(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 4 549 339 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
07.05.2025 Bulletin 2025/19

(21) Application number: **24210016.2**

(22) Date of filing: **31.10.2024**

(51) International Patent Classification (IPC):
B65D 85/68 *(2006.01)* *B65D 88/12* *(2006.01)*
B65D 88/54 *(2006.01)*

(52) Cooperative Patent Classification (CPC):
B65D 85/68; B65D 88/127; B65D 88/542; B65D 2585/6867

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
GE KH MA MD TN

(30) Priority: **31.10.2023 US 202363546728 P**

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(54) VEHICLE TRANSPORTATION AND DISPLAY DEVICE

(57) An innovative vessel 100 which is an all in one smart solution for vehicle storage, display, and transport. The vessel 100 maximizes vehicle loading and unloading access, with a fully automated sliding door system, allowing even large SUVs to be loaded, and all doors on all sides remain accessible. The innovative vessel is stackable, transportable by rail, ship, and truck, and can be used as temporary portable structures, or long term permanent ones.

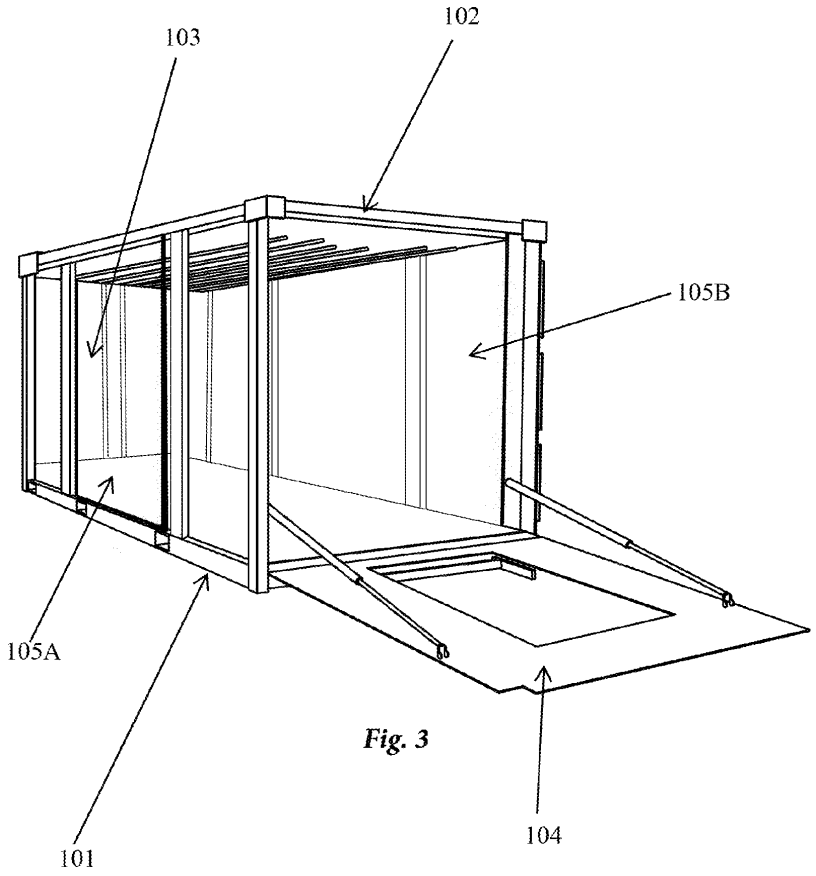

Fig. 3

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Description

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The This nonprovisional application claims the benefit of priority under 35 USC §119 to U.S. Patent Application No. 63/546,728, filed on October 31, 2023, the entirety of which is incorporated herein by reference.

BACKGROUND OF THE INVENTION

Field of the invention

[0002] The invention relates primarily to a vessel for vehicle storage, display, and transport. More specifically, the present invention is a novel vessel sized to accommodate a vehicle with a fully automated sliding door system, allowing even large SUVs to be loaded, with all doors on all sides of such vehicle remaining accessible.

Description of the background

[0003] There are a several reasons that a person or business would need or prefer to transport a vehicle without driving it. In the case of classic, rare, or luxury vehicles, the owner may wish to transport one or more such vehicles without risking wear and tear to the engine, transmission, or other components of the drivetrain, damage to the exterior of the vehicle, or wear and tear on the interior or other vehicle components. Similarly, some such vehicles may not be "street legal", or may have very low ground clearance, such that the owner does not wish to have it driven on road surfaces that may be encountered along the journey. In related instances, the vehicle or portions thereof may be brand new, or being delivered for the first time to a new owner, who does not wish to add miles or risk damage to the vehicle, or to have it driven for the first time by someone else. There are myriad similar reasons that an individual or company may wish to preserve a classic or rare vehicle by keeping it off of road surfaces that might be encountered during transport from place to place. Of course, the need for non-driving transport is not limited to classic, rare or luxury cars, but also applies to certain types of specialty vehicles, like sports cars and other non-standard vehicles.

