CLOTHING SYSTEM WITH CONCEALED WEAPONS COMPARTMENT

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ABSTRACT

A clothing system with a concealment pocket for concealing a weapon or other items. The concealment pocket includes internal stitching which may follow the outline of a weapon, such as a handgun. The internal stitching maintains the orientation of the handgun when placed in the concealment pocket. The concealment pocket is located on the clothing system such that when a weapon or other item is inserted in the pocket, the outline of the weapon is not visible and the pocket retains the weapon despite movements by the clothing system wearer. The concealment pocket is constructed of materials that offer high strength, resist abrasion, and reduce friction with an inserted weapon allowing for the weapon to be removed with little resistance. Padding attached to the concealment pocket provides a cushioning layer to the clothing system wearer. A cargo pocket may be located in proximity to the concealment pocket. The cargo pocket placement aids in disguising the concealment pocket and its contents. The seams of the clothing system may be positioned to allow for the placement of the concealment pocket. Additional pockets may be provided that may include internal stitching to storage of other items, including weapons. The pocket has sufficient opening width to allow for rapid placement and removal of various sizes of handguns and other equipment without stressing the fabric and has sufficient depth to retain articles placed in the pockets through the wearer's full range of motion.
CLOTHING SYSTEM WITH CONCEALED WEAPONS COMPARTMENT

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention is directed toward a clothing system with at least one compartment. More particularly, the present invention is directed toward a clothing system with at least one compartment for concealing weapons or other items.

[0003] 2. Description of the Related Art

[0004] Law enforcement officers, homeland security officers, members of the military, and citizens are among those with a desire or duty requirement to carry weapons. In many cases, these individuals must carry weapons in a concealed manner, either for tactical advantage, undercover assignments, social necessity, or to comply with concealed weapons regulations. One example is a U.S. federal air marshal who routinely travels aboard aircraft and who must carry a weapon inconspicuously in order to remain undetected by fellow aircraft passengers. Another example is an undercover law enforcement officer who must carry a weapon but cannot use a traditional law enforcement-style holster as that would betray the officer’s undercover status. Similarly, off-duty law enforcement officers have been recently empowered under the Law Enforcement Officers’ Safety Act of 2004 to carry their weapons when off duty. Citizens may also wish to carry weapons inconspicuously while complying with the local regulations pertaining to concealed weapons.

[0005] Traditionally, weapons holsters exist in a variety of forms. These include belt holsters, shoulder holsters, ankle holsters, thigh holsters and other variations that attach to the body and/or clothing by means of straps, bands, buckles, snaps, hooks, or other fasteners. Additional weapon holsters may be included in a purse, backpack or other cargo carrier, as well as specially designed vests, jackets, or coats with internal concealment pockets. All of these options share one or more of the following disadvantages: accidental exposure, difficulty to access, inability to conceal full-sized duty weapons, or discomfort. For example, a holster that must be concealed under an additional layer of clothing such as a belt holster or shoulder holster which may require the user to wear a jacket at inappropriate times, thus indicating the individual may be concealing something; the covering garment such as a jacket or long shirt may shift and accidentally expose the weapon at an inappropriate time; and finally the shirt or jacket may impede rapid access to the weapon at the critical time when it is needed. The deeper a weapon is concealed the more difficult it is to access. Many deep concealment techniques may also make it difficult for the wearer to bend, sit, walk or run comfortably. Others may lead to seasonally inappropriate or conspicuous clothing choices.

[0006] Using any of the above existing concealment products requires the user to make a two-handed motion to clear away the concealing garment or portion of the garment with one hand and retrieve the firearm with the other hand. This requires extra time and thought at a time when milliseconds count and extreme stress makes routine tasks more difficult. Furthermore, the use of two hands to retrieve a weapon puts the user at a disadvantage. It does not leave a hand free to operate a radio, open a door, or fend off an attack.

[0007] These factors combine to cause many to choose smaller, back-up handguns for concealment purposes than for duty purposes. The smaller guns are easier to conceal and more comfortable to carry but often lack the firepower, stopping power, or capacity of larger models. The use of smaller guns also creates a training issue for law enforcement officers, members of the armed forces, or others who switch back and forth between different firearms depending upon different situations, being on or off duty, or in plain clothes or uniform.

[0008] Smaller guns may be conveniently carried in a pants pocket, for example, either inside a pocket holster designed for pocket carry or simply loose within the pants pocket. The present difficulty with pocket carry is that currently available pants and other garments are not specifically suited for concealed carry. Typical pockets are generally lightly constructed, are too small, too tight, and not properly positioned or situated on the garment to contain and conceal virtually all handguns, save for the smallest models. If the handgun does fit within the pants pocket of a typical pair of pants, there is a risk that it may fall out; it may be very difficult to remove or insert; and it may become trapped in the inner pocket liner. Concealed pocket carry is very difficult to achieve with traditional pants due to the large pistol-shaped bulge on the front of the pants in the area of the pocket, also known as “printing”. There are additional disadvantages toward using traditional pants for pocket carry, including lint contamination from the pocket to the handgun, moisture present in the pocket damaging the handgun, or the possibility of the gun rotating out of position and being stuck within the pocket.

[0009] What is needed then is a clothing system that includes at least one dedicated concealed weapons pocket to safely and discretely allow wearers to carry and use a weapon, such as a handgun with one hand, according to embodiments of the present invention.

SUMMARY OF THE INVENTION

[0010] The clothing system of the present invention includes at least one concealed pocket for concealing a weapon or other item. The concealment pocket includes a first concealed pocket-half connected to a second concealed pocket-half forming the concealment pocket. The concealment pocket also includes inner stitching which selectively engages a weapon or item inserted into the concealment pocket. The concealment pocket optionally includes a spacer pad which cushions the concealment pocket and a band which selectively secures the concealment pocket to a limb, for example. The concealment pocket may be constructed of a variety of materials, such as nylon. In one embodiment, a pair of pants includes front and rear leg portions, joined together by inseams and outseams. A waistband and seat section is attached to the leg portions. At least one concealment pocket is attached to the pair of pants. Other pockets may be attached to the pair of pants.

DETAILED DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a front view of a pair of pants according to at least one embodiment of the present invention.

[0012] FIG. 2 is a rear view of a pair of pants according to at least one embodiment of the present invention.

[0013] FIG. 3 is a side cutaway view of a pair of pants according to at least one embodiment of the present invention.

[0014] FIG. 4 is a front side view of a concealment pocket according to at least one embodiment of the present invention.

[0015] FIG. 5 is a rear side view of a concealment pocket according to at least one embodiment of the present invention.
FIG. 6 is a front side view of a swing pocket according to at least one embodiment of the present invention.

FIG. 7 is a sectional view of the layers of a concealment pocket according to at least one embodiment of the present invention.

FIG. 8 is a front view of a pair of pants according to at least one embodiment of the present invention.

FIG. 9 is a rear view of a pair of pants according to at least one embodiment of the present invention.

FIG. 10 is a side cutaway view of a pair of pants according to at least one embodiment of the present invention.

FIG. 11 is a front side view of a concealment pocket with leg band according to at least one embodiment of the present invention.

FIG. 12 is a rear side view of a concealment pocket with leg band according to at least one embodiment of the present invention.

FIG. 13 is a sectional view of the layers of a concealment pocket according to at least one embodiment of the present invention.

FIG. 14 is a front view of a pair of pants according to at least one embodiment of the present invention.

FIG. 15 is a rear view of a pair of pants according to at least one embodiment of the present invention.

DESCRIPTION OF THE INVENTION

The present invention is a clothing system with at least one concealment pocket. The concealment pocket enables a wearer of the clothing system to conceal a weapon or other item from detection by others. The concealment pocket is configured to allow a weapon to be inserted and withdrawn from the pocket in an intuitive and predictable motion. The concealment pocket includes internal stitching which selectively engages an inserted weapon, maintaining its orientation such that when the wearer inserts a hand into the concealment pocket, the weapon is consistently in a position for the wearer to confidently grip and draw the weapon in the correct orientation. The clothing system may include other pockets on the inside and/or outside. Some of these pockets may be concealment pockets, cargo pockets, or other pockets configured to accept other items. The materials for the concealment pocket improve the insertion and withdrawal of a weapon and also provide an environment conducive to weapon storage.

