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(54) **SCOOTER TRANSPORT CONTAINER**

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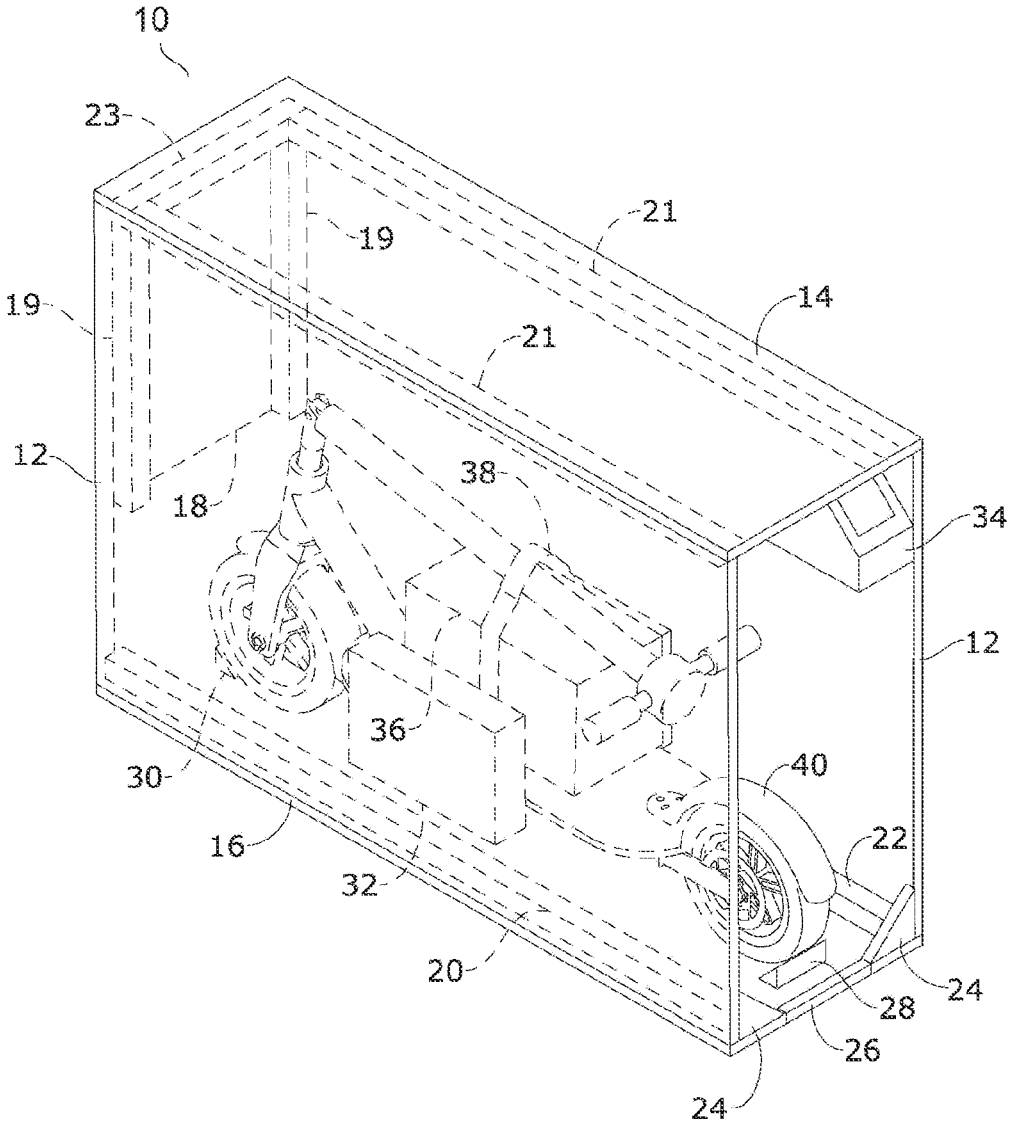
(57) **ABSTRACT**

A scooter transport container that houses and retains an electric scooter securely in a natural upright position whenever transporting. The scooter transport container includes a plurality of panels defining an interior cavity. An opening is defined in at least one of the front or the rear end of the transport container to permit insertion and removal of the scooter in the interior cavity. Wheel chocks prevent movement of the scooter in a longitudinal direction within the transport container. A left and a right lateral support pad are disposed on an interior of the transport container and protrude from left and right opposed sidewall panels to abut with a lateral side edge of a deck of the scooter for supporting the rider or a lateral frame member of the scooter. The lateral support pads are configured to retain the scooter **40** in an upright condition within the transport container.