[0004] The need for vehicle transport may arise when a vehicle owner is moving residences, or wishes to have a vehicle taken from one residence to another (while the vehicle owner flies, for example). Vehicles may also be transported to and from driving / racing tracks, dealerships, or to car shows, including trade shows and marketing events.

[0005] Currently known means to transport a vehicle, other than via roll-on-roll-off shipping (in which a vehicle is driving on its own wheels into and out of a shipping vessel or onto and off of an auto transport trailer), include placing it inside a container, such as a self-contained trailer with wheels, or a shipping container which is designed to be loaded onto another vehicle. U.S. Patent No. 5,639,174 ("Gonska") shows a common form of a prior art vehicle transportation container, which includes a flat surface on which a vehicle can rest, and upright walls, one of which folds down to form a ramp from the flat surface to the ground over which vehicles can roll to get on and off of surface / device.

[0006] Particularly when vehicles of the type described herein are transported to and from car or trade shows or for other marketing uses, it may be desirable to display such vehicle upon arrival. In the prior art, it is common to drive the vehicle out or off of a trailer onto a platform where the vehicle can be viewed from all angles more easily by bystanders. U.S. Patent Application Publication No. 2005/0173601 ("Hestand") takes this a step further by integrating a vehicle lift into a prior art-style wheeled trailer. Thus, the Hestand device is designed to be driven directly onto a showroom floor, and then activated to lift the car up onto a viewing platform.

[0007] Prior art solutions such as the Gonska and Hestand devices each offer partial solutions to the unique transport and display needs of antique, classic, rare, luxury, and like vehicles. Vehicles of this type are often not regularly driven, and for many of the reasons noted above, their owners may also wish to keep them in a secure location to avoid the risk of damage from water, humidity, environmental factors, accidental contact (such as might take place if stored in a garage, for example), or theft. No prior art solution has yet been able to satisfy each of these three needs unique to the luxury/rare vehicle market (transportation, display and storage) in a single product which provides each of these functionalities without the need to remove the vehicle from inside a secure and protected containment. For example, the Hestand device comprises a bulky trailer on wheels with the added mass of the lift and the mechanics needed to operate same, which is unsuitable for providing long-term storage in a convenient location, and which is not designed to protect vehicles against the elements on a long-term basis. The Gonska devices is an example of a more compact solution which may be capable of being stored in a smaller footprint, but it is not readily adaptable for use in providing an aesthetically pleasing or viewer-friendly display for same.

SUMMARY OF THE INVENTION

[0008] It would therefore be useful and advantageous to have a single, securely enclosed containment vessel sized and shaped to accommodate a vehicle for storage purposes, and which can also function as a transport container without the need to remove the vehicle therefrom.

[0009] It would also be useful for such a storage and transport solution to provide an aesthetically pleasing, viewer-friendly, and compact display solution that also does not require movement of the vehicle from one

secure containment to another. Such a solution would enable an owner to, for example, display a luxury vehicle at his/her home, indoor or outdoor, without the need for a large space to do so, all while providing a secure containment - allowing viewing without damage or theft.

[0010] The present invention is therefore a container or vessel having the overall shape of a rectangular prism or rectangular box, and sized to both (a) contain most standard sized vehicles and (b) not exceed the height requirements for transportation of the inventive vessel on major (or the primary) roads in the U.S., and other height/size requirements (such as the Convention for Safe Containers (CSC)). The inventive vessel includes functional openings on at least two sides: at least one ramp sized and structured to allow a vehicle to pass over/up it, and at least one door on at least one of the long, vertical sides of the vessel, as will be described in more detail herein. In preferred embodiments, the ramp and side doors are electrically actuated. In certain preferred embodiments, they are fully automated, and/or remotely controllable.

[0011] One additional novel aspect of the innovative vessel is that the primary vertical surfaces of the vessel are constructed from a transparent material such as glass or polycarbonate. In combination with the structural aspects of the innovative vessel, this novel feature advantageously allows the invention to double as a display container at a car show or the like, or as a "display garage" at a private residence.

