



(19) **United States**
(12) **Patent Application Publication**
Ogden

(10) **Pub. No.: US 2009/0179455 A1**
(43) **Pub. Date: Jul. 16, 2009**

(54) **SYSTEMS AND METHODS FOR PROVIDING A VEHICLE CAMPER**

(57) **ABSTRACT**

(76) Inventor: **Eric Ogden**, Seattle, WA (US)

Correspondence Address:
Ruttler Law PLLC
One Union Square
600 University Street, Suite 1919
Seattle, WA 98101 (US)

(21) Appl. No.: **12/344,476**

(22) Filed: **Dec. 27, 2008**

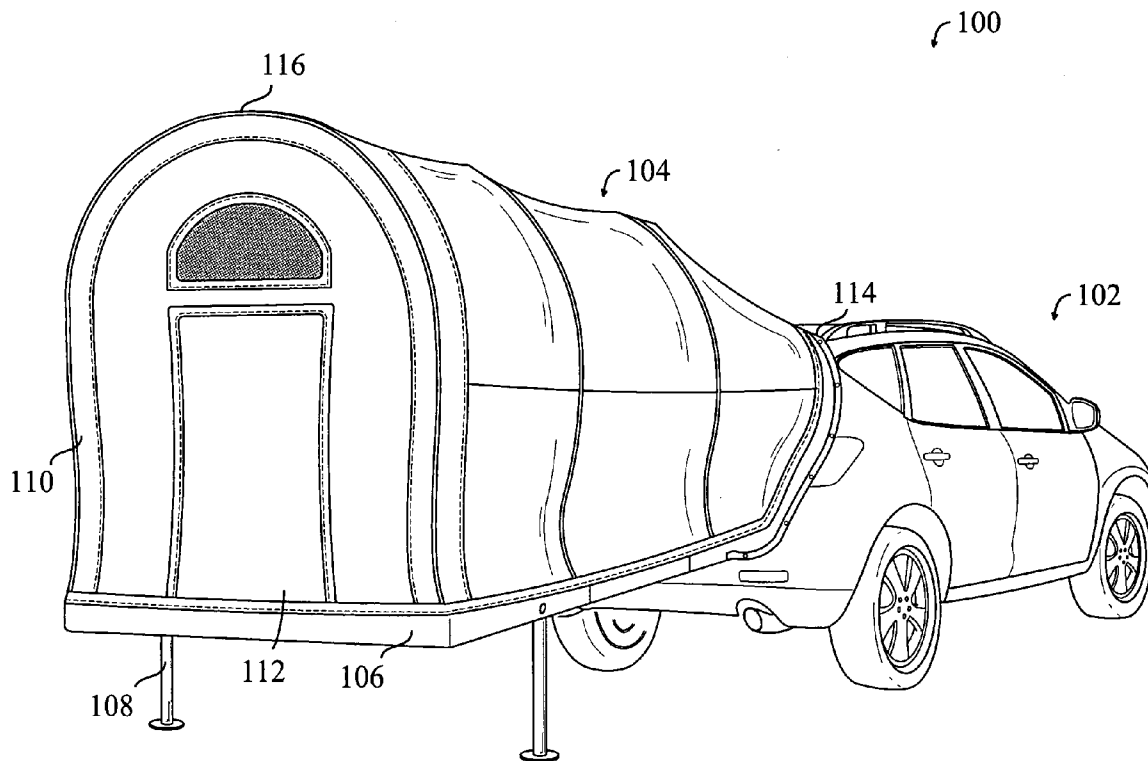
Related U.S. Application Data

(60) Provisional application No. 61/018,146, filed on Dec. 31, 2007.

Publication Classification

(51) **Int. Cl.**
E04H 15/06 (2006.01)
(52) **U.S. Cl.** **296/161; 135/88.14**

This invention relates generally to mechanics, and more specifically, to systems and methods for providing a vehicle camper. In one embodiment, the invention includes a vehicle camper having a base, a first portion of the base configurable to being disposed within a cargo space of a vehicle, the first portion of the base configurable to resting upon a floor of the cargo space, a second portion of the base configurable to extending laterally and outwardly from the cargo space such that the second portion is exposed from the vehicle; at least one support, the at least one support being deployably coupled to the base and configurable to extend from the base to a ground surface to provide support for the base; and a tent, the tent coupled to at least a portion of the base configured to being exposed from the vehicle, the tent suspendable by a frame, the tent and the frame configurable to being automatically deployable upon release to define an interior space above the base, the tent configurable to extending around at least a portion of an outside of the vehicle to provide a seal against moisture, the tent having a door for providing access from an exterior of the vehicle, wherein the base, the at least one support, and the tent are deployably collapsible into a stowable and portable unit.