In one embodiment of the present invention, a clothing system such as a pair of pants including a concealment pocket, that allows a wearer to carry and conceal a handgun, other weapon, or other item safely, securely and discreetly as well as allowing for a smooth and rapid draw and replacement when necessary. The clothing system of the present invention overcomes the difficulties and drawbacks of concealment that the use of a holster creates. Additionally, it overcomes the difficulties and drawbacks of using a traditional pocket to carry a weapon and allows a wearer to carry weapons such as handguns of sizes ranging from small to large. The clothing system of the present invention also allows a wearer to quickly draw or access a weapon or item stored within the pocket while providing a high level of concealment for situations in which the wearer does not wish to reveal that the wearer is carrying a weapon or other item.

The clothing system of the present invention, such as a pair of pants, includes tailoring for a loose fit in the upper leg/thigh area that provides the space for the concealment pocket. The additional space allows for a weapon or other items to be inserted in the pocket without the outlines of those objects showing through the garment outer surface, otherwise known as “printing”. Traditional pants, for example, generally include an outseam, also called a sideseam. The outseam joins the front and back pant halves together, opposite the inseam. It generally runs from the garment waist to the wearer’s feet, in the case of a pair of pants. In one embodiment, the pants with a concealment pocket of the present invention have a unique outseam that is offset rearward by 5.08 to 10.16 cm (2 to 4 inches). This offset accommodates the enlarged opening of the concealment pocket and shifts the pocket to a position on the wearer’s outer thigh. The concealment pocket may be attached at the waist and outseam. For example, in one embodiment, the concealment was 40.64 cm (16 inches) deep by 17.78 cm (7 inches) wide. It should be understood that the concealment pocket may have other dimensions, and the prior example is illustrative of but one embodiment of the present invention.

The bottom of the concealment pocket may be contoured with internal stitching or other fasteners to substantially match the shape of a handgun and keep the handgun in a draw position. The bottom of the concealment pocket may be further shaped to cradle or engage with a handgun, such that the forward portion of the concealment pocket in the orientation of the wearer, is configured to cradle the muzzle, with the handgun grip engaging a raised position rearward of the muzzle portion of the concealment pocket. When a wearer places a handgun in the pocket, it is held in a draw position (grip upright and muzzle down) due to the internal stitching of the pocket, also called the Weapon Contour Stitching (WCS). In the concealment pocket of the present invention, a stored weapon is maintained in the draw position when in the pocket, later when the wearer reaches in the pocket to draw the weapon, it is easily found and gripped, eliminating the need for the wearer to “hunt” in the pocket to locate the weapon. Since the weapon is maintained in the correct draw position when stored within the pocket, when the wearer removes the weapon, it is still in the correct draw position such that the weapon is in a ready-to-grasp position, every time.

Further, the present invention provides a clothing system an advantageous, secure concealment pocket for a weapon such as a handgun, which stores the weapon such that another person will not have access do it and will have difficulty detecting its presence. Many traditional handgun holsters present a tempting target for another person to try to obtain the holster wearer’s weapon, such as in a physical struggle between a law enforcement officer and a combative suspect. These holsters often are not effective in securely retaining the weapon once holstered, such as when a holster wearer is changing position, running, climbing, or even more extreme situations, such as falling or tumbling. The present invention, however, securely stores a weapon in a contoured bottom portion of a concealment pocket that still enables the clothing system wearer to confidently reach in the concealment pocket and draw the weapon.

Another advantage of the present invention is that the concealment pocket is constructed of materials that do not have the limitations of traditional pocket materials. These traditional pocket materials may cause difficulties in drawing or storing the weapon and/or damage it if stored within. Many traditional garment pockets are constructed of soft materials such as cotton that appeal to the wearer in that the materials feel soft and comfortable against the wearer’s skin. The same attributes that make these traditional materials preferred for
pocket material makes them poor choices for a pocket that stores a weapon, such as a handgun. These traditional materials are prone to generate lint, which is problematic if in close proximity to a handgun. Handguns are mechanical devices, and as such contain a number of moving parts, many with tight tolerances. If pocket lint accumulates in portions of the handgun, it may adversely affect operation of the handgun. Many handguns include lubrication as part of regular maintenance or manufacture. These lubricants may increase the amount of lint and other pocket debris that is drawn toward and into the weapon. Finally, traditional pocket materials such as cotton lack the durability necessary to withstand repeated weapon storage and removal from the concealment pocket.

Another advantage of the clothing system of the present invention is that it enables a person to carry a primary weapon used in connection with work or on-duty operations in a concealed manner without resorting to a smaller handgun for use in a traditional holster that may have lower performance attributes that the person’s primary weapon. For example, a police officer may, with the clothing system of the present invention, carry a full-size/primary weapon concealingly stored within the concealment pocket. In contrast, the officer wearing a traditional garment would not be able to insert and conceal a large primary handgun, and so would have to resort to carrying a backup handgun either in a holster and/or in the traditional pocket. Aside from the officer’s preference in using the primary handgun, due to its larger size and capacity, it has improved performance and stopping power. Due to the recent passage of the Law Enforcement Officers’ Safety Act of 2004, many police officers desire to carry their primary weapon while off-duty, and to do so in a comfortable and concealed manner. As a result, the need for the clothing system of the present invention to effectively and discreetly conceal a handgun while allowing for a smooth and accurate weapon draw is more pronounced than ever.

The front concealment pocket of the clothing system according to the present invention is constructed of materials that have superior performance to traditional pocket materials. One of these materials is nylon, which is lint-free and extremely durable. Nylon, and similar synthetic materials such as polyester, presents a smooth, low-friction surface to interact with a weapon, without the catches or snag common in traditional pocket materials resulting from weapon placement or removal. Nylon also resists abrasion or wear when a weapon is placed in the pocket. Unlike traditional pocket materials which are vulnerable to wear caused by the weapon being inserted and drawn from the pocket, materials such as nylon in the pocket of the present invention are less affected by the contours, edges and other points of detail common on weapons that come into contact with the pocket surface. The durability of nylon is also desirable due to the weight of a handgun and the load it places on the pocket when the handgun is stored within. Finally, the nylon material contains a level of stiffness which prevents the pocket surface from strictly adhering to the weapon outline. The stiffness also limits the amount of printing that the weapon makes through the pocket surface, particularly when compared to traditional pocket materials.

The clothing system of the present invention includes pants, trousers, shorts, jeans, dress slacks, uniform pants, carpenter-style pants, coveralls, overalls, jumpsuits, athletic wear, skirts, dresses, or any other leg coverings for men and women with unique tailoring to conceal a weapon such as a handgun, including medium and large size handguns. The clothing system of the present invention allows a wearer natural, unrestricted and uncomplicated single-handed access to a handgun stored in a front concealment pocket at the outer thigh position (right, left, or both) in at least one embodiment. The outer thigh position has been found to have many advantages. It is a comfortable location for a wearer if the wearer is running, walking, sitting, or other activities. The outer thigh location is also the location where a wearer’s hands naturally move toward in the arms’ range of motion. It is a location that while standing, the wearer’s hands are close proximity to, and appears outwardly to be, in an inconspicuous location, and not necessarily in a position in close proximity to a concealed weapon. Therefore, this outer thigh location is a preferred location for the front concealment pocket as the wearer has easy access to, and the ability to grip and hold a weapon contained within the pocket while appearing to observers to simply have his/her hands in the front pockets of clothing system, including the front concealment pocket.

In addition to providing a concealed pocket to store a weapon, such as a handgun, other items may be concealed or stored in the concealment pocket. For example, tools may be stored in the pocket to allow a wearer a higher degree of freedom of movement and safety than if the wearer were wearing a traditional tool belt in addition to the wearer’s pants or other clothing. This is advantageous for several reasons. The wearer placing tools within the concealment pocket presents a smaller cross-section, enabling the wearer to fit into tighter areas than if the wearer were wearing a tool belt in addition to the wearer’s clothes. If the wearer were entering a hatch, manhole, or circular stairwell, for example, a person having a smaller profile is desirable. If the wearer were engaging in high levels of movement, such as running or climbing, the depth and volume of the concealment pocket is capable of containing a number of tools and keeping them within the pocket despite high levels of movement by the wearer. If a traditional pair of pants with front pockets or a tool belt was worn instead, tools may not be as securely contained and could fall out of the pockets or tool belt, which may result in the tools being lost, causing damage, or injury.

In another example, an outdoors person (such as a hiker, hunter, or fisher) may wear an embodiment of the clothing system including the concealment pocket. In many situations, an outdoors person wishes to travel lightly and freely and ease of movement is desirable. An article of clothing with the concealment pocket, such as a pair of pants, offers the wearer the ability to carry a number of items securely in an easily accessible pocket. For example, a wearer may use the clothing system concealment pocket to store a global positioning system (GPS) device or a compass—both items the wearer does not want to lose. Alternatively, the wearer may store a handgun or hunting knife in the concealment pocket, or other related items such as matches, food, first aid items, identification, and water purification tablets.