[0012] The innovative vessel according to the present invention preferably has a combination of additional features including: built-in e-tracks, tie-down anchors, GPS tracking, biometric access panels for each entrance point, integrated security cameras, temperature and/or humidity controls with integrated temperature and/or humidity sensors, ventilation system, LED lighting, integrated power supply with or without solar panels and/or battery backup, cellular capacity, satellite service, fire suppression system(s), flotation system(s), integrated audio system, and/or smart tinting in the transparent surfaces.

[0013] The foregoing objects, features and attendant benefits of this invention will, in part, be pointed out with particularity and will become more readily appreciated as the same become better understood by reference to the following detailed description of a preferred embodiment and certain modifications thereof when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] In the drawings:

Fig. 1 is a side view of the inventive vessel 100, showing the rear door open.
Fig. 2 is a front view of the inventive vessel 100.
Fig. 3 is a rear perspective view of the inventive vessel 100, showing the rear door open.
Fig. 4 is a schematic view of the side of inventive vessel 100.
Fig. 5 is a rear view of the inventive vessel 100, showing the rear door closed.
Fig. 6 is a schematic view of the top of vessel 100.
Fig. 7 is an isolated section view of the top corner of inventive vessel 100, showing the top portion of the sliding door track.
Fig. 8 is an isolated section view of the bottom corner of inventive vessel 100, showing the bottom portion of the sliding door track.
Fig. 9 is a schematic view of the side of inventive vessel 100 showing the roof bow configuration.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0015] With reference to Fig. 3, the innovative vessel 100 includes a bottom surface 101, top surface 102, front end surface 103, rear end surface 104, and side surfaces 105A and 105B, which collectively form a rectangular prism or rectangular box. In preferred embodiments, the overall dimensions of the vessel 100 are 20' (20 feet) long (between front 103 and rear 104 surfaces) by 8' wide (between side surfaces 105A, 105B). In certain preferred embodiments, the height dimension (between bottom surface 101 and top surface 102) is 8'6". In other preferred embodiments, the height is 9'6". In other preferred embodiments, the width dimension is 9' wide, and in other preferred embodiments, the width dimension is 10' wide. Either of the foregoing embodiments advantageously meets the CSC/ISO Standards, such that the inventive container may be capable of being CSC/ISO certified. Thus, preferred embodiments of the inventive vessel are capable of being handled globally as a standard 20' shipping container, including the capacity to be stackable with other such containers, including prior art shipping containers of the type which are commonly transported via ship, rail, and tractor trailer, as well as with other containers of the type described herein. In other embodiments, the length of the vessel 100 is up to 53'. In some preferred embodiments, the length of the vessel 100 is 40'.

[0016] In embodiments, the exterior frame of the inventive vessel 100 is a completely custom frame up 20' container chassis. In preferred embodiments, the main body of the frame/chassis is constructed from steel, individual lengths of which are welded to form the completely solid frame. However, other frame materials are encompassed within the scope of the present invention. Alternative materials may include metals or composite materials, provided that they possess the toughness and malleability to withstand deformation or breaking under the conditions typically encountered by a shipping container during shipment and storage. Potential alternative materials include titanium, magnesium, and composites thereof. In preferred alternative embodiments, the frame could be constructed of aluminum. As will be seen, the

innovative frame structure has the specific advantage of making the entire vessel 100 lighter weight, which may reduce transportation (including gas) costs, make the vessel 100 capable of being transported with fewer pieces of heavy equipment, and/or make the vessel 100 more easily storable without the need to reinforce the surface on which it will be stored, by, for example, pouring a concrete pad or the like. As will be appreciated, the innovative vessel 100 is novel at least in part because its features make it capable of being readily adapted to the specific needs or requirements of each of transport, storage, and display.

[0017] The primary frame of the innovative vessel 100 covers only the edges of the vessel's exterior, with the minimum thickness needed to provide the requisite amount of structural integrity to the frame for the lifting, stacking, storage and transport functionalities as described herein. This configuration also advantageously maximizes two dimensions: window surface area, and interior vessel width.

[0018] On top 102 and bottom 101 surfaces of the vessel 100, additional support components are included. Referring to Fig. 9, top surface 102 is uniquely configured to meet the simultaneous needs of transport, storage and display. In preferred embodiments, the top exterior surface of the vessel 100, or roof panel, as noted in Fig. 9, comprises a single sheet (constructed of the same material as the frame, as previously described) which is fully welded (or attached by other known means as appropriate for the material in question) to the top edges of the innovative vessel's frame. Suspended therefrom are a series of (or at least one) roof bows, which in preferred embodiments span the width of the vessel between sides 105A, 105B. Roof bows advantageously allow the top surface 102 of the vessel 100 to be configurable in a custom manner, in that roofing, lighting, and other components (including electronics panel 400, shown in Fig. 6), may be affixed directly to one or more of the roof bows without the need for further modification to the roof panel. Thus, roof bows are sized and shaped to accommodate attachment brackets which in turn correspond to attachment points on each of the one or more custom ceiling covering, lighting, or other features which a user or owner may choose for purposes of vehicle display, or for added functionality during transport or storage. As a representative example, Fig. 9 shows the attachment of "wood grain aluminum square tube", a coating material which provides a wood-look finish to the interior ceiling of the vessel 100, and Fig. 6 shows a schematic view of an LED lighting configuration which may be accommodated via the configuration of roof bows described herein.