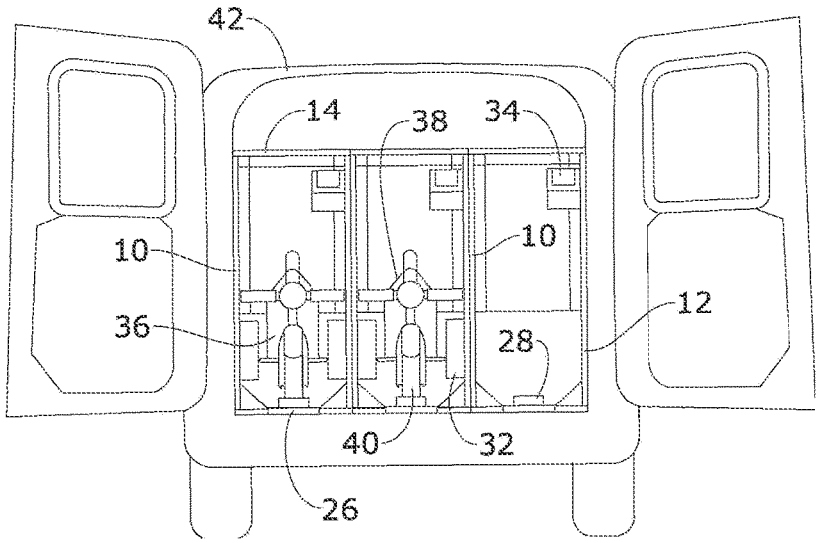

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FIG.1

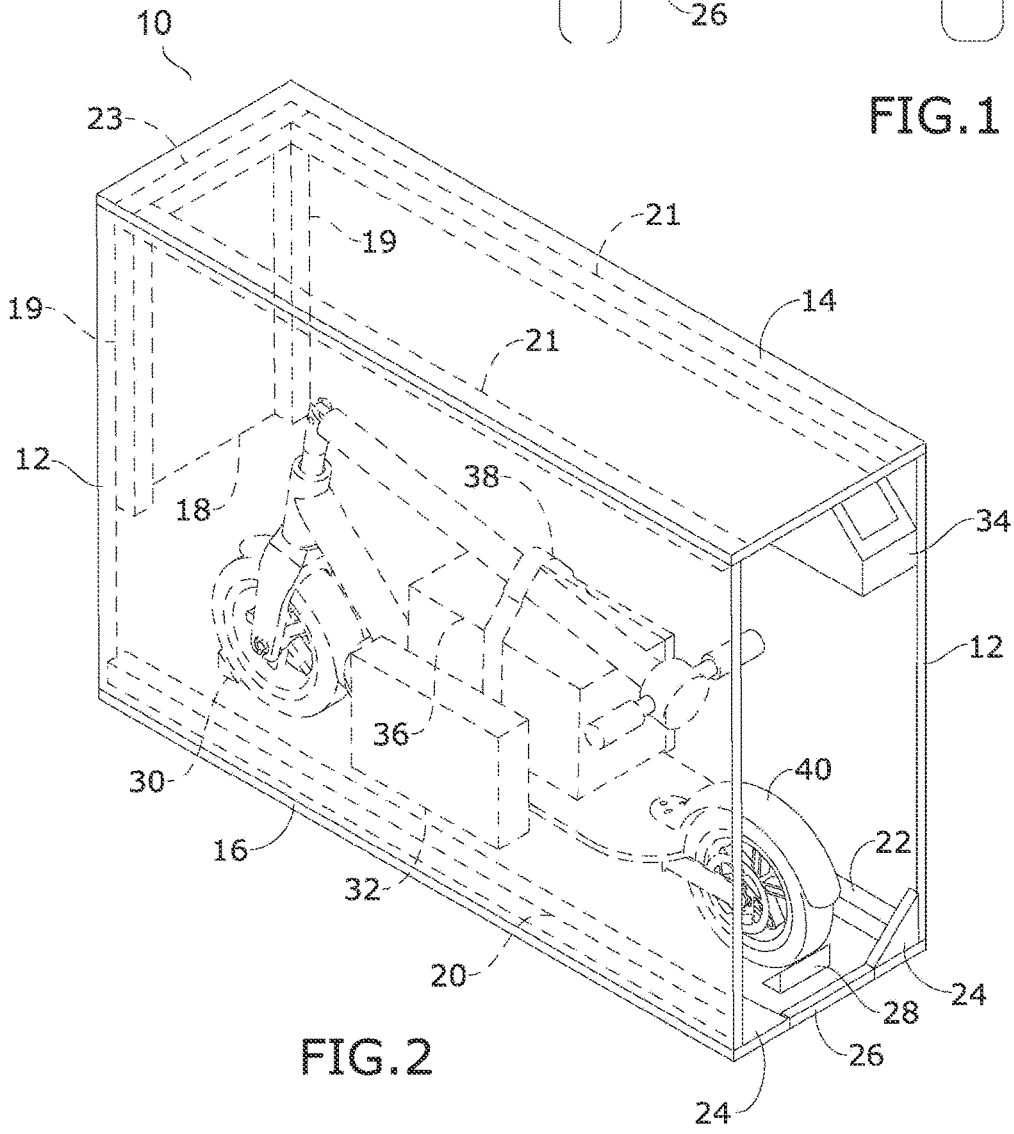
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FIG.2

