



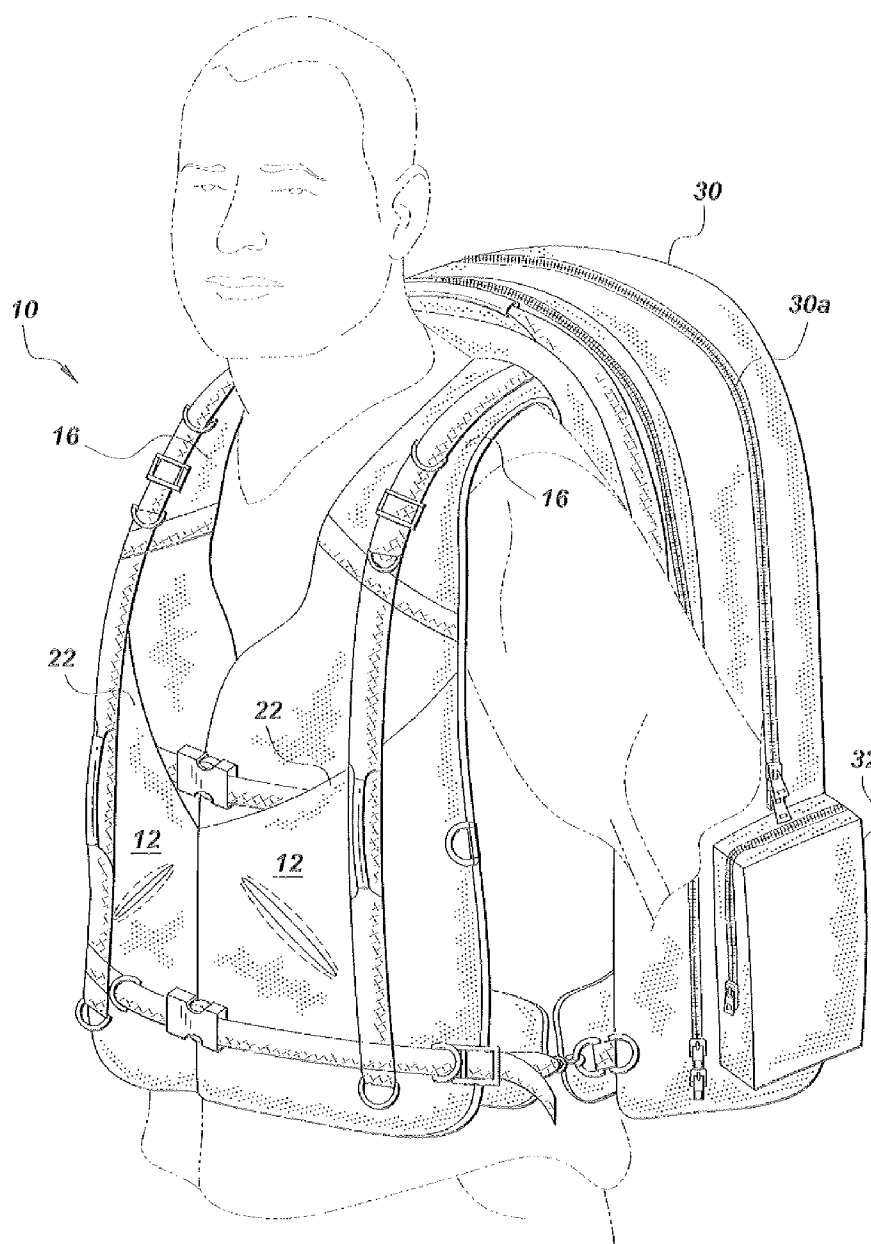
US 20120018477A1

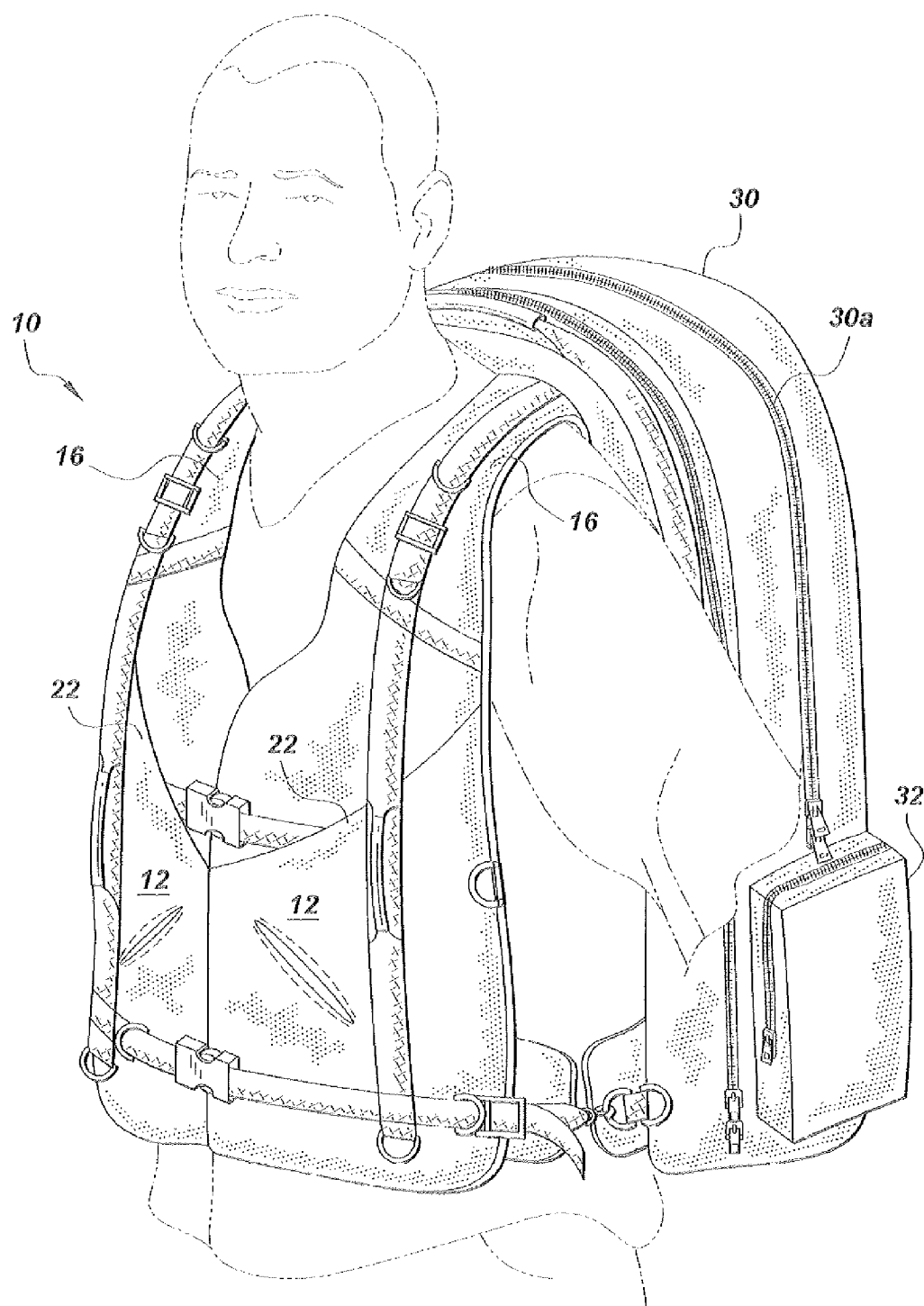
(19) **United States**(12) **Patent Application Publication**  
**INOUE**(10) **Pub. No.: US 2012/0018477 A1**(43) **Pub. Date: Jan. 26, 2012**(54) **SURVIVAL GEAR BACKPACK****Publication Classification**(76) Inventor: **TODD F. INOUE**, Oro Valley, AZ  
(US)(51) **Int. Cl.**  
**A45F 3/06** (2006.01)(52) **U.S. Cl.** ..... **224/576**(21) Appl. No.: **13/191,337**(57) **ABSTRACT**(22) Filed: **Jul. 26, 2011**

The survival gear backpack is a backpack having a plurality of internal pockets adapted to contain items that would be needed in crisis situations while maintaining its function as a viable storage vessel for personal items usable in non-crisis situations. The backpack also includes pockets that house ballistic-protective inserts. The pockets and inserts are positioned to protect the front, rear and sides of the upper torso.

**Related U.S. Application Data**

(60) Provisional application No. 61/367,764, filed on Jul. 26, 2010.