[0019] The bottom surface 101 is likewise adapted to the specific needs of transport, storage and display of one or more vehicles. Specifically, in preferred embodiments, bottom surface 101 includes steel C-channel beams running in parallel, at regular spacing, along the short dimension of the vessel 100 between sides 105A, 105B. Also in preferred embodiments, a flooring material, such as solid steel plate, is attached (by welding or the like) directly to the c-channel beams.

[0020] Also as shown in Figs. 1-5, each of the vertical sides 103, 104, 105A, 105B of the vessel 100 includes at least one window (each, 300), preferably constructed of polycarbonate, and having the largest surface area feasible for a container of its size, due to the narrowness of the frame. As noted, windows 300 are preferably constructed of polycarbonate, with a frame, preferably constructed of metal (such as steel or aluminum, or one of the materials mentioned above with respect to construction of the frame) for allowing easy integration of the windows 300 into the frame in each window location, as described herein and shown in the figures. As will be appreciated, the relative percentage of each portion of vertical sides 103, 104, 105A, 105B of the vessel 100 which is window 300 greatly increases the visibility both from the interior of vessel 300 to the exterior, and vice versa. This greatly enhances the ability of the inventive vessel 100 to serve as a display container for a vehicle, such as a luxury car.

[0021] In preferred embodiments, windows 300, inclusive of their frames, span the entire available height of the vessel 100, between the top and bottom edges of the frame on each respective side of the vessel. Also in preferred embodiments, the frames for each window have as small of a profile as possible, to allow the maximum possible amount of surface area for each side to be polycarbonate or like (transparent) window material. In some embodiments, windows 300 could be constructed of other materials which are at least partially transparent, provided that they are durable enough to withstand the forces of repeated transport, stacking and storage, such as glass (including materials commonly referred to as "smart glass", hurricane class, and/or bulletproof glass), acrylic, polycarbonate and like materials, including semi-transparent materials known in the art or hereinafter discovered which possess the requisite qualities described herein.

[0022] The novel and advantageous configuration of windows (and doors, as will herein be described) is shown with particular reference to Fig. 2, which is a representative view of one of the two long sides, 105A, 105B of the innovative vessel 100. As can be seen, in preferred embodiments, at least one side 105A, 105B has at least one sliding door 301. In preferred embodiments, each such sliding door 301 has a height which is the same height as the vessel itself, less the space taken up by the frame. As noted previously, the frame is a low profile frame which has the narrowest allowable size in the height direction (such that the maximum percentage of the height of the vessel 100 can be taken by windows/-doors) and the narrowest allowable size in the width direction, weighted towards the outside of the container, such that the open interior space between framed sides 105A, 105B and 103, 104, respectively, is as large as possible.

[0023] To further enable these innovative features, the frame of the inventive vessel 100 includes header and

footer columns which are approximately three times larger than those used for an average prior art 20' shipping container. This enables the frame of the inventive container to carry the free span load required for the innovative configuration of windows and doors as described herein.

[0024] In preferred embodiments, and with specific reference to Figs. 7 and 8, the top and bottom edges of frame on long sides 105A, 105B of the vessel 100 have a cross section which accommodates a track system for sliding doors 301 to slide on, to open and close. While, alternative embodiments could include accordion or swing open doors, sliding doors are preferred in order to provide the smallest possible width for the side door system(s), to provide the greatest possible open span in the width direction of the vessel 100. The track system accommodates the sliding doors 301 on the side of the track which faces the exterior of the container on each side 105A, 105B. This provides the widest open span at the height midpoint of the vessel 100, which is preferable for accommodating vehicles of different sizes, as will be described.

[0025] Referring again to Fig. 2, it can be seen that in some preferred embodiments, a representative long side 105A of the inventive vessel 100 includes two stationary windows 300 and two sliding doors 301. Preferred embodiments include two sliding doors 301 oriented side by side and centered on the representative long side 105A of the vessel 100, and each flanked by a stationary window 300. Also in preferred embodiments, the doors 301 are configured with a closure between them, and further configured to slide along the track in the frame of vessel 100 away from each other, towards stationary windows 300.