In yet another example, a service technician such as a mechanic may wear an embodiment of the clothing system with the concealment pocket. The concealment pocket may contain tools such as socket wrenches, screwdrivers, or other hand tools. For example, the mechanic may be working on an automobile with a painted exterior. In servicing the automobile engine, it is necessary for the mechanic to be in close proximity to the painted surfaces of the exterior of the automobile. If the mechanic is wearing pants or a coverall with the
concealment pocket and tools are safely stored within, the painted exterior of the automobile is protected from damage due to physical contact by the mechanic since the tools are stored within the concealment pocket.

[0038] Other examples where the clothing system with the concealment pocket is advantageous include: a person using an RFID or other close-proximity detection device, located in the concealment pocket that enables the person to track an RFID-equipped package while keeping both hands free for other tasks. For example, a warehouse worker with an inventory device may simply walk by the items to be inventoried. Another example is an aircraft handler wearing an embodiment of the clothing system. The handler may have many tasks, including guiding and parking aircraft using lighted batons. These batons are awkward and bulky, yet the handler must keep them for use when needed. By wearing an embodiment of the clothing system the handler can place the batons in the concealment pocket and still have both hands free for other tasks, such as baggage handling. Additionally, the concealment pocket offers protection to the batons and the clothing system enables the handler to move easily around the tarmac.

[0039] An athlete wearing an embodiment of the clothing system with the concealment pocket may use it to keep sporting equipment safely within the pocket. For example, a tennis player may use the pocket to store a number of tennis balls; a golfer may use the pocket to keep a scorecard and/or golf tees; or a target shooter may use the pocket to store ammunition. In another example, a construction worker, such as a roofer, may use the clothing system to keep a hammer and other tools securely in the concealment pocket. Since a roofer has to climb ladders and generally have a high degree of freedom of movement, clothing such as the present invention allow the roofer to move easily and with confidence that no tools in the concealment pocket will fall out, such as during ascent and descent of a ladder.

[0040] Those having ordinary skill in the art will appreciate that the contours of the concealment pocket may be configured to accommodate a variety of weapons, including but not limited to handguns, that may also include accessories or tactical equipment such as custom grips, flashlights, lasers, scopes, or other equipment that may be used in conjunction with a weapon. In other embodiments of the present invention, the concealment pocket may be adapted for other items, by relocation of the internal stitching of the pocket, to engage and maintain the orientation of other items, such as radios, phones, stun guns, handcuffs, or other police or weapons-related equipment.

[0041] The opening of the concealment pocket is designed to allow unimpeded access to the weapon or other item stored within. When a wearer reaches into the concealment pocket, the wearer can be confident that the weapon is properly oriented. The proper orientation of the weapon stored in the concealment pocket gives the wearer additional safety as opposed to a traditional pocket. The time saved by the proper orientation of the weapon due to the concealment pocket may be precious or even life-saving in certain situations. Further, the concealment pocket is deep enough to sufficiently conceal a handgun with the grip at the approximate height of a wearer’s hand if the hand is placed into the concealment pocket. Thus, the wearer does not have to reach deeper or “fish around” in the pocket to locate the weapon, it falls readily to hand and the reaching-in motion and draw is entirely natural. The concealment pocket also prevents the “printing” of the weapon on the outer surface of the clothing system, so the presence of the weapon is not observable or apparent. Conversely, if a handgun is stored in a traditional pocket, the removal or draw of the weapon from the pocket is fraught with difficulties. The weapon may snag on a portion of the pocket or it may become stuck due to smaller size of a traditional pocket. In a traditional pocket, a weapon stored within presents a very visible bulge, notifying others that the wearer is carrying a concealed weapon. The bulge will be present, regardless of whether the handgun is small, medium or large sized. In the present invention, the concealment pocket uses reinforcing materials to prevent the shape of the weapon from being “printed” on the garment outer surface. The reinforcement or stiffening materials of the concealment pocket also aids in the draw and insertion of the weapon by maintaining the pocket shape and minimizing the likelihood of the weapon catching on a portion of the pocket during the draw motion.

[0042] The concealment pocket of the present invention may optionally include a water-proofing coating and/or water-resistant layer to protect a handgun from moisture, either from the wearer or the environment. In other embodiments, the material itself may have inherent water-proofing properties. Moisture may originate from the wearer through perspiration, and be brought into the pocket by the wearer’s hands. The environment may supply moisture through precipitation, which may be present around the garment and pocket opening. It is generally known that weapons, such as handguns, should not be exposed to moisture as it may cause damage to the weapons or impact their operation. Additionally, some moisture such as perspiration or ocean mist contains salt which in combination with water is additionally destructive to metal-based weapons in particular. These situations are avoided by the water-proofing and/or water-resistant layer of the concealment pocket materials. It may be coated in urethane, for example, to prevent moisture from passing through the pocket into the pocket interior. The urethane or similar material may also provide additional rigidity to the pocket, further improving the draw and store motions by the wearer. Other materials or coatings may be used, which absorb or otherwise mitigate moisture that may be present, to protect the weapon stored in the concealment pocket.

[0043] The concealment pocket of the present invention may also include at least one layer of padding, a spacer pad, for wearer comfort. The spacer pad is attached to the concealment pocket using stitching or other attachment methods and cushions the pocket against the wearer, particularly when the pocket is loaded. Additionally, the padding improves the appearance of the pocket and the adjacent garment fabric, to further reduce the “printing” effect and improve the concealment of the pocket. The padding also improves air circulation around the pocket, with the additional benefit of improving wearer comfort, particularly in warm climates or situations. The padding also dampens the movement of the pocket against the wearer’s body, such as a leg in the case of a pair of pants. An example of padding for the concealment pocket is 3.5 mm of 100% polyester 3-D material, though many other materials with similar properties may be used.

[0044] The concealment pocket placement requires moving the outseam (or side seam) rearward on a pair of pants, according to at least one embodiment of the present invention. Additionally, moving the leading edge of the concealment pocket rearward allows for a larger pocket opening, in contrast with traditional pants wherein the front leading edge of the pocket is generally located along the front center of the
leg. Shifting the outseam rearward rotates the front leading edge of the front concealment pocket approximately 45 degrees to a position along the outer thigh, as opposed to the front of the thigh. The outseam shifting provides an opening for a concealment pocket that allows a weapon to be stored within the pocket absent any “printing” on the clothing system of the wearer. A traditional pants pocket sits high on the thigh such that objects in that pocket “print” on the clothing system outer surface, especially when seated. In contrast, the concealment pocket of the present invention, a weapon stored in the rearward shifted concealment pocket rests on the wearer’s outer thigh, in at least one embodiment, and the concealment pocket is hidden behind the loose and extra fabric of the pant leg. An optional patch or cargo pocket attached to the pants provides additional concealment for the pocket. In another embodiment, the outseam of the pants is shifted rearward at the waistline to allow room for the concealment pocket but then the outseam tapers or jogs back toward the traditional outseam location (the centerline) as it reaches the end, or bottom, of the pant leg. In yet another embodiment, the outseam may be shifted rearward at the waistline to allow for the concealment pocket and remain shifted rearward over the entire pant leg.

According to the clothing system of at least one embodiment of the present invention, a pair of pants 10 with a concealment pocket 12 is shown in FIGS. 1 and 2. FIG. 1 is a front view of a pair of pants and FIG. 2 is a rear of a pair of pants. The pants 10 are a pair of men’s right handed cargo pants. The concealment pocket 11 is in the right hand pocket location in this embodiment. The pants 10 are made in a variety of sizes, such as 34 W-30 L. The pants 10 may be constructed of a variety of materials; such as but not limited to 100% cotton. Additional materials for the clothing system may include a cotton/synthetic blend, 100% synthetic, denim, leather, or other suitable materials. The pants or clothing system material may have a variety of colors, such as khaki, blue, black, granite, olive or grey. Other embodiments may include more than one color, or include additional features such as reflective components for high visibility, or uniform requirements, or be a number of camouflage or hunting-style patterns.

The weight of the pants material may be, for example, 6-9 oz./sqy. yd. twill. Twill is a type of textile weave material that is made up of a series of diagonal parallel ribs. Another example of twill fabric material is denim, which is commonly used in the construction of jeans, simply known as jeans. Twill material generally has a front and back side, with the front side being more durable and is more often used for the exterior side of garments, such as the cargo pants embodiment of the present invention. It is understood, however, that other materials may be used, such as canvas, woven or knit fabrics.