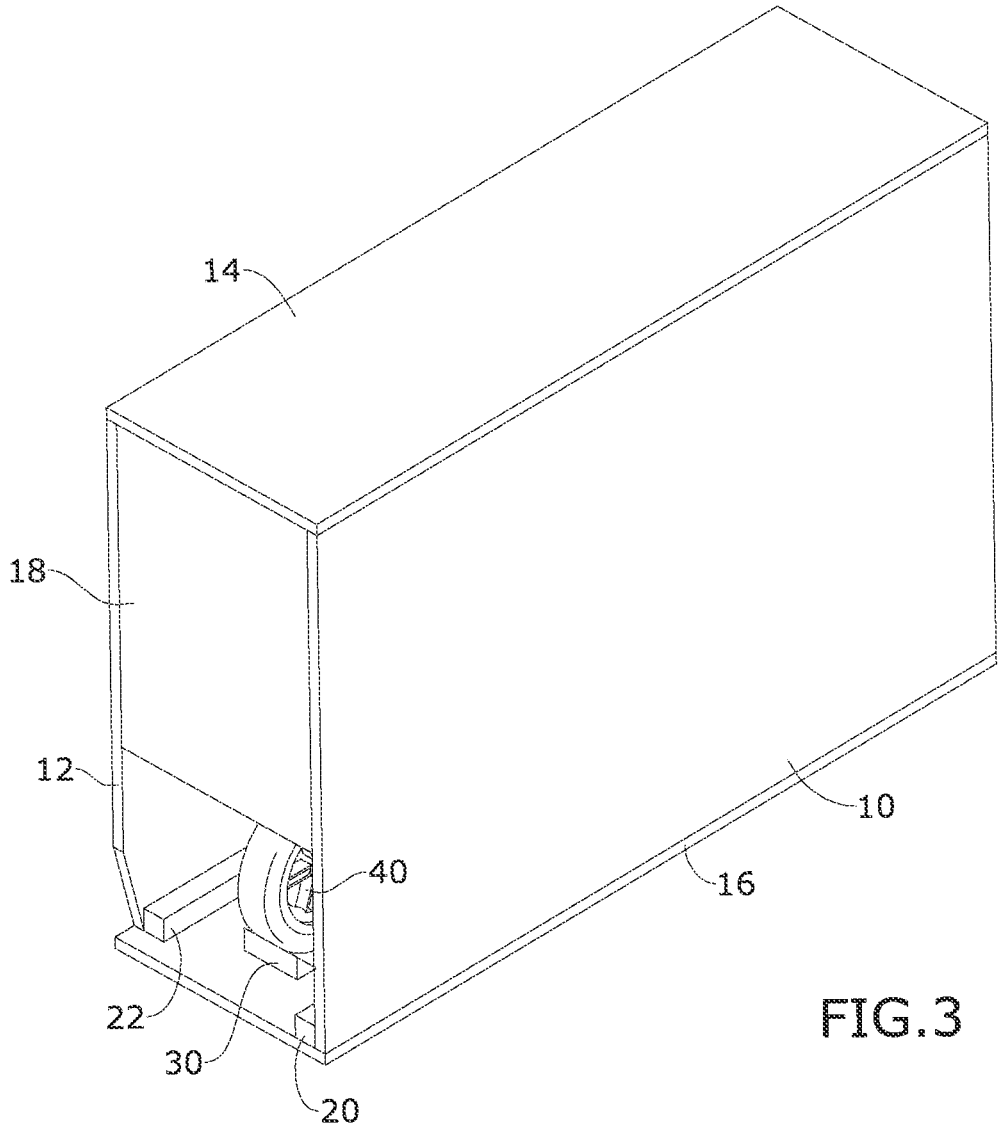

FIG.3

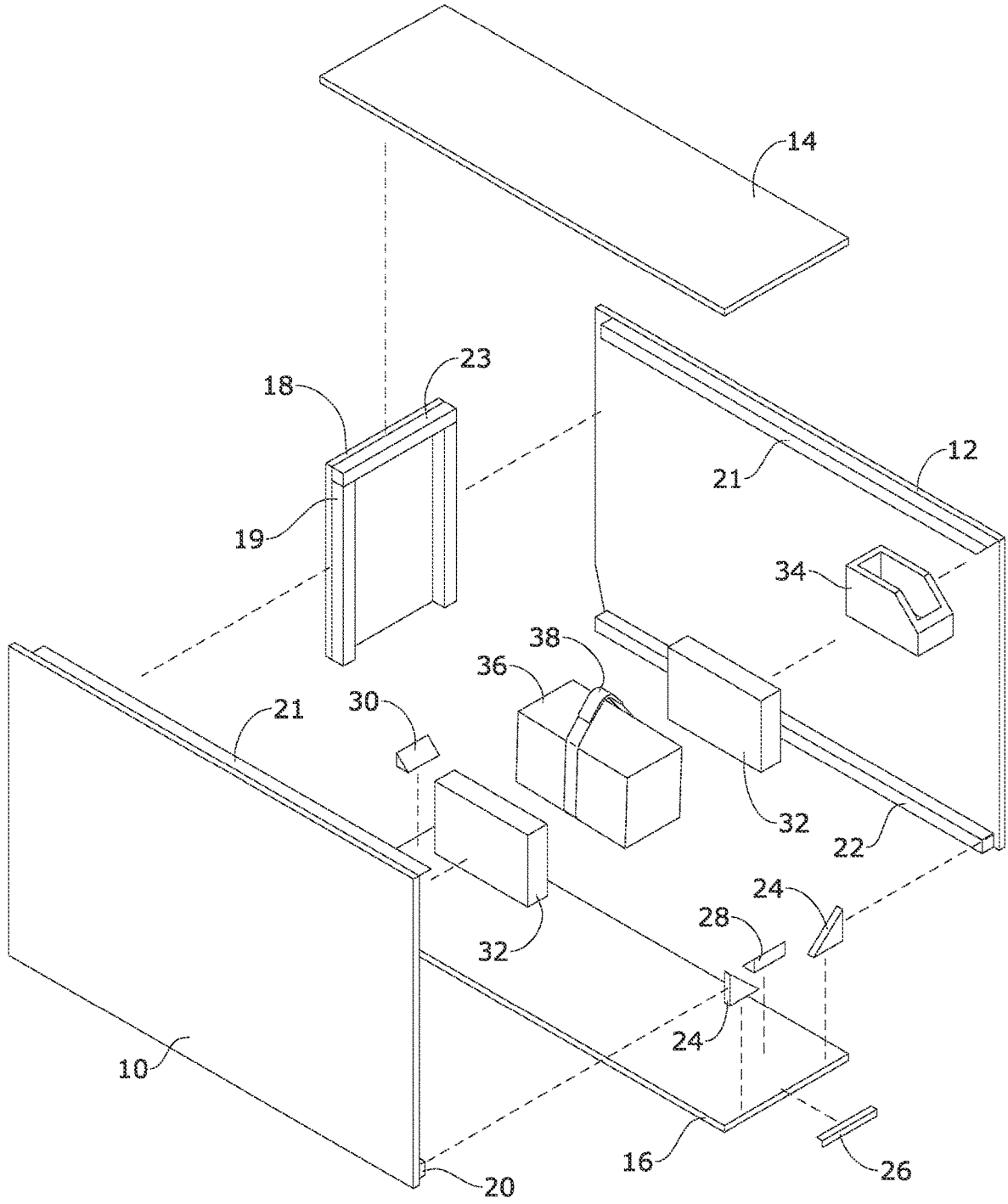

FIG.4