[0026] In some embodiments, the width (as measured along the long side of sides 105A, 105B) of each window 300 and door 301 may be the same or very close. Thus, in embodiments, each of the four panels in this configuration (two windows 300, two doors 301) can take up exactly or about 25% of the total open span of sides 105A, 105B. Preferred embodiments include two the sliding doors 301 which take up at least 45% of the width of representative side 105A. Also in preferred embodiments, the one or more sliding doors 301 are oriented in the center of the representative side 105A as measured along the long side thereof. The present inventors have found that these two features, in combination, provide a distinct and novel advantage for the innovative vessel: when the opening enabled by doors 301 is at least 45% of the width of representative side 105A and centered thereon, it is possible to open *all four doors* of a vehicle which is situated inside of the vessel 100. These features are unique to the innovative vessel and overcome a major shortcoming of the prior art: the need for the vehicle to be removed from the shipping container, or for an individual to climb through an open window, in order to access the interior of a vehicle which is parked in the prior art container. These features in particular enable the novel vessel 100 to serve simultaneously as both a shipping container and a storage container / garage, whereby the frame (and other features as will be described herein) enable the vessel 100 to safely carry a vehicle and be transported via ship, rail and/or tractor trailer, and whereby the innovative structure of the side panels 105A, 105B allow a vehicle to be pulled into the container (sliding doors 301 opened - electronically, as will be described here - if not already open), and two or all four doors to be opened simultaneously for passenger egress.

[0027] In preferred embodiments, both long sides 105A, 105B have a configuration which includes doors, preferably sliding doors 301, taking up at least 45% of the width of the side, and centered in the middle of each side (both measured along the long side of side 105A, 105B) to enable both doors on both sides of the vehicle to be fully opened. In this configuration, in some embodiments, each such representative side 105A may further comprising framing members located roughly ¼ and ¾ along the length of the side 105A, that is, between each window and door member.

[0028] When configured in the manner described herein, in preferred embodiments, the minimum opening achievable via sliding doors 301 on the one or more sides 105A, 105B is 9' on a 20' long vessel. In alternative embodiments, sliding doors 301 are multi-stage sliding doors that provide have an opening greater than 9' (or 45% of the length of sides 105A, 105B), such as 15'. As noted elsewhere herein, the invention is not limited to a vessel having a length of 20'; any length that can be accommodated via known or hereinafter discovered means of transporting enclosed shipping container systems is considered to fall within the scope of the invention. Specifically, the present invention envisions containers up to 53' in length, with the width of the opening provided by sliding doors 301 adjusted accordingly. Preferred embodiments include lengths of 20' and 40', whereby the at least one opening in at least one side 105A, 105B is, in some embodiments, at least 45% of the length of the representative long side 105A, and in other embodiments, at least 9'.

[0029] Embodiments of the present invention having a length greater than 20' could advantageously accommodate more than one vehicle front to back, including embodiments that accommodate more than one compact vehicle (that is, a vehicle with a shorter than average frame length, such as an ATV). In embodiments where the vessel 100 is sized to accommodate two vehicles front to back, two openings in the one or more representative sides 105A are preferably centered at points equating to 25% and 75% along the length of the representative side 105A. Likewise, embodiments which are sized to handle more than two vehicles may be outfitted with a number of side openings equaling the number of vehicles that the vessel 100 is designed to accommodate, and configured with their center lines spaced equally along the length of representative side 105A.

[0030] In preferred embodiments, the mechanical

components used to operate sliding doors 301 are located at the top of the doors 301 in the frame, and the doors 301 ride in a lower channel in the floor of the container. Also in preferred embodiments, sliding doors 301 are electric motorized, and have integrated mechanical locks. As can be appreciated, the electronic doors can also be connected to a WiFi or Bluetooth adapter to enable the doors to be locked, unlocked, opened and closed remotely - and the status thereof also checked remotely. This provides a measure of convenience and security to the owner of the vehicle using the vessel 100, who can remotely monitor the status of the vessel 100, or open the sliding doors 301 from the inside after pulling a vehicle in, for example.