The pants shell, consisting of the cotton twill, may have a variety of finishes. One example of a finish is the pre-shrink finish, a common fabric treatment that is used to prevent shrinkage after manufacture. Another example of a fabric finish is a sanded finish, which uses abrasives and/or enzymes to create the appearance of a smooth and aged clothing surface. A wash-and-wear finish is applied to fabric to make it crease-free or wrinkle-free. A brushed finish may alternatively be used resulting in a soft nap and flannel-like texture. Other finish examples include mercerizing, singeing, flame retardant, water repellent, waterproofing, anti-static and peach pit finishes. If synthetic fabrics are used, other finishes may be applied which have been developed strictly for synthetic fabrics.

The pants 10 include a pair of exterior patch pockets 16, commonly called cargo pockets, which lend their name to the style of pants—cargo pants. The cargo pockets are generally applied to the external surface of the pants, such as by stitching them to the pants surface, or shell. The cargo pockets provide the cargo pants wearer with additional storage apart from the regular pockets located at the left and right leg/waistband area. Additionally, the cargo pockets contribute to the concealment aspect of the present invention due to their location, adjacent to the concealment pocket. The design of the cargo pockets, which allows for expansion to accept cargo, also results in pockets that are billowy and have a different contour than the pants shell. The bulkiness of the cargo pockets works in conjunction with the concealment pocket design to minimize the “printing” of a weapon stored within the concealment pocket. In other embodiments, some or all of the cargo pockets may be deleted from the pants without impacting the concealment pocket’s performance in eliminating the “printing” effect. If the cargo or “patch” pockets are included on the pants, the pockets may be used to store a number of items, such as a mobile communication device, a pair of handcuffs, flashlight or other objects. The cargo pockets may be constructed of the same material as the pants shell, or be constructed of a different material. Similarly, the cargo pockets may be the same color as the pants, or a contrasting color, or include other elements such as reflective material or printed material. The pockets may be sealed by a number of fasteners, such as button, zippers, hook-and-loop fasteners, snaps, magnetic buttons, or other suitable fasteners. Sealing flaps may also be included with the cargo pockets to keep debris from entering and/or items falling out. The fasteners may be integrated with the sealing flaps and connect to the remainder of the cargo pockets. The cargo pockets may be of various designs and shapes.

The cargo pants according to at least one embodiment of the present invention may include front swing pockets, both right and left, alternating with the front concealment pocket. In this embodiment, the right hand pocket is the concealment pocket, but a left-handed version is also available. Additionally, a double concealment pocket version is another embodiment. In this exemplary embodiment, however, the right hand pocket is the concealment pocket and the left hand pocket is a standard pocket. The concealment pocket is constructed of a variety of materials, such as 600x300d diamond black nylon with a PVC finish backing. The left hand pocket is constructed of 50% cotton and 50% nylon (200 gsm) ripstop material for durability. The construction of the pockets is discussed in further detail below.

As previously stated, in this embodiment, the right hand interior front concealment pocket 12 is configured for a concealed handgun. The concealment pocket 12 may be constructed of a single layer of heavy-duty urethane coated nylon. A spacer pad, not shown, may be included to cushion the concealment pocket against the right leg of the wearer. The right hand interior front pocket is enlarged from a traditional pocket size, and is in the form of a bag, with two panels stitched together forming the concealment pocket 12. In other embodiments, the concealment pocket 12 may be constructed of a plurality of panels, a front and back panel, or a single panel folded and stitched together. Other embodiments of the concealment pocket 12 include an inner and outer panel, such
as a nylon-inner and cotton/padded outer panel, or multiple layers including nylon, a stifferener, waterproofing, and padding, or may be a single layer such as coated or uncoated synthetic or natural materials, and may or may not include a padding layer.

[0051] The concealment pocket 12 of the present invention includes a concealment pocket opening 14, which forms the boundary between the exterior of the pant leg and the pant waist. The concealment pocket opening (or facing) is generally constructed with the same material as the pant exterior or shell, providing a consistent and uniform appearance. It is understood however, that the concealment pocket facing is not limited to the same material and/or color of the pant exterior. The contour of the concealment pocket opening generally corresponds to the style of the garment or clothing, such as a scoop, slash, or other pocket opening design. The integration of the concealment pocket 12 into the overall design and style of the pants further minimizes the “printing” effect.

[0052] The concealment pocket 12 includes two sides, stitched together about their perimeters, forming a pocket with a volume. The perimeter stitching may be of a variety of types, such as serge stitching, though other joining techniques may be used to form the concealment pocket. Additional stitching is present apart from the perimeter stitching in the concealment pocket. Interior stitching (also referred to as weapon contour stitching) forming the outline of a handgun or other weapon also joins the two sides of the concealment pocket 12. The muzzle section of the pocket faces toward the front of the pocket (and the user). The interior stitching continues to follow the trigger and grip sections of the handgun toward the rear of the concealment pocket. As previously discussed, this stitching arrangement allows for the handgun to naturally enter the pocket and maintain its position regardless of the wearer’s movements. The interior stitching prevents the handgun from rotating, twisting, tumbling or exiting the pocket despite the wearer’s movements. Because of the stability that the concealment pocket 12 imparts on the weapon, the wearer may be confident that reaching into the pocket will result in the handgun falling readily to hand, and a smooth and sure draw of the handgun is guaranteed. Alternative embodiments may include additional interior stitching patterns, adopted for other items, such as tools, parts, devices, or other weapons such as knives or non-lethal devices.

[0053] In some embodiments, additional features may be added to the clothing system with at least one concealment pocket, such as a leg band for use with pants including concealment pocket. The leg band is secured to the concealment pocket and may be selectively wrapped around a wearer’s leg. The band provides additional support and reinforcement for the concealment pocket, particularly when the wearer is moving and the pocket contains a weapon or other items. The band may be joined by a number of fasteners, such as buttons, snaps, or hook-and-loop fasteners. The band may also be adjustable for length and/or be constructed of an elastic material to ensure strong contact with the wearer’s leg. The leg band may be selectively removable as well, so that if the wearer decides not to use the band, it may be removed or reinstalled later if desired.

[0054] Referring now to FIG. 3, one embodiment of the present invention is shown. A pair of pants 20 is shown with right-hand concealment pocket 22. Concealment pocket 22 includes pocket opening 24 through which various sized weapons and other devices are accommodated. Pocket facing 26 is visible through pocket opening 24 and forms a portion of the inner panel of concealment pocket 22.

[0055] The pocket facing 26 of at least one embodiment of the present invention is generally constructed of the same garment (pants in this embodiment) shell fabric, as the pocket facing 26 is typically visible (at least partially) in the garment concealment pocket opening. The garment shell fabric is used primarily for the pocket facing 26 from a design perspective, to maintain the uniform appearance of the garment. Another reason for using the garment shell fabric for the pocket facing is that the garment shell fabric is typically a material that is intended for the wearer to touch, such as cotton. As the wearer frequently contacts the pocket facing 26 when using the pocket, selecting a material for the pocket facing 26 that the wearer frequently touches is a consideration. In some embodiments, the pocket facing 26 may be of a different material than the garment shell fabric. In still other embodiments, the pocket facing 26 may be absent and the inner pocket liner may be extended to fill in the portion of the concealment pocket that would be the pocket facing 26 in other embodiments.

[0056] The pocket facing 26 may be secured to the inner pocket panel, not shown, if the pocket facing 26 is present. The inner pocket panel generally is located below the pocket facing 26 such that the inner pocket panel is typically not visible through the concealment pocket opening. The pocket facing 26 and the inner pocket panel are securedly attached to each other, such as using serge stitching, particularly since both components are structural elements of the concealment pocket and carry some of the pocket's load to the garment (pants) through the pocket opening and may be attached to other components of the garment, such as an inseam or side seam. If the pocket facing 33 is not present, the inner pocket liner 35 may be attached to the concealment pocket opening directly as well as other components of the garment, such as an inseam or side seam.

