, into the flat cavity, for attaching the fastening  
17 component thereof to the fastening component on the back side, for releasably  
18 securing the holder adjacent to the front side of the platform.

1 Claim 15 (original). The attachment system of claim 14, wherein the  
2 fastening component on the back side of the platform comprises a loop pile fabric.

1 Claim 16 (original). The attachment system of claim 15, wherein the  
2 front side of the platform comprises a woven or non-woven fabric attached to the  
3 loop pile fabric.

1 Claim 17 (original). The attachment system of claim 16, wherein the  
2 loop pile fabric and the woven or non-woven fabric are attached by lamination,  
3 adhesive, or fusion, or comprise a composite of a smooth fabric on one surface and a  
4 pile fabric on an opposite surface.

Claim 18 (original). The attachment system of claim 16, wherein  
each of the slits is bound by opposing edges of the loop pile fabric and the woven  
fabric fused together.

1                   Claim 19 (original). The attachment system of claim 14, wherein the  
2   at least one tab has a V shape.

1                   Claim 20 (original). The attachment system of claim 19, wherein the  
2   holder comprises a pouch and includes a plurality of the V shape tabs at spaced  
3   locations therealong.

1                   Claim 21 (original). An attachment system for supporting holders on  
2   a carrier, including a generally vertical platform including a front side having a  
3   plurality of slits arranged in a predetermined pattern of vertically aligned and spaced  
4   apart rows, configured for receiving one or more elongate straps in a vertical  
5   interlocking manner for supporting a holder against the front side,  
6                   characterized by the front side being substantially smooth, the  
7   platform having a back side opposite the front side and opposing a surface of the  
8   carrier enclosing a generally flat pocket therebetween generally coextensive with the  
9   platform, a closure along an edge of the platform for preventing entry of particulates  
10   into the pocket and configured to be openable sufficiently to allow insertion of at  
11   least fingers of a hand into the cavity therethrough, and the slits extending through  
12   the platform to the cavity and being defined and bounded by edges configured as a  
13   barrier to passage of particulates through the slits while allowing passage of flat  
14   straps therethrough for interlockingly securing a holder against the front side and  
15   maintaining the barrier to passage of particulates through the slits about the straps,  
16   and the back side of the platform at least partially comprising a first fastening  
17   component of a hook and loop fastening system.

1                   Claim 22 (original). The attachment system of claim 21, further  
2   characterized by at least one holder supported adjacent to the front side of the  
3   platform by at least one substantially flat, flexible tab extending through one of the  
4   slits with the edges defining the slit maintaining the barrier about the tab, and the tab

5   having a second fastening component of a hook and loop fastening system attached  
6   to the second fastening component in the pocket securing the holder to the platform.

1                   Claim 23 (original). The attachment system of claim 22, wherein the  
2   second fastening component is detachable from the first component by opening the  
3   closure and inserting fingers into the pocket for grasping and detaching the fastening  
4   components.

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### **REMARKS/ARGUMENTS**

Claims 1-23 are pending in this application, and all of them are rejected. In particular, claims 1-23 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over McBride et al. WO 2009/051619A2 in view of Talavera.

Responsive to the rejection, Applicants herein amend independent claim 1, and claims 2, 4, 5, 6, 7, and 9 that depend from claim 1, to more patentably distinguish those claims over the cited prior art. Applicant herein traverses the rejection of those claims, as well as claim 14 through 23, as set forth below.

Turning to amended claim 1, that claim is directed to an attachment system including a platform having a front side, an opposite back side, and **a plurality of slits therethrough** configured for receiving elements for attaching at least one holder to the platform. Claim 1 is amended to require the platform to be supported by and comprise an element of a carrier configured to be worn on a user's body with the back side of the platform facing the carrier and the front side facing outwardly, for carrying the at least one holder at a desired location adjacent to the front side. Claim 1 is further amended to require the platform being comprised of laminated layers, the back side disposed in opposing relation to a surface of the carrier or a backing element forming a generally flat cavity therebetween, the platform and the carrier or backing element having generally coextensive peripheral edge portions attached together and bounding and substantially enclosing the flat cavity providing a barrier to entry of particulates thereabout, and **the slits being defined and bound by opposing edges of the laminated layers, each of the edges bounding the slits comprising a hardened fusion of the laminated layers.**