[0031] Another advantage of the sliding door 301 and window 300 configuration described herein can be seen in the context of a typical shipping operation. In prior art vehicle shipping containers, the operator drives the vehicle into the container, and then must either climb out the open window of the vehicle in order to get out, open the driver's door and risk hitting the door on the interior side of the container, or attempt to position the vehicle with the passenger side right up against the far interior side of the container, which may risk scratches to that vehicle. This may prevent the operator from fully securing the car during shipment, in that the window may not be able to be fully closed from the outside. For obvious reasons, such a container cannot serve as a long term storage solution for such a vehicle without significant drawbacks. Moreover, many luxury or classic vehicles have non-standard window and/or door openings, which may limit the usefulness of such prior art containers.

[0032] Another unexpected benefit of the structure of the innovative vessel is that it could provide alternative or additional garage space for a vehicle without the need for construction or compliance the attendant zoning criteria. Moreover, the owner of a luxury vehicle who also has the need to transport such vehicle (such as, from home to home) without risking damage to the vehicle during transport could use the innovative vessel 100 as a secure garage at each location, and simply secure the car within the vessel 100, load the vessel onto a tractor trailer bed, and ship the vehicle from place to place (or home to home) without compromising the security of the vehicle *or* requiring construction of a special purpose garage at either location.

[0033] Critical to the functionality of the inventive vessel 100 is the inclusion of *both* rear 204 and side 301 doors, each having the specific size and configuration as set forth herein, which in preferred embodiments are fully motorized and remotely controllable. As noted, in some embodiments, side doors 301 appear on both sides 105A and 150B of the inventive vessel 100. In other embodiments, they can appear on only one side. Preferably, when appearing on only one side of the vessel 100, side doors 301 appear on the left side (as viewed from the rear surface 104 of the vessel) for the reasons that will be described herein.

[0034] The interoperability of side 301 and rear 204 doors has the unique advantage of allowing a vehicle, such as a luxury car, to be placed inside of the vessel 100 such that the interior of the vehicle is accessible. As described previously, the side doors 301 allow an individual (i.e., to the car owner or another person assisting with the transport of the vehicle) to access the interior without the risk of damage to the car exterior. The rear door 204 enables a full size vehicle to drive into the vessel 100.

[0035] The rear door 204 is configured, and constructed of a material, in a manner which makes it strong enough to support the heaviest vehicles possible, while also having a low, long rake to allow lowered vehicles easy access without the need for special shims or vehicle lifters. In preferred embodiments, rear door 204 is constructed of steel, with an optional window (make of materials described with respect to windows 300, above) to provide greater visibility into the vessel 100. Alternative materials include aluminum, or other materials described for the construction of the frame, above. In preferred embodiments, rear door 204 hinges on the bottom to provide a ramp for a vehicle to drive over to access the interior of the vessel 100 (see Fig. 3). Also in preferred embodiments, rear door 204 operates via dual electric actuators the actively 'pull' the door closed. In preferred embodiments, rear door 204 is a low profile integrated ramp for universal access. However, alternative embodiments may include a roll up or swing open configuration. The flooring of vessel 100, in preferred embodiments, can be plastic tile flooring on top of a metal subfloor.

[0036] Also as shown in Fig. 2, the front end of the vessel 100 also includes one or more doors 302; in preferred embodiments, door(s) 302 are sliding doors. Front door 302 allows access for the front of the vehicle for use for, for example, strapping the vehicle down to the floor of the vessel 100 for transport. Other features that increase the ease of transport of a vehicle in the vessel 100 include integrated tie downs.

[0037] In preferred embodiments, the innovative vessel also includes a control panel (represented by the reference character 400; see Fig. 6), which in embodiments is located on the top interior surface of the vessel 100. The presence of an electronics control panel, which as noted previously may also have integrated WiFi or Bluetooth access, also enables several additional unique features for a vehicle shipment container, including an integrated ventilation/exhaust system, an integrated (preferably LED) lighting system, which may be a smart lighting system, motorized sliding doors (as previously described), an electric actuated ramp door (as previously described), temperature control and regulation, security cameras, integrated sound systems, GPS Tracking and cellular capability. In embodiments, the vessel 100 control system also includes an integrated battery backup.

[0038] In some embodiments, the vessel 100 includes integrated hydraulic lifts both exterior for lifting the container off the ground for vehicles to park underneath,

and/or one or more internal four-point lifts for a high-cube variant to store two vehicles stacked inside the vessel 100.

[0039] As can be seen, the innovative vessel 100 is an all in one smart solution for vehicle storage, display, and transport. The vessel 100 maximizes vehicle loading and unloading access, with a fully automated sliding door system, allowing even large SUVs to be loaded, and all doors on all sides remain accessible. The innovative vessel is stackable, transportable by rail, ship, and truck, and can be used as temporary portable structures, or long term permanent ones, including dealership displays, or other display / storage applications, either indoor or outdoor.