[0057] Outseam 28 is shown shifted rearward in the area of concealment pocket 22. Concealment pocket 22 is secured to the pants 20 at the outseam 28 may be optionally secured elsewhere. Weapon 30 is shown stored in concealment pocket 22, and engaging interior stitching (hereinafter referred to as Weapon Contour Stitching 32). Outseam 28 begins at the top of the pants 20 near the waistband, follows the rear boundary of the concealment pocket 22 near the pocket opening 24, then shifts forward underneath the patch/cargo pocket 34 and continues to the bottom of the pant leg. In other embodiments, outseam 28 remains at the rear of the concealment pocket 22 and then continues to the bottom of the pant leg without shifting forward. The outseam 28 may be shifted or moved to accommodate the concealment pocket 22. While this embodiment illustrates a concealment pocket 22 on the right side of the wearer, it is understood that a concealment pocket 22 may be included on the left side of the wear also, in conjunction with a right side concealment pocket 22. Alternatively, in other embodiments only a left side concealment pocket 22 may be provided, with the right side pocket either omitted or present and adapted for other items. WCS 32 maintains the proper orientation of weapon 30 when stored in concealment pocket 22, and will be described in further detail below.

[0058] Cargo pocket 34 is shown on the exterior of pants 20, positioned over concealment pocket 22 and outseam 28. The cargo or patch pocket 34 is constructed of a flap that is selectively attached to the patch pocket 34 or the clothing system, or both. The flap may include a number of fasteners
for selectively securing to the patch pocket body. The flap may include serge stitching, other types of stitching, or other means of layering the flap material. The fasteners may be of a variety of types, including but not limited to hook-and-loop, snaps, buttons, or magnets. The patch pocket body may include a number of features, including pleats to increase the capacity of the pocket 34. A number of pleats, or folds of material, may be added to the patch pocket body. Additional sewing techniques may be used to increase the capacity of the patch pocket 34, pleats are provided only as an exemplary embodiment.

In another embodiment, the external patch or cargo pocket 34 includes a flap 81 including stitching about its perimeter that may be serge stitching, other forms of stitching or other means of layering the flap material. The patch pocket body may include a number features, including pleats to increase the capacity of pocket 34. Buttons are one example of fasteners that selectively close pocket 34 by using button holes in the flap. Additional fasteners may be used, or alternatively no fasteners may be used.

As discussed previously, the location of the cargo pocket 34 relative to the concealment pocket 22 assists in the secretion of the concealment pocket 22 and eliminating the “printing” effect. The outseam (or side seam) 28 is shown, forming one boundary of the concealment pocket 22. The outseam 28 is joined to the concealment pocket 22, such as by stitching, and aids in distributing the load the concealment pocket 22 may be carrying. The cargo pocket 34 may be placed over the outseam 28 in one embodiment. In other embodiments the cargo pocket edge may be aligned with the outseam 28, or the cargo pocket 34 may be omitted. In other embodiments, additional material may be placed in the area where a cargo pocket may be placed on the clothing system, to aid in secreting the concealment pocket. For example, a dummy cargo pocket may be used, to provide the appearance of a pocket without the functionality. A patch may also be placed on the clothing system, such as to provide additional strength or comfort, if a pad is included. The cargo pocket may also be replaced by other forms of pockets or storage, such as for specialized tools.

Concealment pocket 40 is shown in FIG. 4. Outer panel 42 and inner panel 44 are joined to form right-hand concealment pocket 40. Outer panel 42 of the right-hand concealment pocket forms one exterior side of the pocket and it is located adjacent to the right interior pant leg. The opposite side of the outer panel 42 forms one side of the pocket interior. The size of the outer panel 42 generally defines the size of the pocket; while other components may be smaller than the outer panel 42, the outer panel 42 is determinant with regard to the pocket capacity. Since the pocket accommodates various sized weapons, the outer panel 42 must therefore be of sufficient size to form half of a pocket to contain such weapons. The perimeter of the outer panel 42 is serge-stitched to at least the inner panel 44. In some embodiments, inner panel 44 is a combination including pocket facing. Additional layers or components may be stitched with the outer panel 44. Some examples are detailed below.

The outer panel 44 may include Weapon Contour Stitching (WCS) 46, apart from the perimeter serge stitching that forms divisions or compartments within the concealment pocket. In at least one embodiment of the concealment pocket of the present invention, WCS 46 follows the outline of a handgun from the muzzle through the trigger and on to the grip. WCS 46 joins outer panel 42, inner panel 44, spacer pad and other optional layers (not shown), running from the rear side of concealment pocket 40 to the bottom, so that the remaining open portion of concealment pocket 40 allows a handgun to be placed inside in a holster-like position. In other words, the weapon, when placed in concealment pocket 40, is directed and guided by the WCS 46 toward a holster-like position. The shape of WCS 46 allows a wearer to reach into concealment pocket 40 and easily grip the weapon.

In some embodiments, the outer and inner panels 42, 44, along with the spacer pad (not shown) are serge-stitched together about their perimeters, forming the concealment pocket. An additional line of stitching, the Weapon Contour Stitching (WCS) 46, is made from one side of the pocket to an adjacent side, resulting in a portion of the pocket being sealed off from the remainder of the pocket.

The WCS 46 may be of a variety of stitches, such as a safety stitch, coverstitch, or lockstitch. Alternatively, other fastening means may be used, such as hook-and-loop fasteners, which allow for WCS 46 to be removed if desired by the wearer, or modified for holding a differently shaped weapon. In that embodiment, and others that do not involve stitching, WCS 46 may instead be referred to simply as the Weapon Contour (WC). Snaps, buttons, or other mechanical fasteners may also be used to adjust the position of the WC, to accommodate weapons of different sizes.

The WCS divisions or compartments serve a number of uses. They may be used to form internal walls that direct placement of a weapon in the pocket. In this example, the WCS may generally follow the contour of a weapon, such as a handgun. The WCS assists in maintaining the correct orientation of the weapon while it is stored in the concealment pocket. The weapon is therefore stored in a position where the wearer can confidently reach and grip the weapon, in a manner that is both familiar and natural. Likewise, when the wearer replaces the weapon in the pocket, the WCS ensure that the weapon is replaced in the same position as it was prior to its removal.

Other WCS divisions may be included in the pocket, in addition to, or separate from the WCS divisions that engage a weapon. These divisions may have other uses, such as storage of a weapon ammunition magazine, for example. While one set of divisions may engage and direct the position of a weapon, another set of divisions may be used to form a separate interior pocket for a magazine or other item. The wearer may then draw the weapon and later reach into the same pocket, or opposite side pocket, to withdraw an ammunition magazine. In other embodiments, a second pocket may only include pocket subdivisions for other items such as magazines, flashlights, tools, knives, handcuffs, etc. In this embodiment, the wearer may reach into a first front pocket (for example, the right front), draw a weapon, and with the left hand draw a magazine, flashlight, or other item from the second front pocket. In still other embodiments, both front pockets are weapons-capable, or both pockets may be optimized toward other equipment. Additional divisions within the pockets may or may not be included for additional items.

The outer panel 44 may be constructed of a variety of materials, such as ripstop nylon, for strength and durability. The material of outer panel 44 may include other features such as a water or moisture repellent coating that serves to protect the weapon stored within. The material may include or be made of a breathable material that allows air to circulate within the pocket. This attribute is desirable if the weapon has been repeatedly fired and its surface temperature has
increased. Air circulation around the weapon will aid in cooling the weapon and keeping the wearer comfortable. An example of this situation is if the wearer is at a firing range. The wearer may draw the weapon from the pocket and fire until the magazine is empty. This operation will generate heat in the weapon. When the user places the now-hot weapon in the pocket, the temperature of the weapon may act increase temporarily due to the lower airflow within the pocket and the proximity to the wearer from the wearer’s body heat. The pocket material may be capable of dispersing heat from within the pocket.

[0068] The division created to form the general outline of the weapon using WCS 46 as described above may serve an additional purpose in at least one embodiment. A desiccant or moisture-absorbing product may be sewn into the division. Alternatively, the division may include a selective fastening means allowing the desiccant to be periodically replaced, as it may lose effectiveness over time. The desiccant serves to absorb moisture and keep it away from the stored weapon, particularly over long periods of time. For example, a wearer may wear the garment, for example a pair of pants for a day, and later remove them, keeping the weapon in the pocket. As a result, the weapon may stay in the pocket overnight or even longer before the pants are again put on by the wearer or the weapon is removed from the pocket while the pants are not being worn.

[0069] In another embodiment, the division created to form the general outline of the weapon as described above may include padding to cushion the weapon when it is placed within the pocket. A wearer may forcefully place the weapon in the pocket such that the weapon falls or is dropped into the pocket. The padding the division absorbs the energy of the weapon and distributes it around the pocket perimeter and on to the pants. Many weapons are quite heavy (2 lbs./1 kg) and as a result dropping or placing the weapon forcefully in the pocket may cause a high level of impact with the bottom of the pocket. The padding division distributes this energy and prevents the focusing of it at a corner as would be the case in a traditional pocket.