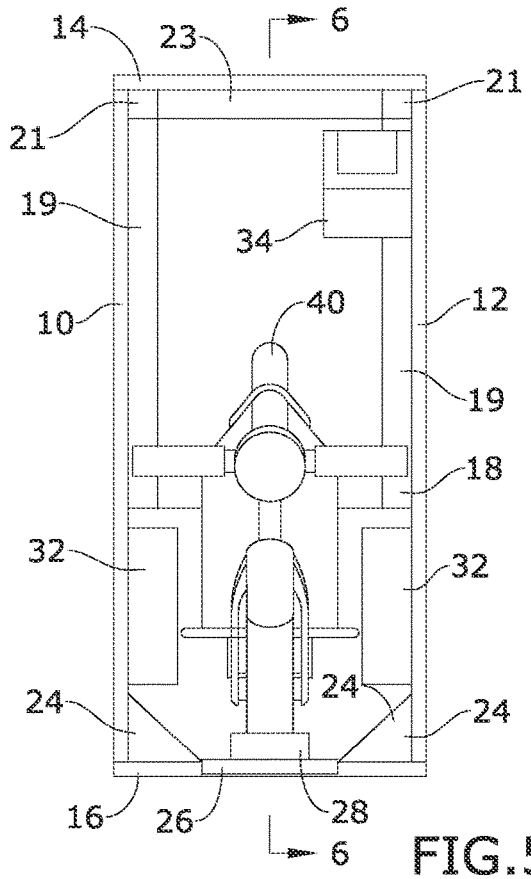
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FIG.5