[0040] This application is therefore intended to cover any variations, uses, or adaptations of the invention using its general principles. Further, this application is intended to cover such departures from the present disclosure as come within known or customary practice in the art to which this invention pertains.

Claims

1. A device comprising:

a vessel sized and shaped to accommodate at least one motor vehicle, wherein said vessel has two short vertical sides having a first width and two long vertical sides having a second width; wherein at least one of said two long vertical sides comprises an opening having a third width; wherein said third width is at least 45% of the second width.

2. The device of claim 1, wherein said second width is greater than said first width.

3. The device of claim 1, wherein said first width is 8' and wherein said second width is 20'.

4. The device of claim 1, wherein at least one of said two long vertical sides is constructed of transparent or semi-transparent material.

5. The device of claim 1, further comprising at least one sliding door configured to cover said opening.

6. The device of claim 5, wherein said two vertical sides have a first height, and said at least one sliding door has a second height, wherein said first height and said second height are the same.

7. The device of claim 6, wherein said at least one sliding door consists of two sliding doors, and wherein said two sliding doors are constructed of a transparent or semi-transparent material.

8. The device of claim 6, wherein at least one of said two long vertical sides comprises two fixed portions and two sliding doors, and wherein said two sliding doors are centered at a midpoint of said second width.

9. The device of claim 8, wherein at least one of said two short vertical sides comprises a fold-down ramp.

10. The device of claim 1, wherein at least one of said two short vertical sides comprises a fold-down ramp.

11. A vehicle containment device comprising:

a vessel sized and shaped to accommodate at least one motor vehicle, wherein said vessel has two short vertical sides having a first width and two long vertical sides having a second width; wherein at least one of said two long vertical sides comprises an opening having a third width; wherein said third width is at least 45% of the second width.

12. The device of claim 11, wherein said second width is greater than said first width.

33. The device of claim 11, wherein said first width is 8' and wherein said second width is 20'.

14. The device of claim 11, wherein at least one of said two long vertical sides is constructed of transparent or semi-transparent material.

15. The device of claim 11, further comprising at least one sliding door configured to cover said opening.

16. The device of claim 15, wherein said two vertical sides have a first height, and said at least one sliding door has a second height, wherein said first height and said second height are the same.

17. The device of claim 16, wherein said at least one sliding door consists of two sliding doors, and wherein said two sliding doors are constructed of a transparent or semi-transparent material.

18. The device of claim 16, wherein at least one of said two long vertical sides comprises two fixed portions and two sliding doors, and wherein said two sliding doors are centered at a midpoint of said second width.