[0070] The weapon contacts the outer panel 44 of the concealment pocket each time it is inserted or withdrawn, requiring a material that will not impede movement or have a high friction surface. It is important that the material remain smooth and wrinkle-free as disruptions in the outer panel surface may interfere with smooth weapon insertion or removal. The material used in the outer panel 44 retains its smooth surface, even when the wearer changes position, for example, standing to sitting. This is desirable since the wearer may wish to draw the weapon from the pocket while sitting without making any additional movements or effort that may draw attention or add time to the weapon draw sequence. For example, an air marshal may walk onto an aircraft and sit in an airplane seat. Sometime later, the air marshal may wish to draw the weapon stowed within the pocket. Using the pocket of the present invention, the air marshal may smoothly and discreetly draw the weapon, without undue movement of the body, into a firing position. In this example, the ability of the wearer to smoothly and quickly draw the weapon is of utmost importance.

[0071] The inner panel 44 of the concealment pocket according to the present invention forms the second half of the pocket for carrying a concealed weapon. The perimeter of the inner panel 44 is sergestitched to at least the outer panel 42 and may optionally be paired with pocket facing material, as explained below. The inner panel 44 generally follows the same shape as the outer panel 42. The upper portion of the pocket may include the pocket facing, which may be a distinct material from the inner panel 44 in some embodiments. Alternatively, the pocket facing may be deleted, in which case the inner panel 44 extends to include the portion that would be used for the pocket facing.

[0072] In one embodiment, the inner panel 44 completely forms the second half of the pocket (the first half being the outer panel). The inner panel 44 is constructed of similar material as the outer panel 42, such as nylon. The inner panel 44 differs from the outer panel 42 in that in some embodiments, the top portion of the inner panel 44 is visible through the pocket opening in the pants. This arrangement has certain advantages. As the inner panel 44 is made of a material such as nylon, it is very durable. If the weapon is frequently inserted and withdrawn from the pocket, the nylon inner panel 44 will resist wear and maintain a satisfactory appearance. Additionally, if the inner panel 44 extends to the top of the pocket opening, the additional operation of adding a pocket facing to a shortened inner panel is deleted. If the pair of pants shell is constructed of another material, for example, cotton, the nylon inner panel 44 that is exposed in the pocket opening may provide a contrasting color or texture which may be desirable.

[0073] In another embodiment, the inner panel 44 is combined with the pocket facing, which is inserted into the inner panel 44 and forms the top half of the pocket facing/inner panel 44 combination. The pocket facing is generally constructed of the same material as the pants shell, such as cotton. However, there may be embodiments where the pocket facing is constructed of a different material than the pants shell or the outer/inner liners. (42/44) such as for a service uniform. The pocket facing is connected to the inner panel 44 using serger stitching in one embodiment, though other types of stitching may be used.

[0074] Concealment pocket 40 may include a number of components. Outer panel 42 is shown with optional facing, in this embodiment made from the same twill fabric as the garment shell, connected to outer panel 44, also with optional twill facing. Both outer panel 42 and inner panel 44 are constructed of nylon material in this embodiment, and may be connected by a variety of means, such as but not limited to serger stitching, forming a concealment pocket. Spacer pad (not shown) is connected to a reverse side of inner panel 44, such as but not limited to serger stitching. On the opposite side of the spacer pad is a backing fabric, in this embodiment made from a ripstop woven fabric (not shown), which may also be attached to the concealment pocket containing outer panel 42, inner panel 44, and spacer pad by serger stitching or other techniques. The twill facing includes as a part of outer panel 42 and inner panel 44 are exposed or visible components of the concealment pocket, generally constructed of the same twill material as the clothing system shell, for example a pair of pants. The twill facing may also include a welt that reinforces the connection between the concealment pocket 40 and the clothing system shell. The back may be constructed of the same material as the clothing system shell, such as twill, or another suitable material such as ripstop. In this embodiment, the ripstop back is in contact with the leg of the wearer, between the cushioning spacer pad 53 and remainder of the concealment pocket 40. A back material provides a comfortable surface for contact with the leg of the wearer is desirable.
FIG. 5 is another example of a concealment pocket 50 according to at least one embodiment of the present invention. In this figure, the concealment pocket 50 is shown from the interior, or leg side. Inner panel 52 is shown attached to ripstop back 54. The inner panel 52 may be attached to ripstop back 54 by a variety of methods, such as serge stitching. In some embodiments, ripstop back 54 may also include a spacer pad (not shown). The spacer pad may be captured between inner panel 52 and ripstop back 54. The spacer pad may cover an area approximately the same as the ripstop back 54, or the spacer pad may be abbreviated to an area that is less than the ripstop back 54 area. At the lower portion of concealment pocket 50 is the Weapon Contour Stitching (WCS) 56. The WCS 56 extends from a portion of the rear side of the concealment pocket 50 and extends in the general outline of a handgun, to the bottom of concealment pocket 50. The WCS 56 engages a weapon placed within the concealment pocket 50, ensuring that the handgun remains in the proper orientation. The WCS 56 may be of a variety of stitching, or the WCS may be achieved through other securing methods, such as gluing or riveting, or hook-and-loop fasteners, for example. In some embodiments the WCS 56 may be removed or modified through the use of selectively detachable fasteners. For example, the WCS 56 may be configured for a particular type of handgun, such as a revolver. Inserting another handgun into the concealment pocket 50 and engaging the WCS 56 may result in an interference situation. The barrel of the second handgun may be considerably longer than the revolver mentioned earlier. The reconfigurable embodiment of the WCS 56 allows a wearer to adapt the clothing system with concealment pocket 50 to accept and properly orient a variety of weapons. In other embodiments, the WCS 56 may be removed entirely, if desired by the wearer.

Referring now to FIG. 6, a front swing pocket 60 according to at least one embodiment of the present is shown. The front swing pocket 60, for objects other than weapons, is formed by joining inner panel 62 and outer panel 64. A portion of inner panel 62 is shown that is not covered by outer panel 64, which is the pocket facing. The pocket facing is visible when the front pocket 60 is installed in an embodiment of the clothing system of the present invention. As detailed earlier, the pocket facing may be constructed of a variety of materials, including the clothing system or shell material, or a different pocket material. The inner panel 62 and outer panel 64 are joined by stitching 66, which may be serge stitching or other suitable stitching technique. In this embodiment, an internal compartment 68 is shown at the bottom of the front swing pocket 60. The internal compartment, of which there may be more than one, may be configured to accept a variety of items. For example the internal compartment 68 may accept a weapon magazine, a mobile communications device, a flashlight, coins, a pair of handcuffs, or other items. In embodiments with more than one internal compartment, multiple items may be stored, depending upon the sizes and shapes of those items. For example, if there are three internal compartments 68, one internal compartment 68 may store a weapon magazine; the second may store a knife; the third may store a container of pepper spray.

Another embodiment is shown of swing pocket 60 including inner panel 62 constructed of a first upper portion of twill facing and a second lower portion of another material such as nylon. Inner panel 62 is connected to outer panel 61 by serge stitching, for example. The spacer pad (not shown) is attached to reverse side of inner panel 62, in this embodiment spacer pad does not cover the entire inner panel 62. The spacer pad in this embodiment only covers a lower portion of the pocket 60. The coverage of the spacer pad may be equal to the coverage of the lower portion of outer panel 64 that is constructed of nylon in this embodiment. The spacer pad cushions the contents of the pocket 60 which contact the lower portion of outer panel 64.

Referring now to FIG. 7, a layered cross-section of concealment pocket 70 according to at least one embodiment of the invention is shown. Outer panel 72 is shown in contact with inner panel 74, forming the interior of concealment pocket 70. Pocket facing 76 is shown adjacent to inner panel 74. As discussed previously, in some embodiments, pocket facing 76 is combined with inner panel 74 and joined with outer panel 72 to form concealment pocket 70.

The pocket facing 76 of at least one embodiment of the present invention is generally constructed of the garment (pants or in this embodiment) shell fabric, as the pocket facing 76 is typically visible (at least partially) in the garment concealment pocket opening. The garment shell fabric is used primarily for the pocket facing 76 from a design perspective, to maintain the uniform appearance of the garment. Another reason for using the garment shell fabric for the pocket facing is that the garment shell fabric is typically a material that is intended for the wearer to touch, such as cotton. As the wearer frequently contacts the pocket facing 76 when using the pocket, selecting a material for the pocket facing 76 that the wearer frequently touches is a consideration.