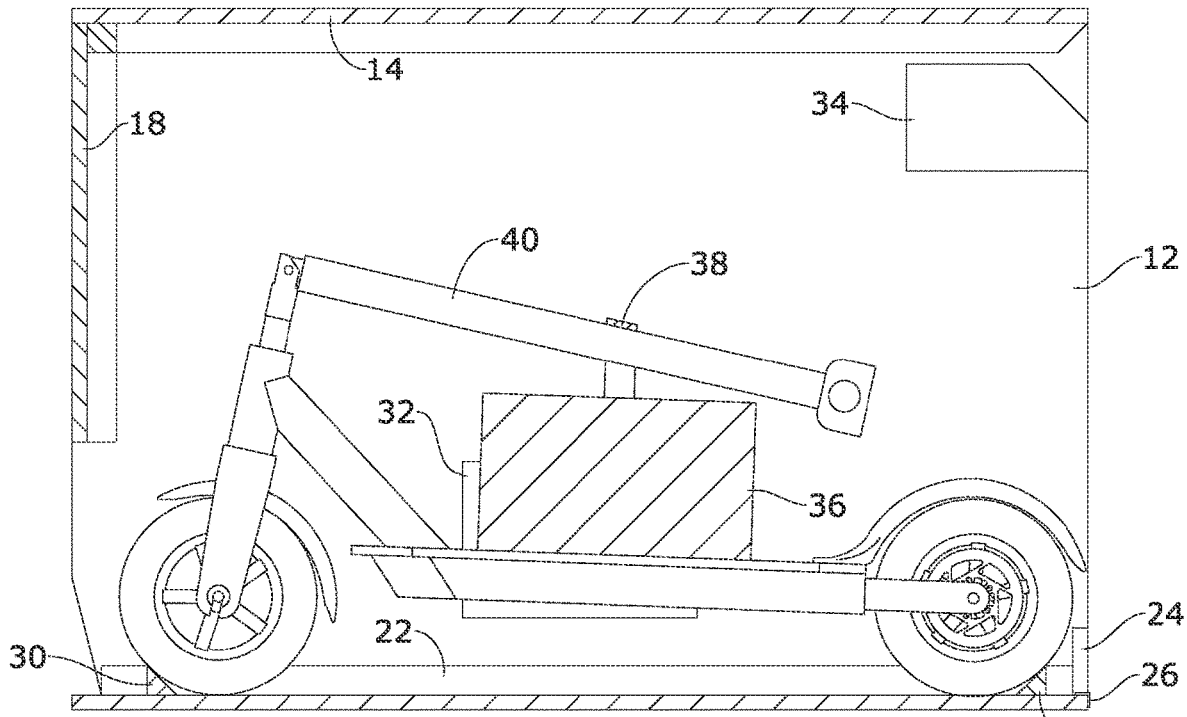
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FIG.6