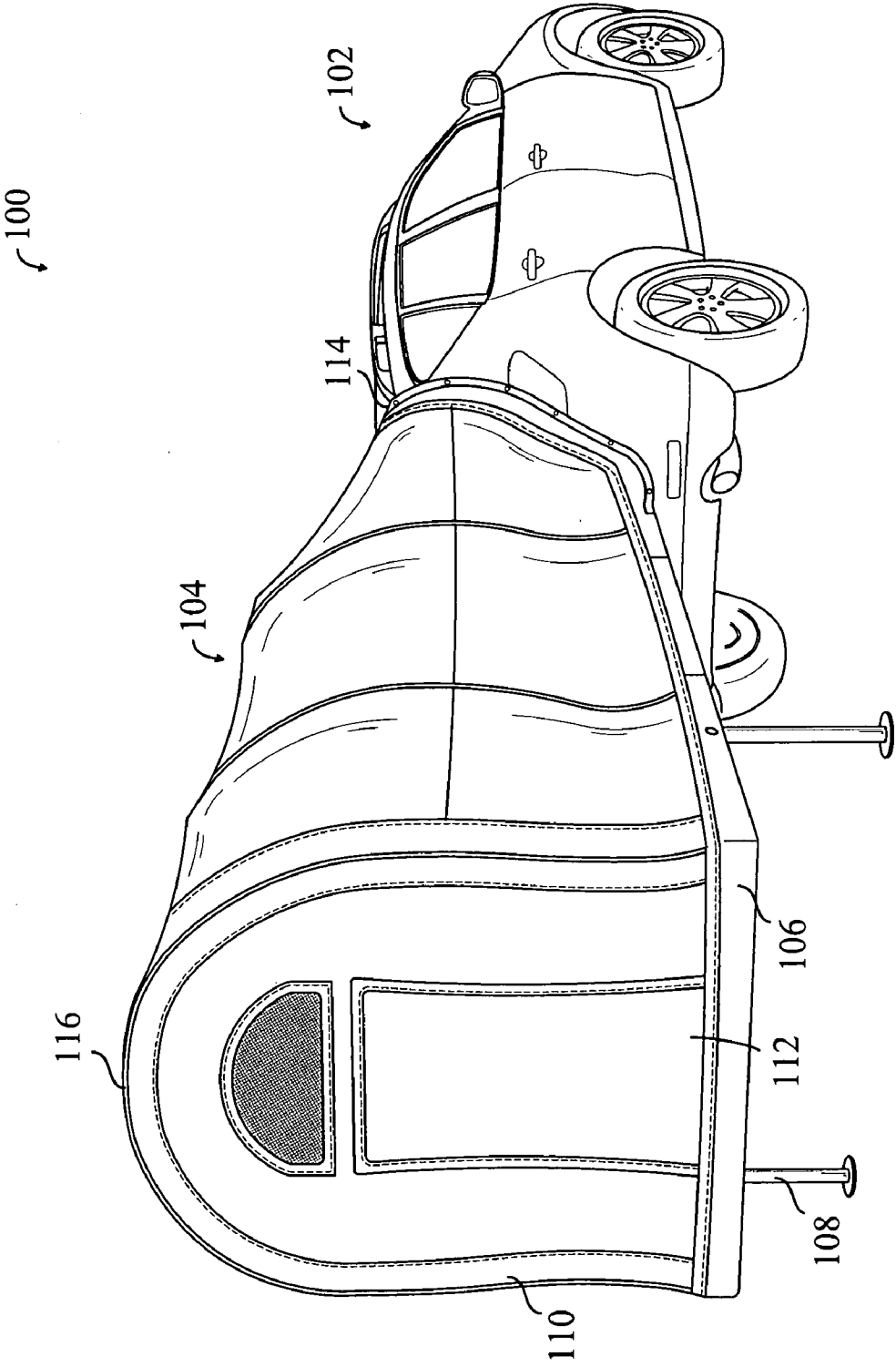
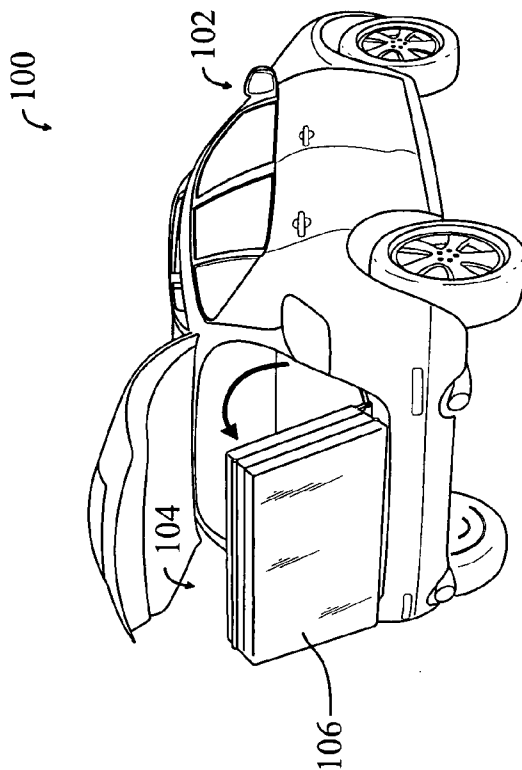