Applicants respectfully assert that the above combination of features of the attachment system of amended claim 1 is not disclosed, taught, and/or suggested or contemplated by the combination of the McBride and Talavera references. In particular, it can be agreed that McBride discloses a platform (load carrier 118) with mounting elements (key hole openings 126) and mentions that different attachment methods could be used. It can also be agreed that Talavera discloses a platform (support 12) that has some strips of hook and loop fastener material (Velcro strips 40, 42, 44) on its opposite surfaces (22 and 24), and teaches that an associated holder (pockets 72, 88) can have slits (92, 94) in a surface (90). However, the slits 92 and 94 are disclosed only as part of the pocket 88 (through rear surface 90 thereof) which is the element that is attached to the platform (support 12) and are **not** disclosed as being on the platform itself as recited in amended claim 1. There is no mention in McBride or Talavera of the material composition of surface 90, or edges defining the slits, lamination, or that any edges bounding the slits being hardened, by fusing the laminated layers or otherwise. Nor is there a stated suggestion or motivation in either document or is it generally known in the art to do so.

Addressing the assertion in the Office Action in the rejection of original claim 5, that it is known to fuse fabric when cutting it to reduce fraying, while that is true, there is no indication or suggestion that **laminated layers** can be fused to form a **hardened edge**, or that such as hardened edge can be used to bound a slit for receiving elements for attaching at least one holder to the platform, as required in amended claim 1. Applicant therefore respectfully asserts that those grounds for rejection are wholly speculative absent the hind sight benefit of the teachings of the present invention, and that one skilled in the art would otherwise not be aware of and



would be surprised to discover that a lamination of layers could be fused together to form a hardened edge as claimed in claim 1.

In light of the above considerations, Applicants respectfully assert that amended claim 1 is patentably distinguishable over the cited prior art and allowable.

Claims 2-13 depend from amended claim 1 and add still further limitations thereto. In particular, claim 2 requires that the **back side of the platform comprises a fastening component of a hook and loop fastening system**. Claim 1 is amended to more particularly recite the location of the platform back side and that this is thus an **internal surface**. Addressing the argument in this regard in the rejection of original claim 1, while support 12 of McBride has a hook and loop fastening component on both of its surfaces 20 and 22, neither of those surfaces are also disposed in opposing relation to a surface of the carrier or a backing element forming a generally flat cavity therebetween (and thus being disposed internally), as required in the combination of claims 1 and 2. Also, while pockets 72 and 88 have fastening elements on their rear surfaces, those surfaces are external and those pockets do not comprise anything analogous to the “platform” of the present invention as claimed, but instead comprise elements analogous to the holders to be attached to the platform, and they only bound any kind of a cavity (open about its periphery) with the front side of the platform itself when mounted thereon, not with a carrier or backing element as recited in combined claims 1 and 2.

Amended claim 5 depends from claims 1 and 3 and requires that at least one of the coextensive edge portions is openable to allow insertion of fingers of a hand into the generally flat cavity. Addressing the rejection of claim 1 in regard to this feature, while McBride admittedly discloses that a “platform” (load carrier 118) is openable, it is in concert with

relatively large keyhole openings which would negate the benefit of any sealing capability.

McBride discloses an openable pocket (on opposite rear panel 12) of that vest, but it is a completely separate element of the vest and is not related to or otherwise associated with the “platform” (load carrier 118) of the front of that vest.

Claim 6 depends from claim 1 and requires the edges of the laminated layers be laser fused. In addition to the assertions in traversing the rejection of claim 1, Applicants respectfully point out that, within their knowledge, it was not known prior to disclosure of the present invention that laminated layers could be laser fused to create useful hardened edges. Further in this regard, when cutting fabric with lasers, it is known that the fabric can be scorched or burned, melted, etc., and many fabrics will melt away from a laser cut. It is also known that there are a large number of possible combinations of laser power level, beam width, pulse width, duty cycle, etc., that can be employed when laser cutting material, and that multiple layers of fabric can be cut with a beam. However, it is also known that when cutting multiple layers, this is typically done to optimize or increase productivity of the cutting operation, not to create any type of fused joiner or closure of laminated layers, and it would likely have been presumed to be counterproductive and undesirable to apply the above parameters such that fusion of adjacent layers were to occur. To summarize, there is no evidence that it was known prior to the invention to fuse laminated edges, or any adjacent overlaying layers of laser cut material to form a hardened joint edge, as that would typically be undesirable, and an unintended consequence.