*Fig. 1*

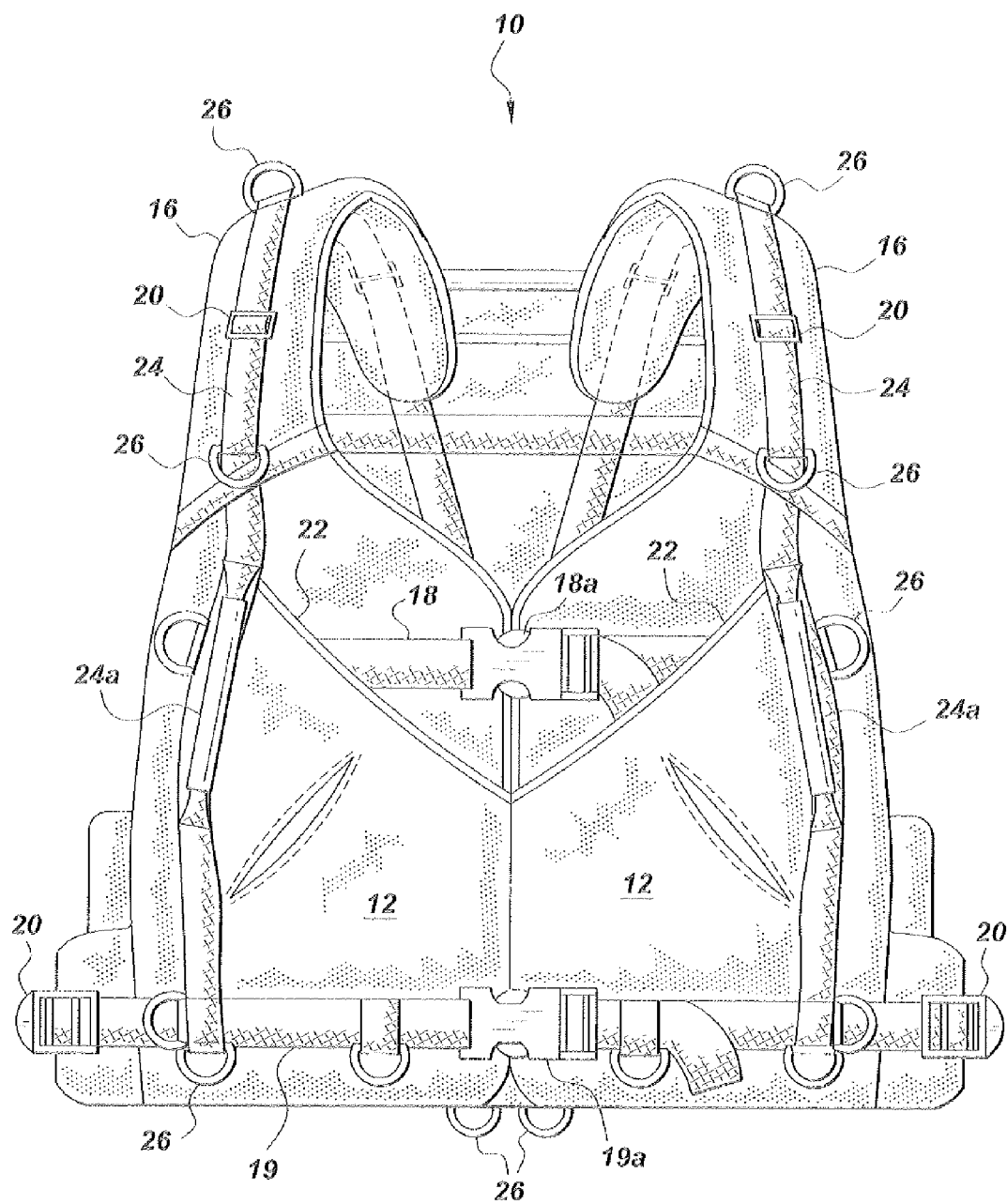


Fig. 2