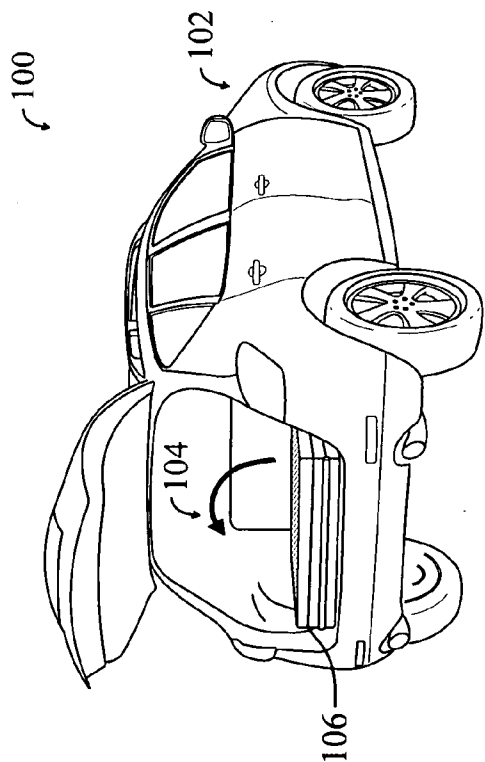
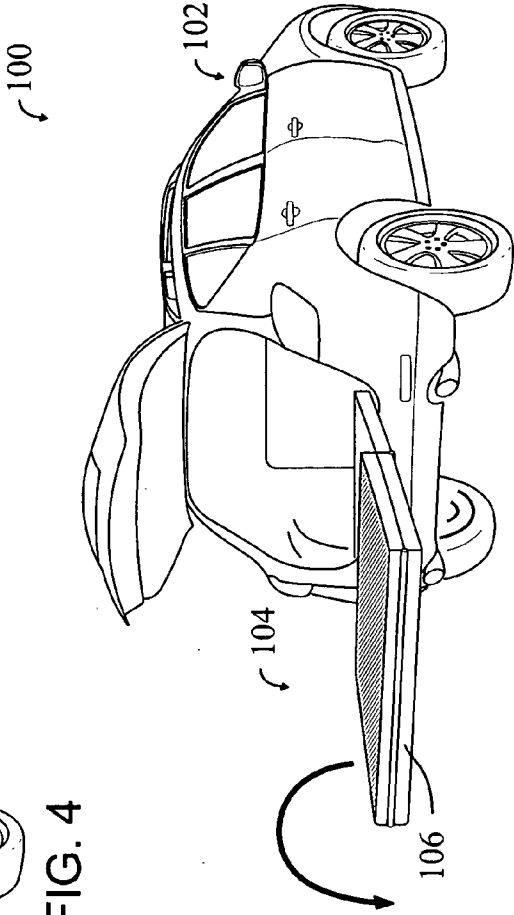
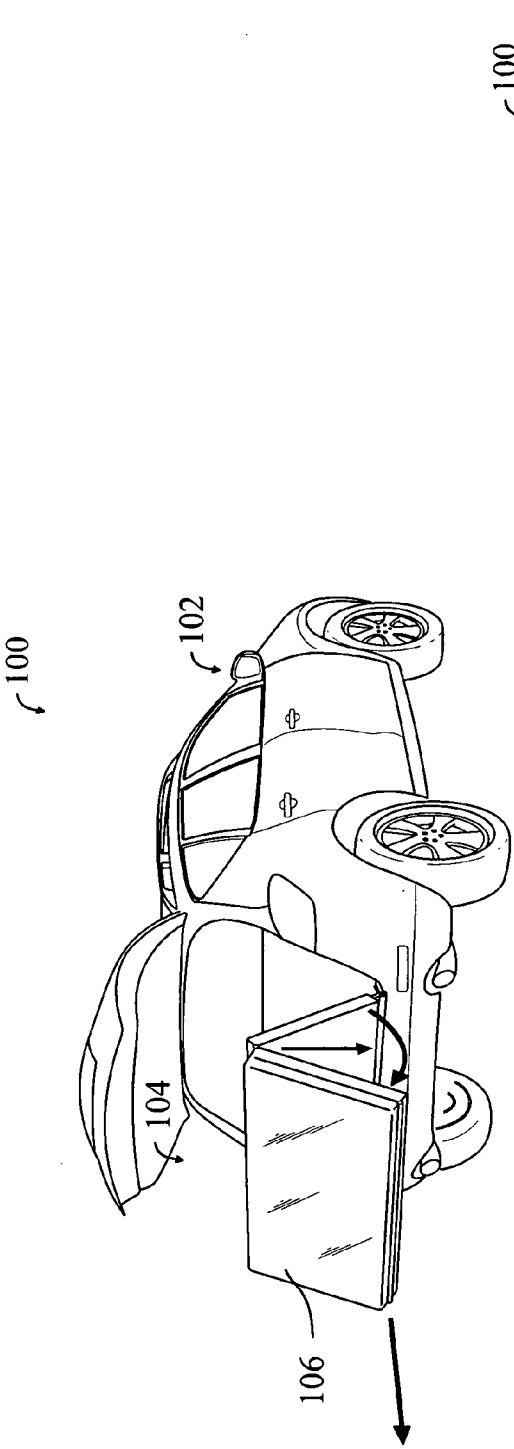