Claim 7 depends from claims 1, 2, 3 and 4, and adds a holder including at least one tab having hook components of the hook and loop fastening system thereon, and wherein the edges bounding the slits are sufficiently resiliently flexible to allow passage of the tabs therethrough,

respectively, for fastening to the loop pile fabric while biasing against the tabs forming a barrier to passage of particulates thereabout, respectively. Again, it is asserted that **fused edges of laminated layers** is not disclosed by the cited prior art, nor was it known to those skilled in the art prior to the present invention. It is also asserted that the combination of cited references fails to disclose or suggest a platform having slits of any kind, and instead the only slits cited are instead on the “holder”, that is, pocket 88, not the support 12 which would be the analogous element to the platform of these claims. Still further, it is also pointed out that the tabs 68 identified in the rejection of this feature are attached to the support 12 which is analogous to the platform of the claims, not on the pocket analogous to the holder of the claims. Addressing claim 8, Applicants respectfully assert that the argument that a V-shape tab is analogous to a belt through a buckle is erroneous, as the V-shape practically doubles the surface area of engagement and thus holding power of the tab compared to a single tab, as pointed out in the specification. Applicants also point out that in the preferred embodiment, the V-shape tab must be folded to fit through the slit, which would be harder, rather than easier, contrary to the argument made in the rejection of this claim.

Claim 9 depends from claims 1 and 2, and requires a holder including at least one tab extending therefrom having a free end portion including a fastening component of a hook and loop fastening system thereon attachable to the fastening component of the hook and loop fastening system on the back side of the platform. Claim 9 further requires that the at least one tab be sized for insertion through any of the slits, respectively, such that edges of the platform bounding the slit will contact the tab forming a barrier to passage of particulates thereabout.

Applicants herein incorporate their arguments in the traversal of the rejection of claim 7 as their response to the rejection of this claim.

For the foregoing reasons, Applicants respectfully assert that claims 2-13 in combination with amended base claim 1 are patentably distinguishable over the cited prior art and allowable.

Applicant traverses the rejection of independent claim 14, for many of the grounds set forth in the traversal of the rejections of claims 1, 2, and 7 set forth above and hereby incorporated herein by reference. In particular, it is noted that claim 14 requires that attachment system comprise a platform supported in covering relation to at least a portion of the outer surface of a carrier to bound and enclose a generally flat cavity therebetween, the platform having a front side facing outwardly, an opposite back side facing the cavity, and a plurality of slits through the platform arranged in a predetermined pattern of vertically aligned and spaced apart rows. As asserted above, neither McBride or Talavera disclose, teach, or suggest, nor is motivation provided for, such a slitted platform to bound and enclose a flat pocket. The only slits disclosed in the cited combination are slits 92 and 94 in the rear surface of the pocket 88, or possibly the ends of tunnel 82 of pocket 72, both of which are only analogous to a holder or pouch element of the present invention, not the claimed platform of this claim. Claim 14 additionally requires the back side of the platform (which bounds and encloses the flat pocket as just explained) include a fastening component of a hook and loop fastening system thereon adjacent to the slits. Again, nowhere in the cited references is this feature disclosed internally in a similar manner, and it would be speculation whether one skilled in the art viewing or with knowledge of McBride would ascertain any need or desire to provide a fastener on the back side of load carrier 118. As recited in the traversal of the rejection of claim 5, the only internal hook

and loop fastening components are disclosed in McBride, as closures for an openable pocket on a different surface (opposite rear panel 12) of that vest. This application of hook and loop fasteners is not related to or otherwise associated with the “platform” (load carrier 118) of the front of that vest in connection with a pocket as recited in claim 14. Here, it is emphasized that Talavera disclose only external fastening of its hook and loop fasteners, namely, only between external hook and loop fasteners on the various pockets and the support 12, neither reference even mentioning or having any need for fastening of the components within an enclosed pocket.

Claim 14 additionally, and importantly requires at least one holder configured for holding an article or object, having at least one flat, flexible tab extending therefrom including a fastening component of a hook and loop fastening system thereon attachable to the fastening component of the back side of the platform, the at least one tab being configured for passage through any of the slots, respectively, into the flat cavity, for attaching the fastening component thereof to the fastening component on the back side, for releasably securing the holder adjacent to the front side of the platform. As set forth in the traversal of the rejection of claim 7, it is again pointed out that the cited combination completely lacks this feature, as Talavera discloses only straps 68 on support 12, and none on pockets 72, 88, which are the only elements of either cited invention analogous to a holder, and those straps attach in a different manner than that recited in the claim.

For the foregoing reasons, claim 14 is believed to be patentably distinguishable over the cited combination of McBride and Talavera and allowable.