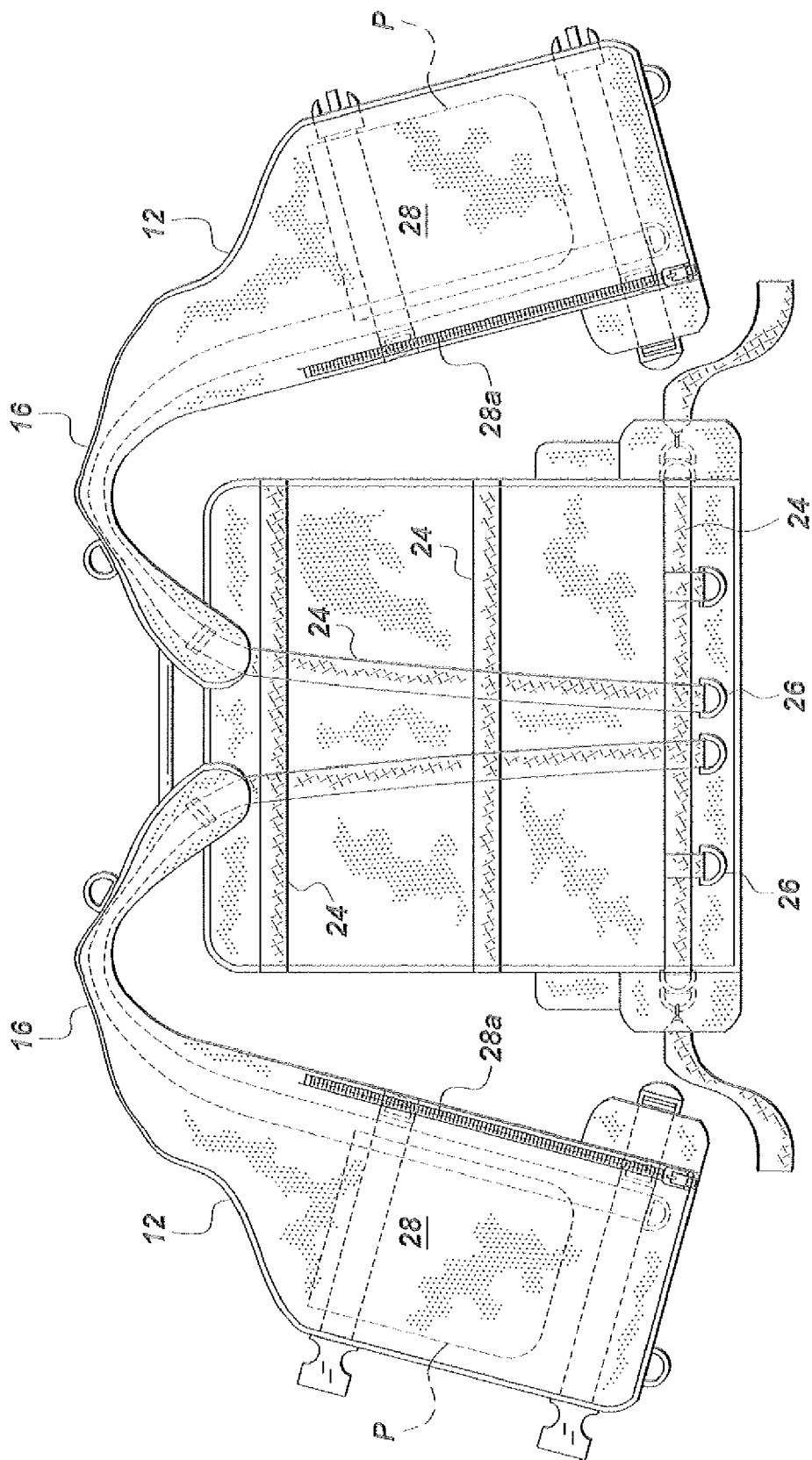


Fig. 3