FIG. 1





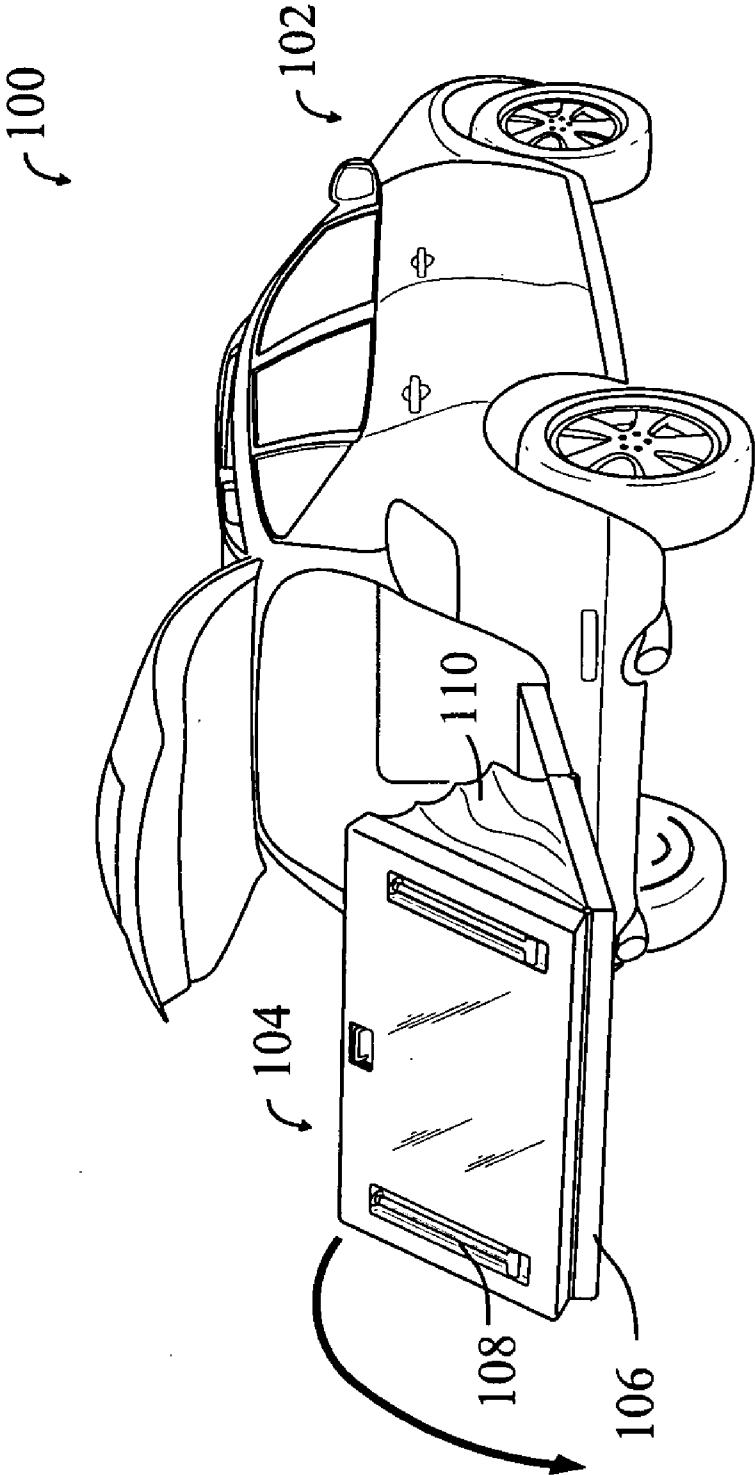


FIG. 6

SYSTEMS AND METHODS FOR PROVIDING A VEHICLE CAMPER

PRIORITY CLAIM

[0001] This application claims the benefit of U.S. provisional patent application Ser. No. 61/018,146 filed Dec. 31, 2007 (our ref. OGDN-1-1001). The foregoing application is incorporated by reference in its entirety as if fully set forth herein.

FIELD OF THE INVENTION

[0002] This invention relates generally to mechanics, and more specifically, to systems and methods for providing a vehicle camper.

BACKGROUND

[0003] Although there are many instances where sleeping in a passenger vehicle would be desirable, such vehicles are not generally designed for overnight accommodations. Instead, passenger vehicles have relatively confined spaces that are disrupted by seating, consoles, and other immovable objects. A number of tent extensions for automobiles have been invented to address this problem, including Woodward (U.S. Pat. No. 3,746,386), Davis (U.S. Pat. No. 3,410,598), Baughman (U.S. Pat. No. 5,066,065). However, each of these inventions suffers from deficiencies that reduce their usability and effectiveness. For example, Woodward discloses a prism shaped tent that provides increased headroom for a hatchback vehicle. While Woodward does enhance the ability of an individual to sit more upright in the trunk area of a hatchback, Woodward does not increase the horizontal surface of the vehicle to permit lateral body extension. Differently, Davis discloses a platform coupled with a tent that provides an extension to the trunk of a sedan. While Davis does slightly increase the horizontal surface area, it does so in an awkward fashion by resting on the frame of the sedan. Furthermore, the increase is limited because it relies on a mount within the trunk to support the entire weight of the platform, tent, and any individuals therein. Moreover, Davis requires the installation of a physical coupling mechanism within the trunk, a modification that is both difficult and undesirable in modern vehicles. Lastly, Baughman discloses a platform coupled with a rigid roof that provides an extension to a vehicle. While Baughman increases the horizontal surface area of the vehicle, the Baughman shelter is not accessible from outside the vehicle, provides only limited headroom, has a cumbersome and rigid design, and results in moisture leakage at the interface with the vehicle.

[0004] Accordingly, while desirable results have been achieved in the art, there exists much room for improvement. What is needed then are systems and methods for providing a vehicle camper.