SCOOTER TRANSPORT CONTAINER

BACKGROUND OF THE INVENTION

[0001] The present invention relates to electric scooters, and more particularly to transport containers for electric scooters.

[0002] Electric scooters have gained in popularity. However, transporting electric scooters can be difficult. Typically, the user would lay their scooter in a trunk of their automobile, bed of their truck, or in a cargo compartment of their sports utility vehicle, where the electric scooter is subject to damage from shifting during transport, or damage to the vehicle.

[0003] As can be seen, there is a need for improved transport container for an electric scooter that houses and retains the electric scooter securely in a natural upright position whenever transporting.

SUMMARY OF THE INVENTION

[0004] In one aspect of the present invention, a transport container for a scooter is disclosed. The transport container includes a plurality of panels joined to define an interior cavity. The plurality of panels including a left and a right opposed sidewall panel; a top panel interconnecting a top end of the left and the right opposed sidewall panel; a bottom panel interconnecting a bottom end of the left and the right opposed side panel; a rear panel interconnecting the left and the right opposed side panel, each of the left and the right opposed side panel, the top panel, the bottom panel, and the rear panel defining an interior cavity dimensioned to contain the scooter, an opening defined in at least one of a front end or a rear end of the transport container; and a left and a right lateral support pad protruding from each of the left and the right opposed sidewall panel to abut with a lateral side edge of a deck of the scooter and retain the scooter in an upright condition within the interior cavity.

[0005] In some embodiments, a plurality of frame members interconnecting the plurality of panels.

[0006] In some embodiments, a pair of upright corner blocks extend vertically at a left side and a right side of the transport container. A pair of lower longitudinal corner blocks extend along a longitudinal length of the transport container at a bottom end thereof. A pair of upper longitudinal corner blocks extend along a longitudinal length of the transport container at a top end thereof. An upper transverse corner block extends transversely across the transport container and joins with the pair of upright corner blocks and the pair of upper longitudinal corner blocks.

[0007] In some embodiments, a corner brace is provided at adjoining ends of the plurality of frame members.

[0008] In some embodiments, the plurality of frame members define an internal frame structure supporting the plurality of panels.

[0009] In some embodiments, a forward wheel chock is positioned on the bottom panel to abut with a forward aspect of a front wheel of the scooter. An aft wheel chock is positioned on the bottom panel to abut with an aft aspect of a rear wheel of the scooter.

[0010] In some embodiments, at least one of the forward wheel chock and the aft wheel cock is selectively positionable to adjust to a wheelbase of the scooter.

[0011] In some embodiments, a width of the of the interior cavity is selected to contain a lateral width of a handlebar assembly of the scooter. A longitudinal length of the interior cavity is selected to contain a longitudinal length of the scooter. A height of the interior cavity is selected to contain a vertical height of the handlebar assembly.

[0012] In some embodiments, a height of the interior cavity is selected to contain a vertical height of the handlebar assembly when positioned in a folded condition.