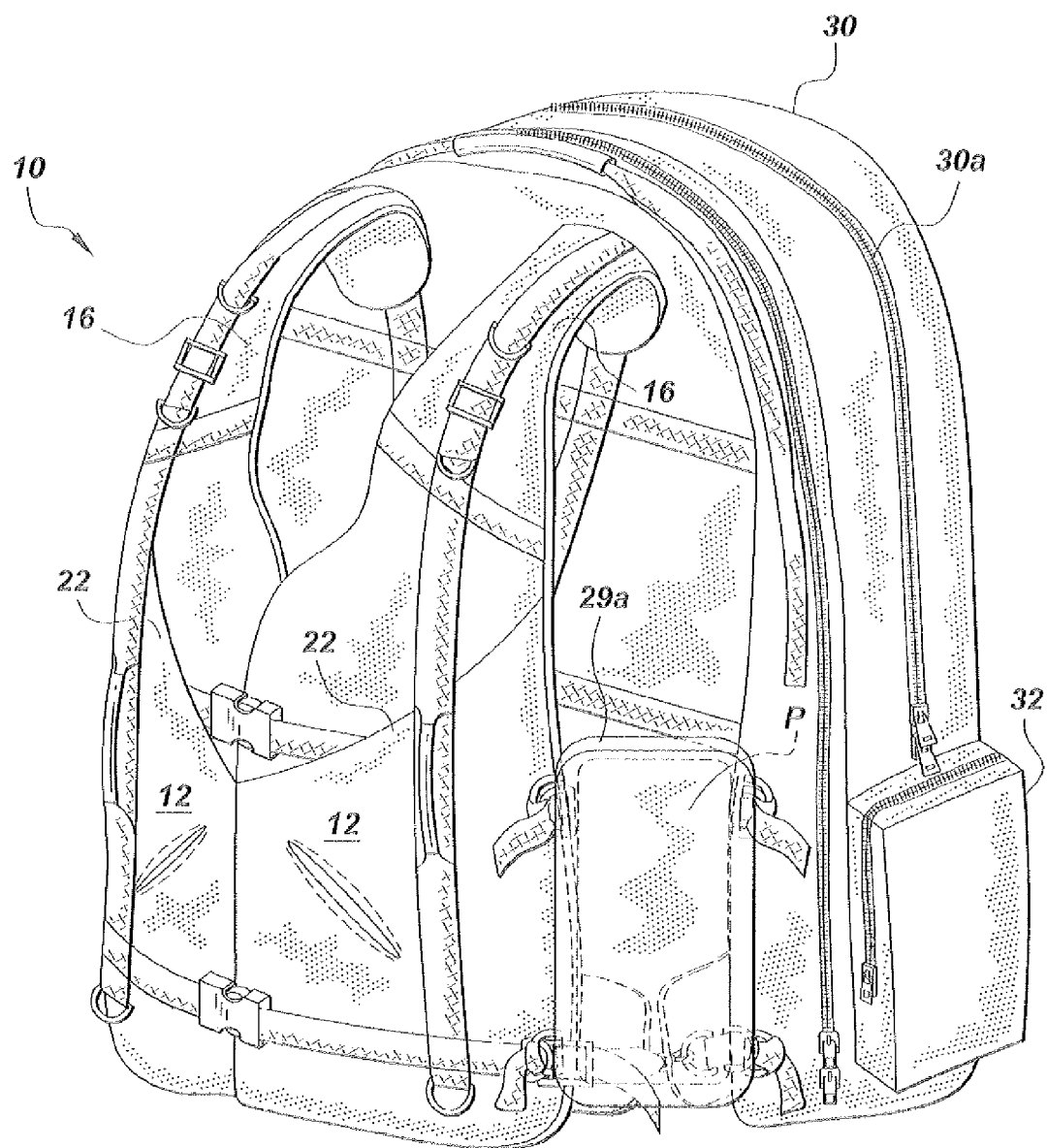
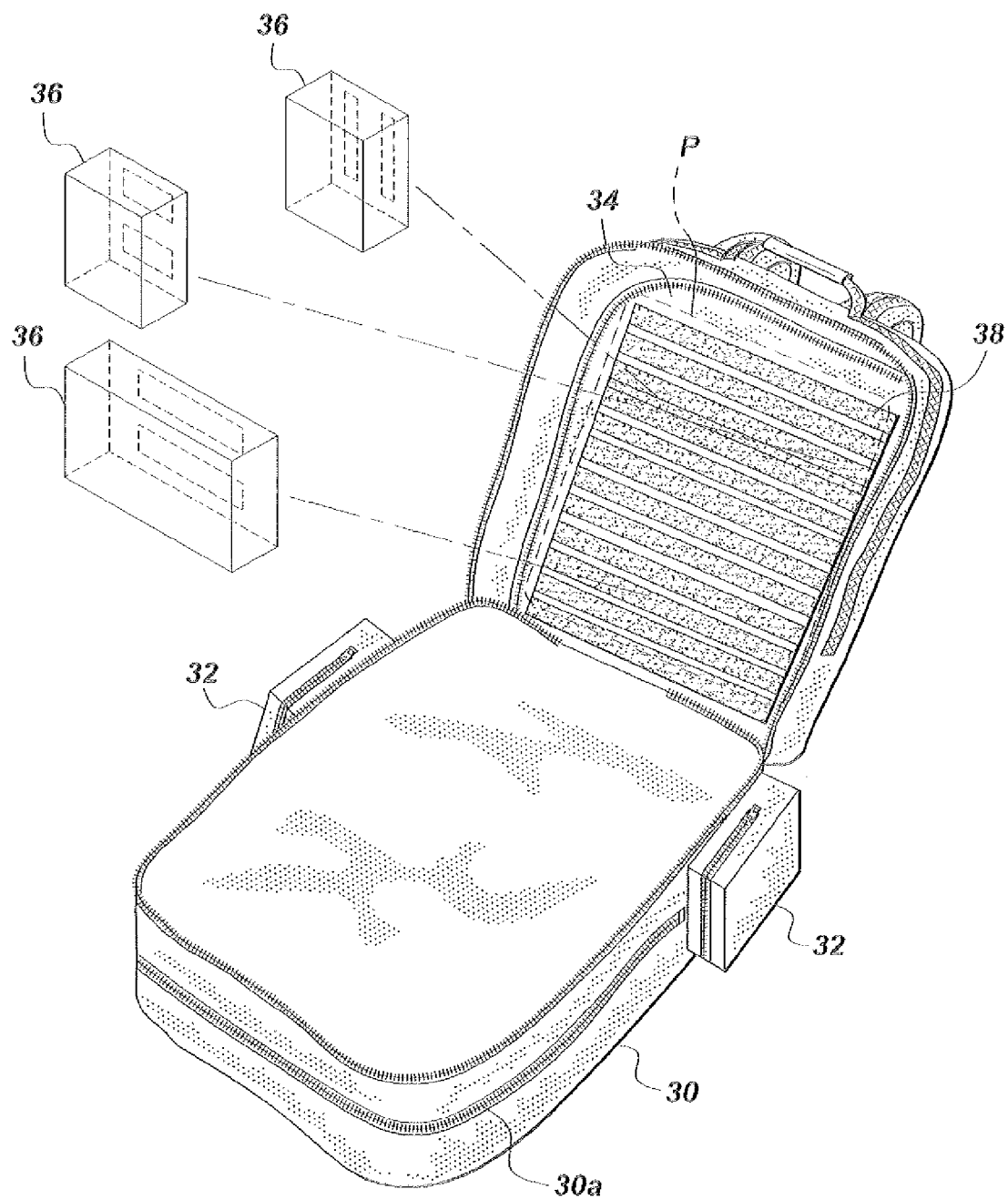