Claims 15 through 20 depend from claim 14, and add still further distinguishing limitations thereto. In particular, claim 17, depends from claims 14 and 16 and requires loop pile

fabric (bounding the flat pocket as recited in claim 14) and woven or non-woven fabric to be attached by lamination, adhesive, or fusion, or comprise a composite of a smooth fabric on one surface and a pile fabric on an opposite surface. There is no similar structure within the combined teachings of McBride and Talavera internally in relation to a flat pocket, other than as a closures for an openable pocket on a different surface (opposite rear panel 12) of the McBride vest, and that application of hook and loop fasteners is not related to or otherwise associated with the “platform” (load carrier 118) of the front of that vest in connection with a pocket.

Claim 18, depends from claims 14 and 16 and requires that each of the slits is bound by opposing edges of the loop pile fabric and the woven fabric fused together. The rejection of this claim is traversed on the grounds set forth in regard to claims 6 and 7, above and incorporated herein by reference.

Claims 19 and 20 require the V-shaped tabs, and the rejection of these claims is traversed on the grounds set forth in regard to claim 8 above, hereby incorporated herein by reference.

Applicant traverses the rejection of independent claim 21, for many of the grounds set forth in the traversal of the rejections of claims 1, 2, 7, and 21, set forth above and hereby incorporated herein by reference. In particular, neither McBride or Talavera disclose or even suggest or contemplate a platform having a back side opposite its front side and opposing a surface of a carrier enclosing a generally flat pocket therebetween generally coextensive with the platform, a closure along an edge of the platform for preventing entry of particulates into the pocket and configured to be openable sufficiently to allow insertion of at least fingers of a hand into the cavity therethrough, **with slits extending through the platform to the cavity and being defined and bounded by edges configured as a barrier to passage of particulates**

**through the slits while allowing passage of flat straps therethrough for interlockingly securing a holder against the front side and maintaining the barrier to passage of particulates through the slits about the straps.** Again, while McBride separately discloses a “pocket” behind load carrier 118 on one portion of that device and a Velcro closing pouch on a rear panel, they are completely different structures, and there is simply no contemplation or suggestion in either of the references for providing a manner of inserting a tab or strap through the openings of carrier 118 into the cavity behind carrier 118, or of somehow attaching older in some manner to the front of carrier 118 using the same. Also, given the number and size of the keyhole openings, it is hard to imagine that the McBride disclosure would contemplate any need for sealing against entry of particulates. In essence in this regard, it is respectfully asserted that the combination of the bride and Talavera references is simply inadequate, even with a broad reading of knowledge in the related art, to come up with the present invention as set forth in claim 21.

For the foregoing reasons, claim 21 is believed to be patentably distinguishable over the cited combination of McBride and Talavera.

Claim 22 depends from claim 21 and requires at least one holder supported adjacent to the front side of the platform by at least one substantially flat, flexible tab extending through one of the slits with the edges defining the slit maintaining the barrier about the tab, and the tab having a second fastening component of a hook and loop fastening system attached to the second fastening component in the pocket securing the holder to the platform. This arrangement is not disclosed, taught, suggested, and/or contemplated by either or both McBride and Talavera , for the reasons set forth in regard to claims 7 and 14 above, herein incorporated by reference.

Again, McBride is silent in this regard, and Talavera discloses only straps 68 on support 12, and none on pockets 72, 88, which are the only elements of either cited invention analogous to a holder, and those straps attach in a different manner than that recited in the claim. Applicants again assert that the only pocket of McBride is for holding a cooling element, and the analogous straps 68 are on the pocket, not the support 12, and fastening component 84 only attaches externally to support 12, not within any structure analogous to a pocket in the manner of the claim.

Claim 23, depends from claim 22, and claim 21, and requires the second fastening component to be detachable from the first component by opening the closure and inserting fingers into the pocket for grasping and detaching the fastening components. This combination of features is not present, nor would it be contemplated in the cited combination of references without the benefit of the hindsight afforded by the present invention, as neither disclose use of fastening elements of a hook and loop system within an enclosed pocket. In this regard, Applicants again respectfully assert that fastening component 84 of Talavera is disclosed only as wrapping around the exterior of support 12 for fastening to the exposed and open back side, and is in no way utilized within a pocket of any kind.

With these amendments, all of the claims are believed to contain limitations that patentably distinguish them from the cited prior art. The non-cited references have been considered, and are deemed non-pertinent to the claims a presently presented. Accordingly, favorable action and allowance of all of the pending claims is hereby requested.



DN 3875PCT/US  
Application No. 14/237,468  
Amendment dated June 21, 2016  
Reply to Office Action of December 21, 2015

If the Examiner has any requirements or suggestions for placing the present claims in better condition for allowance, Applicant's undersigned attorney would appreciate a telephone call at the number listed below.