[0013] In some embodiments, a handlebar cushion is supported by the deck of the scooter. The handlebar cushion is dimensioned to support a folded handlebar assembly.

[0014] In other embodiments, strap secures the folded handlebar assembly with the handlebar cushion.

[0015] In yet other embodiments, the handlebar cushion has a lateral width corresponding to a lateral extent of the left and the right lateral support pad.

[0016] These and other features, aspects and advantages of the present invention will become better understood with reference to the following drawings, description and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] FIG. **1** is a rear view of the electric scooter transport container, shown in use;

[0018] FIG. **2** is a front perspective view of the electric scooter transport container, shown with scooter **34**;

[0019] FIG. **3** is a rear perspective view of the electric scooter transport container, shown with scooter **34**;

[0020] FIG. **4** is an exploded view of the electric scooter transport container;

[0021] FIG. **5** is a side view of the electric scooter transport container, shown with scooter **34**; and

[0022] FIG. **6** is a section view, taken along 6-6 in FIG. **5**, shown with scooter **34** shown in full.

DETAILED DESCRIPTION

[0023] The following detailed description is of the best currently contemplated modes of carrying out exemplary embodiments of the invention. The description is not to be taken in a limiting sense but is made merely for the purpose of illustrating the general principles of the invention.

[0024] Broadly, embodiments of the present invention provide a scooter transport container that houses and retains an electric scooter securely in a natural upright position whenever transporting.

[0025] As seen in reference to the drawings of FIGS. **1-6**, the scooter transport container **10** includes a left and a right opposed sidewall panel **12**, a top panel **14**, a bottom panel **16**, and a rear panel **18** defining an interior cavity dimensioned to contain a scooter **40**, and more preferably an electric scooter **40** for transport by a motor vehicle **42**. or storage. Each of the panels **12**, **14**, **16**, and **18** are preferably joined to a plurality of frame members defining a support structure for the container **10**. An opening is defined at least one of the front or the rear end of the transport container **10** to permit insertion and removal of the scooter **40** in the interior cavity.

[0026] The plurality of frame members may include a pair of upright corner blocks **19** extending vertically at a left side and a right side of the container **10**. A pair of lower longitudinal corner blocks **20**, **22** extend along a longitudinal length of the container **10** at a bottom end thereof. A pair of upper longitudinal corner blocks **21** extend along a longitudinal length of the container **10** at a top end thereof. An upper transverse corner block **18** extends transversely

across the container **10** and joins with the upright corner blocks **19** and the upper longitudinal corner blocks **21**. A corner brace **24** may be provided at adjoining corners to provide additional structural integrity for the transport container **10**. The plurality of frame members may be in the non-limiting embodiment shown, the plurality of frame members define and internal frame structure for the transport container **10**. As will be appreciated with the benefit of the present disclosure, the plurality of support members may alternatively be formed as an external frame structure, or a combination of external and internal frame members.

[0027] As best seen in reference to FIGS. **5** and **6**, the transport container **10** a width of the interior cavity is selected to contain a lateral width of a handlebar assembly of the scooter **40**, when oriented in a steering neutral position. A longitudinal length of the interior cavity of the transport container **10** is selected to contain a longitudinal length of the scooter **40**. A rear chock **28** and a front chock **30** are positioned at a rear aspect of a rear wheel of the scooter **40** and a front aspect of a front wheel of the scooter **40**, respectively. The rear chock **28** and the front chock **30** are positioned or selectively positionable to retain the scooter **40** from rolling on the wheels in a longitudinal direction.

[0028] As best seen in reference to FIG. **5**, a left and a right lateral support pad **32** are disposed on an interior of the transport container **10** protruding from the left and the right opposed sidewall panels **12** to abut with a lateral side edge of a deck of the scooter **40** for supporting the rider or a lateral frame member of the scooter **40**. The lateral support pads. **32** are configured to retain the scooter **40** in an upright condition within the transport container **10**.