Fig. 4



*Fig. 5*

## SURVIVAL GEAR BACKPACK

### CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Patent Application Ser. No. 61/367,764, filed Jul. 26, 2010.

### BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention generally relates to survival and protective gear, and more particularly to a survival gear backpack incorporating ballistic-protective inserts.

[0004] 2. Description of the Related Art

[0005] Recent disasters perpetrated by man (terrorism, nuclear accidents, oil spills, etc.) along with natural disasters (floods, earthquakes, forest fires, etc.) have demonstrated the need for emergency preparedness. Government agencies have been established in many countries to address the need for emergency preparations in the event of one or more of the above-mentioned disasters. One of the many suggested ideas for preparations includes the acquisition of means to personally transport emergency and protective items. During a crisis such needed items as small tools, small firearms, food packets, medical supplies and other emergency, survival equipment must often be carried on ones person. In certain situations it may also be necessary to utilize some form of personal ballistic protection. Thus, a survival gear backpack solving the aforementioned problems is desired.

### SUMMARY OF THE INVENTION

[0006] The survival gear backpack is a structure that includes a plurality of storage sections adapted to contain items that would be needed in crisis and non-crisis situations. Varying arrays of fixed and/or removable pockets are disposed in one or more of the storage sections. The backpack also includes pockets that are specifically designed to house ballistic protection inserts. The ballistic-protective inserts are positioned to protect the front, rear and sides of the upper torso. A strap/harness arrangement built within the backpack structure has structural load strengths equal to or exceeding that of rappel harnesses.

[0007] Accordingly, the invention presents a backpack designed to efficiently contain food, water, emergency medical supplies, defensive weapons, tools, etc. that might be needed in survival-type situations. The backpack also provides adequate personal storage volume for use during non-emergency situations. The backpack is designed to provide removable inserts that afford ballistic protection for the full upper torso. The invention provides for improved elements thereof in an arrangement for the purposes described that are inexpensive, dependable and fully effective in accomplishing their intended purposes.

[0008] These and other features of the present invention will become readily apparent upon further review of the following specification and drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. 1 is an environmental, perspective view of a survival gear backpack according to the present invention.

[0010] FIG. 2 is a front view of a survival gear backpack according to the present invention.

[0011] FIG. 3 is a front view of a survival gear backpack according to the present invention, shown with the front panels unfastened.

[0012] FIG. 4 is a perspective view of a survival gear backpack according to the present invention, showing a removable, side pocket affording ballistic protection.

[0013] FIG. 5 is a perspective view of a survival gear backpack according to the present invention, shown with the internal compartment in an open position.