Respectfully submitted,  
MATTHEWS EDWARDS LLC  
/ Stephen R Matthews /

Stephen R. Matthews  
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Attorney for Applicant

June 21, 2016  
*srm\3875pctus\3875pctusAmendA.doc*

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b>		Docket Number (Optional) DN 3875 PCT/US
Application Number 14/237,468	Filed 2014-02-06	
For LIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM AND METHOD		
Art Unit 3782	Examiner Corey Nelson Skurdal	

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	<u>Fee</u>	<u>Small Entity Fee</u>	<u>Micro Entity Fee</u>	
<input type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ _____
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$ _____
<input checked="" type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$ <u>700</u>
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$ _____
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$ _____

☐ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.  
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to  
Deposit Account Number 08-1280.

☐ Payment made via EFS-Web.

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant.

☒ attorney or agent of record. Registration number 34,384.

☐ attorney or agent acting under 37 CFR 1.34. Registration number \_\_\_\_\_.

/ Stephen R Matthews /

Signature

2016-06-21

Date \_\_\_\_\_

Stephen R. Matthews

Typed or printed name

314-241-4427

Telephone Number

**NOTE:** This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below\*.

☒ \* Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	14237468			
<b>Filing Date:</b>	06-Feb-2014			
<b>Title of Invention:</b>	Light Weight Modular Pouch Attachment System And Method			
<b>First Named Inventor/Applicant Name:</b>	Michael E. Cole			
<b>Filer:</b>	Stephen Roy Matthews			
<b>Attorney Docket Number:</b>	DN 3875 PCT/US			
Filed as Small Entity				
<b>Filing Fees for U.S. National Stage under 35 USC 371</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension - 3 months with \$0 paid	2253	1	700	700
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>700</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	26134572
<b>Application Number:</b>	14237468
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	7080
<b>Title of Invention:</b>	Light Weight Modular Pouch Attachment System And Method
<b>First Named Inventor/Applicant Name:</b>	Michael E. Cole
<b>Customer Number:</b>	2128
<b>Filer:</b>	Stephen Roy Matthews
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	DN 3875 PCT/US
<b>Receipt Date:</b>	21-JUN-2016
<b>Filing Date:</b>	06-FEB-2014
<b>Time Stamp:</b>	22:32:56
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 700
RAM confirmation Number	8298
Deposit Account	081280
Authorized User	MATTHEWS, STEPHEN R.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees) per Exhibit 2001

IPR2019-01152, -01153

Crye Precision LLC v FirstSpear, LLC

Charge any Additional Fees required under 37 CFR 1.21 (Miscellaneous fees and charges)

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	3875pctusAmendA.pdf	92453	no	18
			b661a2dd7afd77240451186292b0f9f1caed0315		
Warnings:					
Information:					
2	Extension of Time	3875pctusExtensionofTimeA.pdf	401270	no	1
			c06635a2a456788f211e16a8a41248972b53df749		
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30611	no	2
			03eef006e001aa6b394237b48ee59bb1454228ae		
Warnings:					
Information:					
Total Files Size (in bytes):			524334		

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

#### **New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

#### **National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

#### **New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875	Application or Docket Number <b>14/237,468</b>	Filing Date <b>02/06/2014</b>	<input type="checkbox"/> To be Mailed
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ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

**APPLICATION AS FILED – PART I**

(Column 1)

(Column 2)

FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =	
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

**APPLICATION AS AMENDED – PART II**

(Column 1)

(Column 2)

(Column 3)

AMENDMENT	06/21/2016	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 23	Minus	** 23	= 0	X \$40 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X \$210 =	0
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))						
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
TOTAL ADD'L FEE						<b>0</b>	

(Column 1)

(Column 2)

(Column 3)

AMENDMENT	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	X \$ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	X \$ =	
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))					
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					
TOTAL ADD'L FEE						

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

\*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE  
/LAVINIA JOHNSON/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875	Application or Docket Number <b>14/237,468</b>	Filing Date <b>02/06/2014</b>	<input type="checkbox"/> To be Mailed
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ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

### APPLICATION AS FILED – PART I

(Column 1)

(Column 2)

FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =	
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

### APPLICATION AS AMENDED – PART II

(Column 1)

(Column 2)

(Column 3)

AMENDMENT	06/21/2016	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 23	Minus	** 23	= 0	X \$40 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0	X \$210 =	0
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))						
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
TOTAL ADD'L FEE						<b>0</b>	

(Column 1)

(Column 2)

(Column 3)

AMENDMENT	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))					
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					
TOTAL ADD'L FEE						

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

\*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE  
/LAVINIA JOHNSON/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.





# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
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## NOTICE OF ALLOWANCE AND FEE(S) DUE

2128 7590 10/07/2016  
MATTHEWS EDWARDS LLC  
514 EARTH CITY PLAZA  
SUITE 131  
EARTH CITY, MO 63045

EXAMINER

SKURDAL, COREY NELSON

ART UNIT

PAPER NUMBER

3782

DATE MAILED: 10/07/2016

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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14/237,468

02/06/2014

Michael E. Cole

DN 3875 PCT/US

7080

TITLE OF INVENTION: Light Weight Modular Pouch Attachment System And Method

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	01/09/2017

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
or **Fax** (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

2128 7590 10/07/2016  
MATTHEWS EDWARDS LLC  
514 EARTH CITY PLAZA  
SUITE 131  
EARTH CITY, MO 63045

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/237,468	02/06/2014	Michael E. Cole	DN 3875 PCT/US	7080

TITLE OF INVENTION: Light Weight Modular Pouch Attachment System And Method

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	01/09/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
SKURDAL, COREY NELSON	3782	224-675000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

1 \_\_\_\_\_

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

2 \_\_\_\_\_

3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

☐ A check is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

**NOTE:** Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

**NOTE:** If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

**NOTE:** Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/237,468	02/06/2014	Michael E. Cole	DN 3875 PCT/US	7080

2128 7590 10/07/2016  
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EXAMINER

SKURDAL, COREY NELSON

ART UNIT	PAPER NUMBER
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3782

DATE MAILED: 10/07/2016

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

### Privacy Act Statement

**The Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

<b>Notice of Allowability</b>	<b>Application No.</b> 14/237,468	<b>Applicant(s)</b> COLE ET AL.	
	<b>Examiner</b> COREY SKURDAL	<b>Art Unit</b> 3782	<b>AIA (First Inventor to File) Status</b> No

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/21/16.  
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_\_.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 1-23. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

**Certified copies:**

- a) ☐ All    b) ☐ Some    \*c) ☐ None of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08),  
 Paper No./Mail Date 2/6/14
3. ☐ Examiner's Comment Regarding Requirement for Deposit  
 of Biological Material
4. ☐ Interview Summary (PTO-413),  
 Paper No./Mail Date \_\_\_\_\_.
5. ☐ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other \_\_\_\_\_.

/COREY SKURDAL/  
 Primary Examiner, Art Unit 3782

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: the amendments to claim 1 define over the art of record and the prior art disclose does not disclose or suggest a platform with slits, the platform comprised of laminated layers forming a cavity with a carrier or backing element, and wherein each of the edges bounding the slots comprises a hardened fusion of the laminated layers as now recited in the claim. Regarding claims 14 and 21, Applicants arguments are persuasive. In particular, while the prior art does disclose and suggest a platform with slits as claimed, there is no teaching of a fastening component on a back side of the platform adjacent to the slits, wherein at least one holder has a flexible tab with a fastening component thereon which is attachable to the fastening component on the back side of the platform. See Applicant's arguments on page 13-14.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to COREY SKURDAL whose telephone number is (571)272-9588. The examiner can normally be reached on M-Th 8am-4pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Newhouse can be reached on 571-272-4544. The fax phone

Art Unit: 3782

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/COREY SKURDAL/  
Primary Examiner, Art Unit 3782

<b>Search Notes</b>  	<b>Application/Control No.</b>  14237468	<b>Applicant(s)/Patent Under Reexamination</b>  COLE ET AL.
	<b>Examiner</b>  COREY SKURDAL	<b>Art Unit</b>  3782

CPC- SEARCHED		
Symbol	Date	Examiner
A45F3/14	12/15/2015	CNS
A45F3/00, 5/02, 2003/001	10/2/2016	CNS
A44B18/0073	10/2/2016	CNS
F42B39/02	10/2/2016	CNS
Y10T24/13, 24/1382	10/2/2016	CNS
A45C13/30, 2013/306	10/2/2016	CNS

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
224	250, 578-580, 660, 671-675, 901.2, 901.4, 901.6, 901.8	12/15/2015	CNS
2	102	12/15/2015	CNS

SEARCH NOTES		
Search Notes	Date	Examiner
inventor name search	12/15/2015	CNS
updated above	10/2/2016	CNS

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
A45F	3/14, 3/00, 5/02, 2003/001	10/2/2016	CNS
A44B	18/0073	10/2/2016	CNS
A45C	13/30, 2013/306	10/2/2016	CNS
F42B	39/02	10/2/2016	CNS
Y10T	24/13, 24/1382	10/2/2016	CNS

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Doc code: IDS

PTO/SB/08a (01-10)

Doc description: Information Disclosure Statement (IDS) Filed

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** ( Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		
First Named Inventor	Cole, Michael E.	
Art Unit		
Examiner Name		
Attorney Docket Number	DN 3875 PCT/US	

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	4236658		1980-12-02	Kallman	
	2	5263618		1993-11-23	Talavera	
	3	5724707		1998-03-10	Kirk et al.	
	4	7047570		2006-05-23	Johnson	

If you wish to add additional U.S. Patent citation information please click the Add button.