[0029] The transport container **10** has a vertical height to accommodate a vertical height of the scooter **40**. In the non-limiting embodiment shown, the vertical height of the transport container **10** is dimensioned to accommodate a folded condition of the handlebar assembly. A handlebar cushion **36** is dimensioned to support the folded handlebar assembly. In some embodiments, the handlebar cushion **36** has a lateral width corresponding to a lateral extent of the inwardly protruding lateral support pads **32** with a close interference fit. The handlebar cushion **36** may include, or work in cooperation with a retaining strap **38** to secure the folded handlebar assembly to the handlebar cushion **36** to prevent movement of the handlebar during transport. In some embodiments, the retaining strap **38** may have a length to secure about the deck of the scooter **40** to provide additional vertical stability for the scooter **40** when contained within the transport container **10**.

[0030] The interior cavity of the transport container **10** may also be equipped with a storage bin **34** for containing maintenance items for the scooter or protective gear for the rider of the scooter **40**.

[0031] One or more of the transport containers **10** may be carried in a storage compartment of the motor vehicle **42**, such as a van, SUV, or truck. As will be appreciated, the transport container **10** may also be utilized as a storage container for the scooter **40** when not in use. The transport container **10** may include a closure for the opening to protect the interior compartment from the elements and may be fitted security closures to prevent theft of the scooter **40** or pilfering of scooter components.

[0032] It should be understood, of course, that the foregoing relates to exemplary embodiments of the invention and that modifications may be made without departing from the spirit and scope of the invention as set forth in the following claims.

What is claimed is:

1. A transport container for a scooter, comprising:
- a plurality of panels joined to define an interior cavity, the plurality of panels including a left and a right opposed sidewall panel;
- a top panel interconnecting a top end of the left and the right opposed sidewall panel;
- a bottom panel interconnecting a bottom end of the left and the right opposed side panel;
- a rear panel interconnecting the left and the right opposed side panel, each of the left and the right opposed side panel, the top panel, the bottom panel, and the rear panel defining an interior cavity dimensioned to contain the scooter,
- an opening defined in at least one of a front end or a rear end of the transport container; and
- a left and a right lateral support pad protruding from each of the left and the right opposed sidewall panel to abut with a lateral side edge of a deck of the scooter and retain the scooter in an upright condition within the interior cavity.

2. The transport container of claim **1**, further comprising:
- a plurality of frame members interconnecting the plurality of panels.

3. The transport container of claim **2**, the plurality of frame members further comprise:
- a pair of upright corner blocks extending vertically at a left side and a right side of the transport container;
- a pair of lower longitudinal corner blocks extend along a longitudinal length of the transport container at a bottom end thereof;
- a pair of upper longitudinal corner blocks extend along a longitudinal length of the transport container at a top end thereof; and
- an upper transverse corner block extends transversely across the transport container and joins with the pair of upright corner blocks and the pair of upper longitudinal corner blocks.

4. The transport container of claim **3**, further comprising
- a corner brace at adjoining ends of the plurality of frame members.

5. The transport container of claim **3**, wherein the plurality of frame members define an internal frame structure supporting the plurality of panels.

6. The transport container of claim **1**, further comprising:
- a forward wheel chock positioned on the bottom panel to abut with a forward aspect of a front wheel of the scooter; and
- an aft wheel chock positioned on the bottom panel to abut with an aft aspect of a rear wheel of the scooter.

7. The transport container of claim **6**, wherein at least one of the forward wheel chock and the aft wheel cock is selectively positionable to adjust to a wheelbase of the scooter.

8. The transport container of claim **1**, further comprising
- wherein a width of the of the interior cavity is selected to contain a lateral width of a handlebar assembly of the scooter; and
- a longitudinal length of the interior cavity is selected to contain a longitudinal length of the scooter.

9. The transport container of claim **8**, wherein a height of the interior cavity is selected to contain a vertical height of the handlebar assembly.

10. The transport container of claim **8**, wherein a height of the interior cavity is selected to contain a vertical height of the handlebar assembly when positioned in a folded condition.

11. The transport container of claim **1**, further comprising:

a handlebar cushion supported by the deck of the scooter, the handlebar cushion dimensioned to support a folded handlebar assembly.

12. The transport container of claim **11**, further comprising:

a strap to secure the folded handlebar assembly with the handlebar cushion.

13. The transport container of claim **11**, wherein the handlebar cushion has a lateral width corresponding to a lateral extent of the left and the right lateral support pad.

* * * * *