SUMMARY

[0005] This invention relates generally to mechanics, and more specifically, to systems and methods for providing a vehicle camper. In one embodiment, the invention includes a vehicle camper having a base, a first portion of the base configurable to being disposed within a cargo space of a vehicle, the first portion of the base configurable to resting upon a floor of the cargo space, a second portion of the base configurable to extending laterally and outwardly from the cargo space such that the second portion is exposed from the

vehicle; at least one support, the at least one support being deployably coupled to the base and configurable to extend from the base to a ground surface to provide support for the base; and a tent, the tent coupled to at least a portion of the base configured to being exposed from the vehicle, the tent suspendable by a frame, the tent and the frame configurable to being automatically deployable upon release to define an interior space above the base, the tent configurable to extending around at least a portion of an outside of the vehicle to provide a seal against moisture, the tent having a door for providing access from an exterior of the vehicle, wherein the base, the at least one support, and the tent are deployably collapsible into a stowable and portable unit.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] Embodiments of the present invention are described in detail below with reference to the following drawings:

[0007] FIG. 1 is a perspective view of a vehicle camper being used with a vehicle, in accordance with an embodiment of the invention;

[0008] FIG. 2 is a perspective view of a vehicle camper being stowed in a vehicle, in accordance with an embodiment of the invention; and

[0009] FIGS. 3-6 are perspective views of a vehicle camper being expanded with a vehicle, in accordance with an embodiment of the invention.

DETAILED DESCRIPTION

[0010] This invention relates generally to mechanics, and more specifically, to systems and methods for providing a vehicle camper. Specific details of certain embodiments of the invention are set forth in the following description and in FIG. 1-6 to provide a thorough understanding of such embodiments. The present invention may have additional embodiments, may be practiced without one or more of the details described for any particular described embodiment, or may have any detail described for one particular embodiment practiced with any other detail described for another embodiment.

[0011] FIG. 1 is a perspective view of a vehicle camper being used with a vehicle, in accordance with an embodiment of the invention. In one embodiment, the vehicle camper being used with a vehicle includes a vehicle 102 and a camper 104. In one embodiment, the camper 104 includes a base 106, at least one support 108, a tent 110, a door 112, a seal 114, and a frame 116. The vehicle 102 is a hatchback, station wagon, sport utility vehicle, pickup truck, or any other vehicle that has a trunk or cargo space accessible from the rear. The base 106 of the camper 104 is configurable to being disposed within the cargo space of the vehicle 102 against a floor of the cargo space and extending laterally and outwardly therefrom. The at least one support 108 is disposed near a distal end of the base 106 and is configurable to extend from the base 106 to a ground surface to provide support. The tent 110 is coupled to a perimeter of the base 106 that is exposed from the vehicle 102. The tent 110 is suspended by the frame 116 to define an interior space within the tent 110 above the base 106. The tent 110 extends around an outside of the vehicle 102 proximate to the cargo space at the seal 114 to prevent and/or reduce moisture from entering the interior space of the tent 110. The door 112 is defined within the tent 110 near a distal end of the base 106 and is configurable to provide access to the interior space of the tent 110. Accordingly, the camper 104 is config-

urable to providing an extended and sheltered horizontal surface area from the rear of the vehicle **102** that is accessible from within and without the vehicle **102** and that prevents and/or reduces moisture from entering an interior of the tent.