[0014] Similar reference characters denote corresponding features consistently throughout the attached drawings.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0015] Attention is first directed to FIGS. 1 and 2 of the drawings, wherein the survival gear backpack is generally indicated at 10. Backpack 10 can be fabricated from any suitable, substantially rugged material (canvas, nylon, etc.) and may be made water-resistant, if desired. The backpack 10 comprises vest-like front panels 12 adapted for positioning at the front torso area of the wearer. A pair of padded, oversized shoulder straps 16 is integral with and extend from front panels 12. Front securing straps 18, 19 having respective quick release fasteners 18a, 19a are provided to secure panels 18 in a closed position covering the stomach and chest areas of the torso. Securing straps 18, 19 and shoulder straps 16 are provided with adjustment buckles or the like 20 (FIG. 2) to permit adjustment of the panels 12 on the torso of the wearer or to secure excess webbing. Securing strap 19 is also provided with an adjustment buckle or the like 20 at each side thereof to further secure excess webbing.

[0016] One or more pockets 22 are provided on the front panels to house small emergency items and may include a universal plug-in port therein. As illustrated, each pocket 22 is provided with a slanted entrance to enhance access thereto. It should be recognized, however, that the entrance could assume vertical or horizontal orientation, if desired. The pockets may be provided with a conventional closure (zipper, button, hook-and-loop, etc.), if desired.

[0017] Identical respective harness straps 24 are secured to the outer surface of each front panel 12. Each strap 24 is provided with a low profile handle portion 24a to provide means for grasping the backpack. A main storage compartment 30 is securely attached to the front panel, shoulder straps, and harness strap assembly. As more clearly explained below, main compartment 30 includes therein at least one internal secondary compartment and may include a variety of auxiliary pocket arrangements. A conventional zipper 30a or the like provides access to main compartment 30. Ancillary compartments 32 are attached to the outer surface of compartment 30. Compartments 32 can be removably attached to the outer surface in any convenient manner, e.g., hook and loop fasteners. Compartments 32 may house emergency items, including a small firearm.

[0018] As best seen in FIG. 3, harness-strap webbing structure 24 is built within the backpack and allows the backpack to have the load strengths of rappel harnesses, as mentioned above. An array of attached hardware 26 (D-rings, ladder locks, buckles, etc.) is attached to the harness-strap webbing structure and other parts of the backpack. The hardware 26 is positioned in configurations as desired, and may be employed to attach other emergency items to the backpack. Respective pockets 28 having entrances at 28a are formed on the inner surface of each panel 12. Each pocket is adapted to house an

insert P (shown in phantom lines) therein. The insert P is constructed from a material, such as Kevlar® (Kevlar is the brand name for a para-aramid synthetic fiber developed at DuPont and utilized as body armor) that offers a degree of ballistic protection for the stomach and chest areas of the torso. The inserts P may be removable from the pockets 28 or permanently secured therein. FIG. 4 discloses the backpack wherein identically configured removable side protective pockets 29 (only one is shown, the other being symmetrical) are utilized to protect the side areas of the torso. Each side pocket 29 is provided with an opening 29a for receiving and retaining a protective ballistic insert P therein. Each pocket 29 is attached to the backpack via D-rings or by hook-and-loop fasteners or the like.

[0019] As best seen in FIG. 5, an internal secondary compartment 34 is disposed adjacent main compartment 30 and is isolated therefrom. The secondary compartment 34 is provided with an opening adapted for closure by a conventional closure fastener, such as a zipper or the like. Whereas the main compartment 30 is adapted to house items of ordinary nature, the secondary compartment 34 is adapted to house items 36 that may be specific to emergency/medical/survival scenarios (bandages, water, medicine, etc.). Compartment 34 is configured with an array of fixed and removable pockets and includes hook-and-loop fasteners 38 for securing the items therein, including affixable modular containers or any form of structured storage dedicated for, but not limited to, emergency equipment storage. A ballistic insert is disposed in the secondary compartment behind the hook-and-loop fasteners for protecting the back area of the torso. Alternatively, the ballistic insert may be disposed in the main compartment, if desired.

[0020] It is to be understood that the present invention is not limited to the embodiment described above, but encompasses any and all embodiments within the scope of the following claims.