Add

U.S.PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20050034232		2005-02-17	Martin	
	2	20070158380		2007-07-12	Calkin	

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** ( Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		
First Named Inventor	Cole, Michael E.	
Art Unit		
Examiner Name		
Attorney Docket Number	DN 3875 PCT/US	

	3	20090282595		2009-11-19	Branson et al.	
	4	20110074644		2011-03-31	Wertman et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. **Add**

## FOREIGN PATENT DOCUMENTS

**Remove**

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup>	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1	2009051619A2	WO		2009-04-23	McBride et al.		<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button **Add**

## NON-PATENT LITERATURE DOCUMENTS

**Remove**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1		<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button **Add**

## EXAMINER SIGNATURE

Examiner Signature	/COREY N SKURDAL/	Date Considered	10/02/2016
--------------------	-------------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

( Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	Cole, Michael E.
Art Unit	
Examiner Name	
Attorney Docket Number	DN 3875 PCT/US

## CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

### SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/ Stephen R Matthews /	Date (YYYY-MM-DD)	2014-02-06
Name/Print	Stephen R. Matthews	Registration Number	34384


This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.


<b>Issue Classification</b> 	<b>Application/Control No.</b> 14237468	<b>Applicant(s)/Patent Under Reexamination</b> COLE ET AL.	
	<b>Examiner</b> COREY SKURDAL	<b>Art Unit</b> 3782	

CPC						
Symbol					Type	Version
A45F		3	/	14	F	2013-01-01
A45F		3	/	00	I	2013-01-01
A44B		18	/	0073	I	2013-01-01
A45F		2003	/	001	A	2013-01-01
A45F		5	/	02	I	2013-01-01
A45C		13	/	30	A	2013-01-01
A45C		2013	/	306	A	2013-01-01
F42B		39	/	02	I	2013-01-01
Y10T		24	/	13	A	2015-01-15
Y10T		24	/	1382	A	2015-01-15
			/			
			/			
			/			
			/			
			/			

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version


NONE  (Assistant Examiner) _____ (Date) _____		<b>Total Claims Allowed:</b> 23	
/COREY SKURDAL/ Primary Examiner.Art Unit 3782  (Primary Examiner) _____ (Date) _____		10/02/2016  O.G. Print Claim(s) 1	O.G. Print Figure 7



<b>Issue Classification</b> 	<b>Application/Control No.</b> 14237468	<b>Applicant(s)/Patent Under Reexamination</b> COLE ET AL.
	<b>Examiner</b> COREY SKURDAL	<b>Art Unit</b> 3782

<input checked="" type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b> <input type="checkbox"/> <b>CPA</b> <input type="checkbox"/> <b>T.D.</b> <input type="checkbox"/> <b>R.1.47</b>															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	17	17												
2	2	18	18												
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11	11														
12	12														
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14	14														
15	15														
16	16														

NONE	<b>Total Claims Allowed:</b> 23	
(Assistant Examiner)	(Date)	
/COREY SKURDAL/ Primary Examiner.Art Unit 3782	10/02/2016	O.G. Print Claim(s) 1
(Primary Examiner)	(Date)	O.G. Print Figure 7

<b><i>Index of Claims</i></b>  	<b>Application/Control No.</b>  14237468	<b>Applicant(s)/Patent Under Reexamination</b>  COLE ET AL.
	<b>Examiner</b>  COREY SKURDAL	<b>Art Unit</b>  3782

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input checked="" type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b> <input type="checkbox"/> CPA <input type="checkbox"/> T.D. <input type="checkbox"/> R.1.47										
CLAIM		DATE								
Final	Original	10/02/2016								
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3	3	=								
4	4	=								
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6	6	=								
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22	22	=								
23	23	=								





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 Alexandria, Virginia 22313-1450  
 www.uspto.gov