[0012] In certain embodiments, the base **106** is not mounted to the vehicle **102** and instead merely rests against a floor of the cargo space. In one particular embodiment, the base **106** is customized for a particular cargo space, is coupled within the cargo space, or is alternatively coupled to the vehicle **102**, such as using a hook or a trailer hitch. In another embodiment, the base **106** is configurable to slidably or unfoldably extend from the vehicle **102** (FIGS. 2-6). In various embodiments, the base is defined by a variety of widths, lengths, sizes, and shapes and can be constructed from plastics, metals, woods, synthetic materials, or any other material. In one particular embodiment, the base includes padding, which may be inflatable and/or heated, such as on its interior surface to enhance comfort. In another embodiment, the at least one support **108** is foldably or slidably deployable or can be removably coupleable to the base **106**. In an alternative embodiment, the at least one support **108** can include a wheel for removably engaging a ground surface or can be movably or extendably adjustable relative to the base **106** in any direction such as to accommodate an uneven ground surface. In one particular embodiment, the at least one support **108** includes a shock absorbance system. In a further embodiment, the at least one support **108** includes two supports that are oppositely disposed proximate to corners of the exposed base **106**. In one embodiment, the tent **110** is coupled or removably coupled to the base **106** such as through zippers or fasteners. In yet another embodiment, the tent **110** is constructed from light-weight and waterproof material such as nylon or other similar material such as those commonly used in camping tents. In an alternative embodiment, the frame **116** is established using tension biased wires or poles or other similar supporting member such as those commonly used in camping tents. In one particular embodiment, the tent **110** and the frame **116** are automatically deployable upon release (e.g. pop-up). In another embodiment, the tent **110** and the frame **116** require at least some manual installation. In various embodiments, the tent **110** can define a variety of widths, lengths, heights, sizes, and shapes such as to accommodate varying degrees of occupancy (e.g. 1-8 persons) or to accommodate standing. Additionally, the tent **110** can include windows, skylights, vents, overhang extensions, multiple rooms, multiple doors, and additional moisture protective layers. In a further embodiment, the seal **114** is provided using the frame **116**, hooks, ground stakes with cordage, adhesives, snaps, rubber, a combination of the foregoing, or other similar mechanism. In an alternative embodiment, the seal **114** is omitted and the tent **110** includes a portion that is disposed about an exterior of the vehicle **102**. In other embodiments, the camper **104** includes other features such as a toilet/plumbing system, a cooking appliance, other kitchen systems, an electrical system, a heating/cooling system, a computer/network system, an entertainment/gaming system, lights, and a security system, any of which can be located within or without the camper **104** or connected to systems provided by the vehicle **102**. Additionally, the camper **104** can be equipped steps, beds, seats, tables, shelves, multiple living levels, and any other element that is present in modern motor homes or campers. In an additional embodiment, the camper **104** is usable on a

ground surface without the vehicle **102**, such as by using a tent insert to fill the aperture resulting in the tent **110** from removal of the vehicle **102**.

[0013] FIG. 2 is a perspective view of a vehicle camper being stowed in a vehicle, in accordance with an embodiment of the invention. In one embodiment, the vehicle camper being used with a vehicle includes the vehicle **102** and the camper **104**. The base **106** of the camper **104** is foldably collapsible along with the tent **110**, the frame **116**, and the at least one support **108** into a self-contained portable unit and the camper **104** is stowable within the cargo space of the vehicle **102**. The stowed camper **104** can be conveniently moved, repositioned, removed, or disposed on the vehicle or within another vehicle and can include one or more latches, handles, or wheels to assist with the foregoing. In one particular embodiment, the camper **104** can be stowed within a compartment in the vehicle **102**, within a bumper of the vehicle **102**, or within a hatch of the vehicle **102**. In a further embodiment, any of the tent **110**, the frame **116**, and the at least one support **108** can be removable and independently stowable.

[0014] FIGS. 3-6 are perspective views of a vehicle camper being expanded with a vehicle, in accordance with an embodiment of the invention. In one embodiment, the vehicle camper being used with a vehicle includes the vehicle **102** and the camper **104**. The base **106** of the camper **104** is unfoldably expandable along with the tent **110**, the frame **116**, and the at least one support **108** from the cargo space of the vehicle **102** as sequentially depicted in FIGS. 3-6. The base **106** is composed of four segments, one of which remains disposed within the cargo space of the vehicle **102**. The remaining three segments are sequentially unfolded with the tent **110** and the at least one support **108** being deployable therefrom (FIG. 6). In certain embodiments, the base **108** is composed of fewer or greater segments, any of which can vary in length, width, or shape. In another embodiment, the base **108** is slidably or rollably expandable or can be joined from one or more separate components. In another embodiment, a motor is provided to assist with expanding and/or collapsing the camper **104**.

[0015] While preferred and alternate embodiments of the invention have been illustrated and described, as noted above, many changes can be made without departing from the spirit and scope of the invention. Accordingly, the scope of the invention is not limited by the disclosure of these preferred and alternate embodiments. Instead, the invention should be determined entirely by reference to the claims that follow.