I claim:

1. A survival gear backpack, comprising:
  - a main compartment having a front wall;
  - a pair of over-sized shoulder straps attached to the front wall of the main compartment, each of the shoulder straps having a front face;
  - a respective panel member integral with each of the respective shoulder straps and extending therefrom, each of the panel members having a front face;
  - respective first pockets disposed in the front face of each of the panel members;
  - a respective harness strap secured on the front faces of the shoulder straps and the front face of each of the panel members;
  - a respective handle formed in each of the harness straps; and
  - first and second respective ballistic protective inserts respectively disposed in each of the panel members for protecting a front torso area of a wearer.
2. The survival gear backpack according to claim 1, further including securing straps disposed on each said panel member for securing said panel members in a closed position.
3. The survival gear backpack according to claim 1, wherein each said first pocket has a slanted entrance.
4. The survival gear backpack according to claim 1, wherein each said panel member has an inner face, the backpack further comprising respective second pockets disposed on the inner face of each said panel member.

5. The survival gear backpack according to claim 4, wherein said first and second respective ballistic protective inserts are respectively disposed in each of the respective second pockets.

6. The survival gear backpack according to claim 1, wherein said main compartment has an outer wall having at least one ancillary compartment removably attached to the outer wall, the ancillary compartment being adapted to house a small firearm therein.

7. The survival gear backpack according to claim 1, further including a plurality of D-rings secured to said harness strap and said securing straps.

8. The survival gear backpack according to claim 1, wherein additional harness strap structure is secured to the front wall of said main compartment.

9. A survival gear backpack, comprising:

- a main compartment having a front wall and an outer wall;
- a pair of over-sized shoulder straps attached to the front wall of the main compartment, each of the shoulder straps having a front face;
- a respective panel member integral with each of the respective shoulder straps and extending therefrom, each of the panel members having a front face and an inner face;
- respective first pockets disposed in the front face each of the panel members;
- respective harness straps secured on the front faces of the shoulder straps and the front face of each of the panel members;
- a respective handle formed in each of the harness straps; and
- first and second respective ballistic protective inserts respectively disposed in each of the panel members for protecting a front torso area of a backpack wearer.

10. The survival gear backpack according to claim 9, further including a pair of side pockets, each of the side pockets being respectively attached to said main compartment and to a respective one of the panel members, each of the side pockets housing respective third and fourth ballistic protective inserts for protecting side torso areas of the backpack wearer.

11. The survival gear backpack according to claim 9, further including:

- a secondary compartment disposed adjacent said main compartment and isolated therefrom, the secondary compartment being adapted to house emergency supplies and equipment therein; and
- a fifth ballistic protective insert disposed in the secondary compartment for protecting a back torso area of the backpack wearer.

12. The survival gear backpack according to claim 9, wherein each said respective first pocket has a slanted entrance.

13. The survival gear backpack according to claim 9, further comprising respective second pockets disposed on the inner face of each said panel member, said first and second first and second respective ballistic protective inserts being disposed in the respective second pockets.

14. The survival gear backpack according to claim 9, further including at least one ancillary compartment removably attached to the outer wall of said main compartment, the ancillary compartment being adapted to house a small firearm therein.



**15.** The survival gear backpack according to claim **9**, further including a plurality of D-rings secured to said harness straps and said securing straps.

**16.** The survival gear backpack according to claim **9**, further comprising additional harness straps secured to the front wall of said main compartment.

**17.** A survival gear backpack, comprising:

a main compartment having a front wall and an outer wall; at least one ancillary compartment removably attached to the outer wall of the main compartment, the ancillary compartment being adapted to house a small firearm therein;

a pair of over-sized shoulder straps attached to the front wall of the main compartment, each of the shoulder straps having a front face;

a respective panel member integral with each of the respective shoulder straps and extending therefrom, each of the panel members having a front face and an inner face;

respective first pockets disposed in the front face each of the panel members, each of the first pockets having a slanted entrance;

respective harness straps secured on the front faces of the shoulder straps and the front face of each of the panel members;

additional harness straps secured to the front wall of the main compartment;

a plurality of D-rings secured to the harness straps, the securing straps, and the additional harness straps;

a respective handle formed in each of the harness straps; and

first and second respective ballistic protective inserts respectively disposed in each of the panel members for protecting a front torso area of a backpack wearer.

**18.** The survival gear backpack according to claim **17**, further including a pair of side pockets, each of the side pockets being respectively attached to said main compartment and to a respective one of the panel members, each of the side pockets housing respective third and fourth ballistic protective inserts for protecting side torso areas of the backpack wearer.

**19.** The survival gear backpack according to claim **18**, further including:

a secondary compartment disposed adjacent said main compartment and isolated therefrom, the secondary compartment being adapted to house emergency supplies and equipment therein; and

a fifth ballistic protective insert disposed in the secondary compartment for protecting a back torso area of the backpack wearer.

\* \* \* \* \*