In some embodiments, the pocket facing 76 may be of a different material than the garment shell fabric. In still other embodiments, the pocket facing 76 may be absent and the inner pocket liner 78 may be constructed of a different material to fill in the portion of the concealment pocket that would be the pocket facing 76 in other embodiments.

The pocket facing 76 may be secured to the inner pocket panel 74, if the pocket facing 76 is present. The inner pocket panel 74 generally is located below the pocket facing 76 such that the inner pocket panel 74 is typically not visible through the concealment pocket opening. The pocket facing 76 and the inner pocket panel 74 are securedly attached to each other, such as using serge stitching, particularly since both components are structural elements of the concealment pocket and carry some of the pocket's load to the garment (pants) through the pocket opening and may be attached to other components of the garment, such as an inseam or side seam. If the pocket facing 76 is not present, the inner pocket liner 78 may be attached to the concealment pocket opening directly as well as other components of the garment, such as an inseam or side seam.

Spacer pad 80 is attached to the outer and inner panels 72, 74 of the concealment pocket 70 through serge stitching. Spacer pad 80 generally conforms to the dimensions of the inner panel 44 in order to provide a cushion between the pocket and the wearer, particularly when a weapon is stored within concealment pocket 70. The spacer pad also improves air circulation in the space between the wearer and the concealment pocket 70. Wearer comfort is improved by the spacer pad which may be constructed of a variety of materials, such as polyester mesh or foam, or other suitable material. The pad, along with the inner fabric liner, faces the wearer's leg and provides a cushioning layer to protect the wearer from discomfort felt when the pocket contacts the leg. When a weapon is inserted into the pocket, the weight of the pocket will increase, and may have the effect of
causing the pocket to move about and contact the wearer’s leg more frequently, due to the inertia of a heavier pocket.

[0083] Additionally, the spacer pad 80 allows for airflow between the wearer’s skin and the concealment pocket, improving wearer comfort. If the environment is particularly warm, heat is radiated from the wearer’s skin and heats the air in between the wearer’s skin and the pants shell, including the front concealment pocket. The front concealment pocket contains additional layers compared to the pants shell, and as a result, these layers are a barrier to heat transfer through the pants shell to the environment. The spacer pad 80 allows a layer of air, through the mesh or foam comprising the pad 80, to be present between the pocket and the wearer’s skin. The air layer encourages improved heat transfer from the skin to the air, and then through the pants to the environment, improving wearer comfort.

[0084] Another attribute of the spacer pad 80 is assisting in cooling a stored weapon if the weapon is inserted into the concealment pocket after firing. Weapons such as firearms have elevated temperatures after firing, particularly after multiple firing events. If the weapon is left in the open, air flow around the weapon may occur without obstruction. However, if the weapon is placed in the front concealment pocket, air flow is more restricted and the rate of cooling will be lower than if the weapon were placed in the open. The spacer pad 80 improves the air circulation around the pocket and the wearer, improving the heat transfer from the weapon to the environment.

[0085] The inner liner 82 of at least one embodiment of the present invention is serge-stitched to the pocket but does not include the interior Weapon Contour Stitching. The inner fabric panel 82 is comprised of the pant shell material generally, but other materials may also be used. The inner liner 82 contacts the spacer pad 80 on one side and the wearer’s leg on the other side. One purpose of the inner panel 82 is to provide a smooth surface for contact with the wearer’s leg. As the wearer walks, sits, runs or otherwise moves, the wearer’s leg and the inner liner rub together. It is desirable for the inner liner 82 to have a smooth surface, such as a cotton fabric, as to minimize friction with the wearer’s skin. Also, the smooth inner fabric panel minimizes friction with the pocket, so that it allows the wearer to move easily without interference occurring between the wearer’s leg and the pocket.

[0086] Referring now to FIG. 8, a pair of pants 100 is shown. Concealment pocket 102 is shown with pocket opening 104 allowing weapons of various sizes to be stored within. Once inserted, a weapon (not shown) engages with Weapon Contour Stitching 106 with concealment pocket 102, maintaining its proper orientation. In this embodiment, pants 100 do not include cargo pockets, though various tailoring treatments may be used to further reduce the printing effect of the weapon on pants 100, such as pleating.

[0087] The pocket welt 108 in at least one embodiment of the present invention is a strip of fabric, generally the same as the garment/pant shell, that is sewn into the outer edge of right-hand concealment pocket 102 in this embodiment and left-hand divided pocket for reinforcement. Pocket welt 108 runs along the inner and outer perimeters of the pockets, and is stitched in place. Additional or alternative fastening to the garment may be used, such as rivets either end of welt 108. Welt 108 also helps support the pockets, in addition to reinforcing the pocket entrances. Particularly with respect to the concealment pocket, which may be carrying a large weapon such as a handgun, the load on attachment points such as welt 108 may be significant. Welt 108 may be connected to the outer panel (not shown) for additional strength, reinforcement, and durability. In at least one embodiment of the present invention, a garment with concealment pocket also includes a swing pocket 110. Swing pocket 110 consists of a number of components, as shown in FIG. 6.

[0088] FIG. 9 is a rear view of a pair of pants 200 according to at least one embodiment of the present invention. Concealment pocket 202 is shown on the right-hand side of pants 200 including pocket opening 204 for insertion and removal of a weapon. A portion of WCS 206 is also visible on the lower portion of concealment pocket 202. Outseam 208 is an attachment point for concealment pocket 112, providing structural support for concealment pocket 202 and a weapon contained within. On the left-hand or opposite side of pants 200, swing pocket 210 is shown.

[0089] FIG. 10 is a side view of one embodiment of the present invention. A pair of pants 300 is shown with concealment pocket 302 on the right-hand side. Pocket opening 304 enables a user to insert a weapon 308 into concealment pocket 302. Pocket facing 306 is shown partially visible outside concealment pocket 302. As described previously, pocket facing 306 may be constructed of a variety of materials, or combinations of materials. WCS 310 is shown at the lower portion of concealment pocket 302, selectively engaging weapon 308 and maintaining its holster-style orientation.

[0090] FIG. 11 is an example of a concealment pocket 400 according to at least one embodiment of the present invention. Outer panel 402 and inner panel 404 form the concealment pocket 400. Pocket facing 406 is shown as a portion of inner panel 404, and may be constructed of different material from outer panel 402 and inner panel 404, such as cotton twill. Alternatively, pocket facing 406 may be constructed of the same material as outer panel 402 and inner panel 404, such as nylon, or pocket facing may be eliminated by enlarging inner panel 404. Stitching secures outer panel 402 and inner panel 404 about their perimeter. The stitching may be serge stitching, for example. Interior concealment pocket stitching or Weapon Contour Stitching (WCS) 408 is shown connecting lower portion of outer panel 402 and inner panel 404. In this embodiment WCS 408 engages the outline of a handgun when placed in the concealment pocket 400, keeping the weapon properly oriented. Optional leg band 410 is shown attached to the lower portion of concealment pocket 400. Leg band 410 may be constructed of a variety of materials, such as elastic cloth, to accommodate a variety of leg sizes.

[0091] FIG. 12 is another example of a concealment pocket 500 according to at least one embodiment of the present invention. In this figure, the concealment pocket 500 is shown from the interior, or leg side. Inner panel 502 is shown attached to ripstop back 504. The inner panel 502 may be attached to ripstop back 504 by a variety of methods, such as serge stitching. In some embodiments, ripstop back 504 may also include a spacer pad (not shown). The spacer pad may be captured between inner panel 502 and ripstop back 504. The spacer pad may cover an area approximately the same as the ripstop back 504, or the spacer pad may be abbreviated to an area that is less than the ripstop back 504 area. Leg band 506 is shown, attached to the concealment pocket 500 and extending outward in a loop for engagement of the leg of the wearer. Leg band 506 may be elastic to accept the leg of the wearer, and to allow for movement and muscle flexing. Leg band 506 may be constructed of additional segments, to allow the band to be opened and closed around the leg, for example. The
segments may be selectively joined by a number of fasteners, such as hook-and-loop, snaps, or buttons. Alternatively, the leg band 506 may be expanded or contracted to firmly engage a variety of leg sizes. In other embodiments, the leg band may be removed entirely based on the decision of the wearer. A removable leg band 506 allows the wearer to decide when to install the leg band 506, based on a number of factors, such as weight of the weapon to be stored, or the degree of movement during the time the particularly-equipped clothing system is to be worn.