## BIB DATA SHEET

CONFIRMATION NO. 7080

<b>SERIAL NUMBER</b> 14/237,468	<b>FILING or 371(c) DATE</b> 02/06/2014 <b>RULE</b>	<b>CLASS</b> 224	<b>GROUP ART UNIT</b> 3782	<b>ATTORNEY DOCKET NO.</b> DN 3875 PCT/US	
<b>APPLICANTS</b> <b>INVENTORS</b> Michael E. Cole, Ste. Genevieve, MO; Scott J. Carver, Manchester, MO; <b>** CONTINUING DATA *****</b> This application is a 371 of PCT/US12/50001 08/08/2012 which claims benefit of 61/521,309 08/08/2011 <b>** FOREIGN APPLICATIONS *****</b> <b>** IF REQUIRED, FOREIGN FILING LICENSE GRANTED *** SMALL ENTITY **</b> 08/19/2015					
Foreign Priority claimed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 35 USC 119(a-d) conditions met <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Verified and /COREY NELSON SKURDAL/ Acknowledged Examiner's Signature	<input type="checkbox"/> Met after Allowance CNS Initials	<b>STATE OR COUNTRY</b> MO	<b>SHEETS DRAWINGS</b> 16	<b>TOTAL CLAIMS</b> 23	<b>INDEPENDENT CLAIMS</b> 3
<b>ADDRESS</b> MATTHEWS EDWARDS LLC 514 EARTH CITY PLAZA SUITE 131 EARTH CITY, MO 63045 UNITED STATES					
<b>TITLE</b> Light Weight Modular Pouch Attachment System And Method					
<b>FILING FEE RECEIVED</b> 680	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit		

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax** **(571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

2128 7590 10/07/2016  
**MATTHEWS EDWARDS LLC**  
**514 EARTH CITY PLAZA**  
**SUITE 131**  
**EARTH CITY, MO 63045**

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/237,468	02/06/2014	Michael E. Cole	DN 3875 PCT/US	7080

TITLE OF INVENTION: Light Weight Modular Pouch Attachment System And Method

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	01/09/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
SKURDAL, COREY NELSON	3782	224-675000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 **Matthews Edwards LLC**

2 \_\_\_\_\_

3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE  
**FirstSpear, LLC**

(B) RESIDENCE: (CITY and STATE OR COUNTRY)  
**Fenton, Missouri**

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
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5. Change in Entity Status (from status indicated above)

- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
- ☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature **/ Stephen R Matthews /**

Date **2017-01-04**

Typed or printed name **Stephen R. Matthews**

Registration No. **34,384**

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	14237468			
<b>Filing Date:</b>	06-Feb-2014			
<b>Title of Invention:</b>	Light Weight Modular Pouch Attachment System And Method			
<b>First Named Inventor/Applicant Name:</b>	Michael E. Cole			
<b>Filer:</b>	Stephen Roy Matthews/Barbara Kuntz			
<b>Attorney Docket Number:</b>	DN 3875 PCT/US			
Filed as Small Entity				
<b>Filing Fees for U.S. National Stage under 35 USC 371</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
UTILITY APPL ISSUE FEE	2501	1	480	480

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				480

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	27969106
<b>Application Number:</b>	14237468
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	7080
<b>Title of Invention:</b>	Light Weight Modular Pouch Attachment System And Method
<b>First Named Inventor/Applicant Name:</b>	Michael E. Cole
<b>Customer Number:</b>	2128
<b>Filer:</b>	Stephen Roy Matthews/Barbara Kuntz
<b>Filer Authorized By:</b>	Stephen Roy Matthews
<b>Attorney Docket Number:</b>	DN 3875 PCT/US
<b>Receipt Date:</b>	04-JAN-2017
<b>Filing Date:</b>	06-FEB-2014
<b>Time Stamp:</b>	15:53:42
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	yes
Payment Type	EFT
Payment was successfully received in RAM	\$ 480
RAM confirmation Number	010517INTEFSW15545800
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

<b>File Listing:</b>					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	IssueFeeTransmittalA.pdf	152070	no	1
			ade8bc9bb066a3e72df0567574bdb9795c299785		
<b>Warnings:</b>					
<b>Information:</b>					
2	Fee Worksheet (SB06)	fee-info.pdf	30870	no	2
			99b5ecec84f390167290cecd089ec991a2ba9a2c		
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			182940		
<p><b>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b>  If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b>  If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b>  If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>					



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[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/237,468	02/14/2017	9565922	DN 3875 PCT/US	7080

2128 7590 01/25/2017  
MATTHEWS EDWARDS LLC  
514 EARTH CITY PLAZA  
SUITE 131  
EARTH CITY, MO 63045

## ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)** (application filed on or after May 29, 2000)

The Patent Term Adjustment is 175 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Michael E. Cole, Ste. Genevieve, MO;  
Scott J. Carver, Manchester, MO;

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