What is claimed is:

1. A vehicle camper, the vehicle camper comprising:
 - a base, a first portion of the base configurable to being disposed within a cargo space of a vehicle, the first portion of the base configurable to resting upon a floor of the cargo space, a second portion of the base configurable to extending laterally and outwardly from the cargo space such that the second portion is exposed from the vehicle;
 - at least one support, the at least one support being deployably coupled to the base and configurable to extend from the base to a ground surface to provide support for the base; and
 - a tent, the tent coupled to at least a portion of the base configured to being exposed from the vehicle, the tent suspendable by a frame, the tent and the frame configurable to being automatically deployable upon release to define an interior space above the base, the tent config-

- urable to extending around at least a portion of an outside of the vehicle to provide a seal against moisture, the tent having a door for providing access from an exterior of the vehicle,
- wherein the base, the at least one support, and the tent are deployably collapsible into a stowable and portable unit.
- 2. The vehicle camper of claim 1, wherein the base is not mounted to the vehicle.
- 3. The vehicle camper of claim 1, wherein the base is coupled to the vehicle using a trailer hitch.
- 4. The vehicle camper of claim 1, wherein the base, the at least one support, and the tent are configurable to foldably collapse into a stowable and portable unit.
- 5. The vehicle camper of claim 1, wherein the base includes padding.
- 6. The vehicle camper of claim 1, wherein the at least one support is adjustable relative to the base.
- 7. The vehicle camper of claim 1, wherein the at least one support includes a shock absorbance system.
- 8. The vehicle camper of claim 1, wherein the tent provides for a plurality of rooms.
- 9. The vehicle camper of claim 1, further comprising: at least one of a plumbing system, a kitchen system, an electrical system, a heating or cooling system, a computer or network system, an entertainment system, and a security system, any of which are usable in coordination with the vehicle.
- 10. The vehicle camper of claim 1, further comprising: at least one of steps, a bed, a seat, a table, and a shelf.
- 11. The vehicle camper of claim 1, further comprising: a plurality of living levels.
- 12. The vehicle camper of claim 1, further comprising: a tent insert, wherein the vehicle camper is configurable to being usable on a ground surface without the vehicle and the tent insert is configurable to filling an aperture resulting from removal of the vehicle.
- 13. The vehicle camper of claim 1, wherein the vehicle camper is configurable to being stowed within a compartment of the vehicle.
- 14. The vehicle camper of claim 1, wherein the tent and/or the at least one support are removably coupled to the base.
- 15. A vehicle camper, the vehicle camper comprising: a means for extending a cargo space of a vehicle; a means for supporting the means for extending the cargo space on a ground surface; and a means for providing an interior space above the means for extending the cargo space that is automatically deploy-

- able, that is sealed from moisture at an interface with the vehicle, and that is accessible from an exterior of the vehicle,
- wherein the means for extending the cargo space, the means for support, and the means for providing an interior space are collapsible into a stowable and portable unit.
- 16. The vehicle camper of claim 15, wherein the means for extending the cargo space of the vehicle is not mounted to the vehicle.
- 17. The vehicle camper of claim 15, wherein the means for support is adjustable relative to the means for extending the cargo space.
- 18. The vehicle camper of claim 15, wherein the means for support includes a shock absorbance system.
- 19. A vehicle, the vehicle comprising: a body, an engine, and at least one wheel, the body defining a cargo space and a compartment; a base, a first portion of the base configurable to being disposed within the cargo space, the first portion of the base configurable to resting upon a floor of the cargo space, a second portion of the base configurable to extending laterally and outwardly from the cargo space such that the second portion is exposed from the vehicle; at least one support, the at least one support being deployably coupled to the base and configurable to extend from the base to a ground surface to provide support for the base; and a tent, the tent coupled to at least a portion of the base configured to being exposed from the vehicle, the tent suspendable by a frame, the tent and the frame configurable to being automatically deployable upon release to define an interior space above the base, the tent configurable to extending around at least a portion of an outside of the vehicle to provide a seal against moisture, the tent having a door for providing access from an exterior of the vehicle, wherein the base, the at least one support, and the tent are deployably collapsible and stowable within the compartment of the vehicle.
- 20. The vehicle of claim 19, further comprising: at least one of a plumbing system, a kitchen system, an electrical system, a heating or cooling system, a computer or network system, an entertainment system, and a security system, any of which are usable in coordination with the vehicle.

* * * * *