[0092] At the lower portion of concealment pocket 500 is the Weapon Contour Stitching (WCS) 508. The WCS 508 extends from a portion of the rear side of the concealment pocket 500 and extends in the general outline of a handgun, to the bottom of concealment pocket 500. The WCS 508 engages a weapon placed within the concealment pocket 500, ensuring that the handgun remains in the proper orientation. The WCS 508 may be of a variety of stitching, or the WCS 508 may be achieved through other securing means, such as gluing or riveting, or hook-and-loop fasteners, for example. In some embodiments the WCS 508 may be removed or modified through the use of selectively detachable fasteners. For example, the WCS 508 may be configured for a particular type of handgun, such as a revolver. Inserting another handgun into the concealment pocket 500 and engaging the WCS 508 may result in an interference situation. The barrel of the second handgun may be considerably longer than the revolver mentioned earlier. The reconfigurable embodiment of the WCS 508 allows a wearer to adapt the clothing system with concealment pocket 500 to accept and properly orient a variety of weapons. In other embodiments, the WCS 508 may be removed entirely, if desired by the wearer.

[0093] FIG. 13 is a layered cross section of concealment pocket 600 according to at least one embodiment of the present invention. Outer panel 602 and inner panel 604 are joined forming concealment pocket 600. Spacer pad 606 is attached to the exterior side of inner panel 604 and is covered by inner cloth panel 608. In this embodiment, spacer pad 606 provides a cushion for concealment pocket 600, particularly when storing a weapon or other device. Inner cloth panel 608 provides a smooth surface against the leg of the wearer to reduce friction and improve comfort, particularly when the wearer is in motion.

[0094] FIG. 14 is a front view of a pair of pants 1000 according to at least one embodiment of the present invention. Concealment pocket 1002 is shown with pocket opening 1004 for insertion of a weapon. WCS 1006 is shown at the lower portion of concealment pocket 1002 for selectively engaging a weapon inserted within. On the opposite side of pants 1000 is swing pocket 1008.

[0095] FIG. 15 is a rear view of a pair of pants 1100 according to at least one embodiment of the present invention. Concealment pocket 1102 is shown with pocket opening 1104 for insertion of a weapon. WCS 1106 is shown at the lower portion of concealment pocket 1102 for selectively engaging a weapon inserted within. On the opposite side of pants 1100 is swing pocket 1108.

[0096] In one embodiment, where the garment of the present invention is a pair of pants, the pants are assembled as follows. Each pant leg is comprised of a front and rear mating shell. The shells are cut from fabric, such as cotton or denim, to a particular size based on the size of pants that are to be produced. After the shell sets are cut for each leg, the sets are placed next to each other on sewing equipment. The front and rear shells for each leg, consisting of right rear shell, right front shell, left front shell, and left rear shell are then joined together at their respective inseams. At the top of the inseam lies the pants crotch, where the zipper and its shell are attached to the left and right front shells (which were joined at the inseam). At this point in the pants assembly, the left and right front shells are joined at the inseam but not at the side or outseam. The next step is to bring the front pocket(s) to the pant shells for capturing by stitching between each front and rear shell. The front and rear shells for each pant leg are joined, including the front pocket(s), which are also joined to the pocket openings located at the top of each front shell.

[0097] The cargo pockets are next attached to the pant legs, if desired. The cargo pockets may include a number of pleats for increasing the pocket carrying capacity. The cargo pockets are constructed of the pant shell fabric or dissimilar fabric and may include various types of interfacing, which provides internal support for the cargo pocket. The cargo pocket may be secured by at least one button, snap or hook-and-loop fastener, or other such fastener with or without a pocket flap as appropriate. The placement of the cargo pockets on the pants may vary. One embodiment locates the cargo pockets on the legs over the front pockets, particularly the right front concealment pocket, in order to provide additional obscuration in that area, improving the pant’s discreteness in disguising a weapon contained within the concealment pocket. Another embodiment locates the cargo pockets over the front pockets and over laying the side or outseam. The cargo pockets in this location also help disguise the presence of a weapon in the front concealment pocket. In this embodiment, the cargo pockets straddling the side seam provide additional reinforcement for the front pockets by distributing the load between the front and rear pant leg shells and the side seam.

[0098] The final item added to the pair of pants is the waistband and the belt loops. The waistband is joined to the tops of the pant legs and the front pockets, as well as the zipper panel. The waistband includes a lower panel which connected to the side seams and rear sides of the front pockets, and may include rear pockets if desired. These pockets may be of a variety of forms, such as a bound pocket, patch pocket, or flap pocket. These pockets may include internal divisions for separating the items placed within. The rear pockets may include a sew-in interfacing for reinforcement. In some embodiments, the rear pockets may be configured to accept unique items, such as ammunition magazines, tools, or other appropriate items.

[0099] Throughout this application, author and year and patents by number reference various publications, including United States patents. Full citations for the publications are listed below. The disclosures of these publications and patents in their entirety are hereby incorporated by reference into this application in order to more fully describe the state of the art to which this invention pertains.

[0100] The invention has been described in an illustrative manner, and it is to be understood that the terminology, which has been used herein, is intended to be in the nature of words of description rather than of limitation. The preceding description and embodiments are merely exemplary and should not be construed as being limiting in nature.

[0101] Obviously, many modifications and variations of the present invention are possible in light of the above teachings. It is, therefore, to be understood that within the scope of the described invention, the invention can be practiced otherwise than as specifically described.
What is claimed is:

1. A clothing system for concealing a weapon, said system comprising:
   a concealment pocket;
   at least one outseam shifted dorsally along an edge of said concealment pocket; said at least one outseam shifted ventrally beyond said concealment pocket;
   a stitching pattern for selectively engaging said weapon when said weapon is placed within said concealment pocket; and
   at least one cargo pocket applied to the outside of said clothing system.

2. The clothing system of claim 1, wherein said concealment pocket further comprises:
   an inner panel;
   an outer panel connected to said inner panel, forming a pocket;
   a spacer pad connected to said inner panel; and
   an inner liner connected to said spacer pad.

3. The clothing system of claim 1, wherein said concealment pocket further comprises an upper pocket facing portion and a lower pocket liner portion.

4. The clothing system of claim 1, wherein said concealment pocket further comprises a spacer pad.

5. The clothing system of claim 1, wherein said concealment pocket further comprises an inner fabric shell panel connected to said spacer pad.

6. The clothing system of claim 1, said clothing system further comprising at least one swing pocket containing at least one internal division.

7. The clothing system of claim 1, said interior concealment pocket further comprises at least one leg band connected to said pocket.

8. The clothing system of claim 1, wherein said concealment pocket is constructed of synthetic materials.

9. A clothing system for concealing a weapon, said system comprising:
   a concealment pocket;
   at least one outseam shifted dorsally along an edge of said concealment pocket;
   a stitching pattern for selectively engaging said weapon when said weapon is placed within said pocket; and
   at least one swing pocket.

10. The clothing system of claim 8, wherein said concealment pocket further comprises an upper pocket facing portion and a lower pocket liner portion.

11. The clothing system of claim 8, wherein said concealment pocket further comprises:
   an inner panel;
   an outer panel connected to said inner panel, forming a pocket;
   a spacer pad connected to said inner panel; and
   an inner liner connected to said spacer pad.

12. The clothing system of claim 8, wherein said concealment pocket further comprises a spacer pad.

13. The clothing system of claim 8, wherein said concealment pocket further comprises an inner fabric shell panel connected to said spacer pad.

14. The clothing system of claim 8, said clothing system further comprising at least one swing pocket containing at least one internal division.

15. The clothing system of claim 8, said interior concealment pocket further comprises at least one leg band connected to said pocket.

16. The clothing system of claim 8, wherein said concealment pocket is constructed of synthetic materials.

17. A clothing system for concealing a weapon, said system comprising:
   a concealment pocket;
   at least one outseam shifted dorsally at said concealment pocket opening, said at least one outseam shifted ventrally beyond said concealment pocket opening; and
   a stitching pattern for selectively engaging said weapon when said weapon is placed within said pocket.

18. The clothing system of claim 15, wherein said concealment pocket further comprises an upper pocket facing portion and a lower pocket liner portion.

19. The clothing system of claim 15, wherein said concealment pocket further comprises a spacer pad.

20. The clothing system of claim 15, wherein said concealment pocket further comprises an inner fabric shell panel connected to said spacer pad.

21. The clothing system of claim 15, said clothing system further comprising at least one swing pocket containing at least one internal division.

22. The clothing system of claim 15, said interior concealment pocket further comprises at least one leg band connected to said pocket.

23. The clothing system of claim 15, wherein said concealment pocket is constructed of synthetic materials.

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