19. The device of claim 18, wherein at least one of said two short vertical sides comprises a fold-down ramp.

20. The device of claim 11, wherein at least one of said two short vertical sides comprises a fold-down ramp.

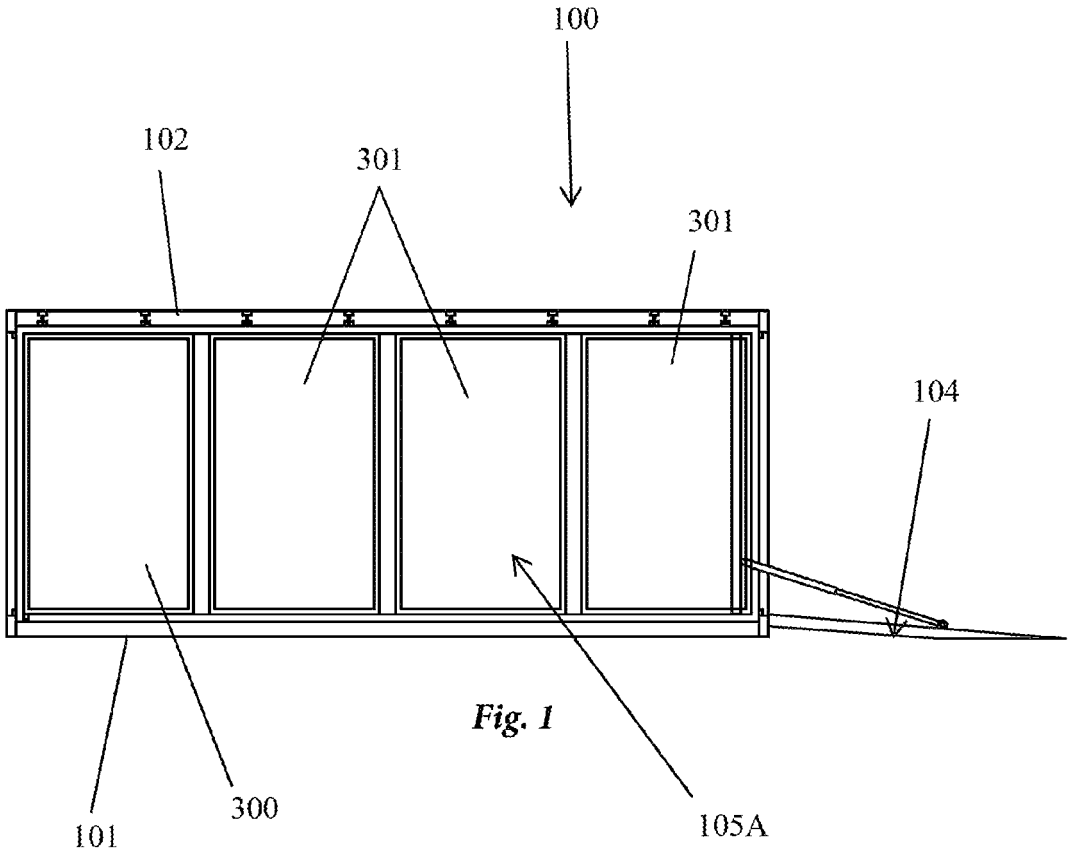

Fig. 1

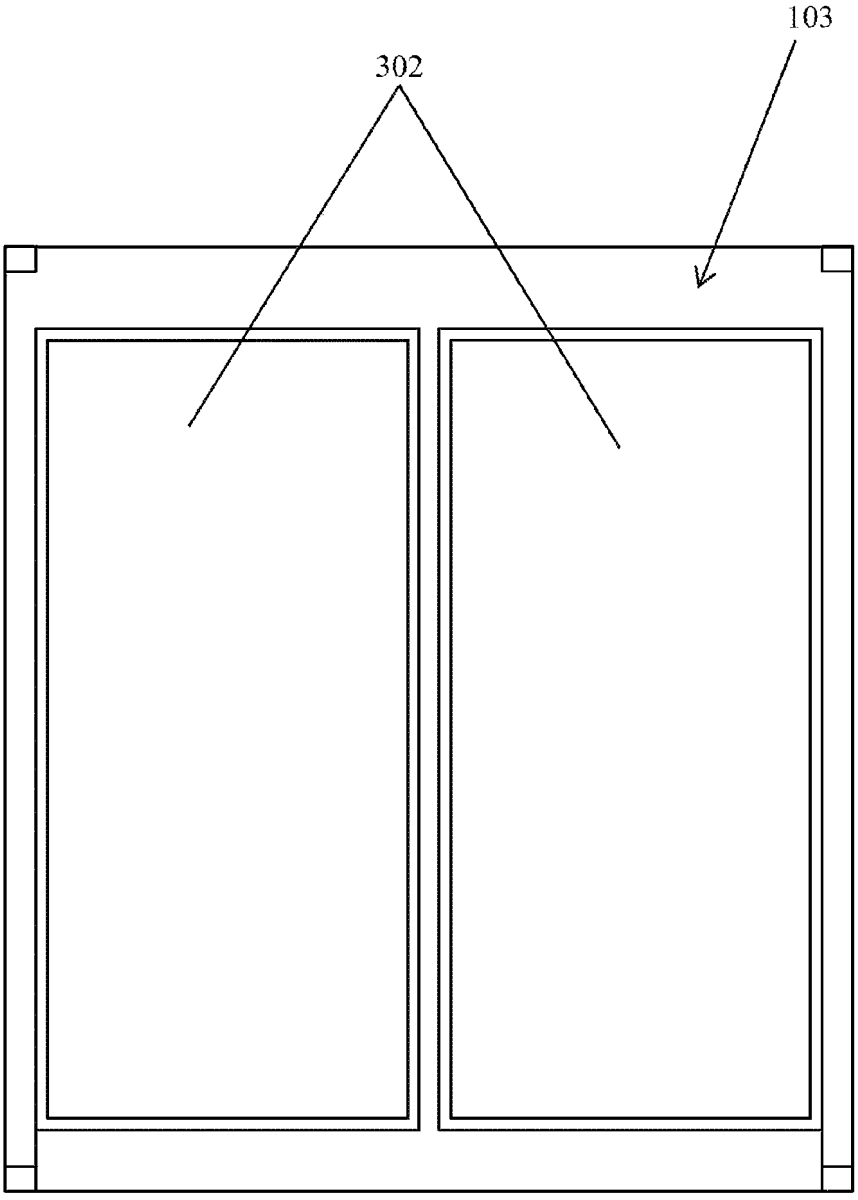

Fig. 2

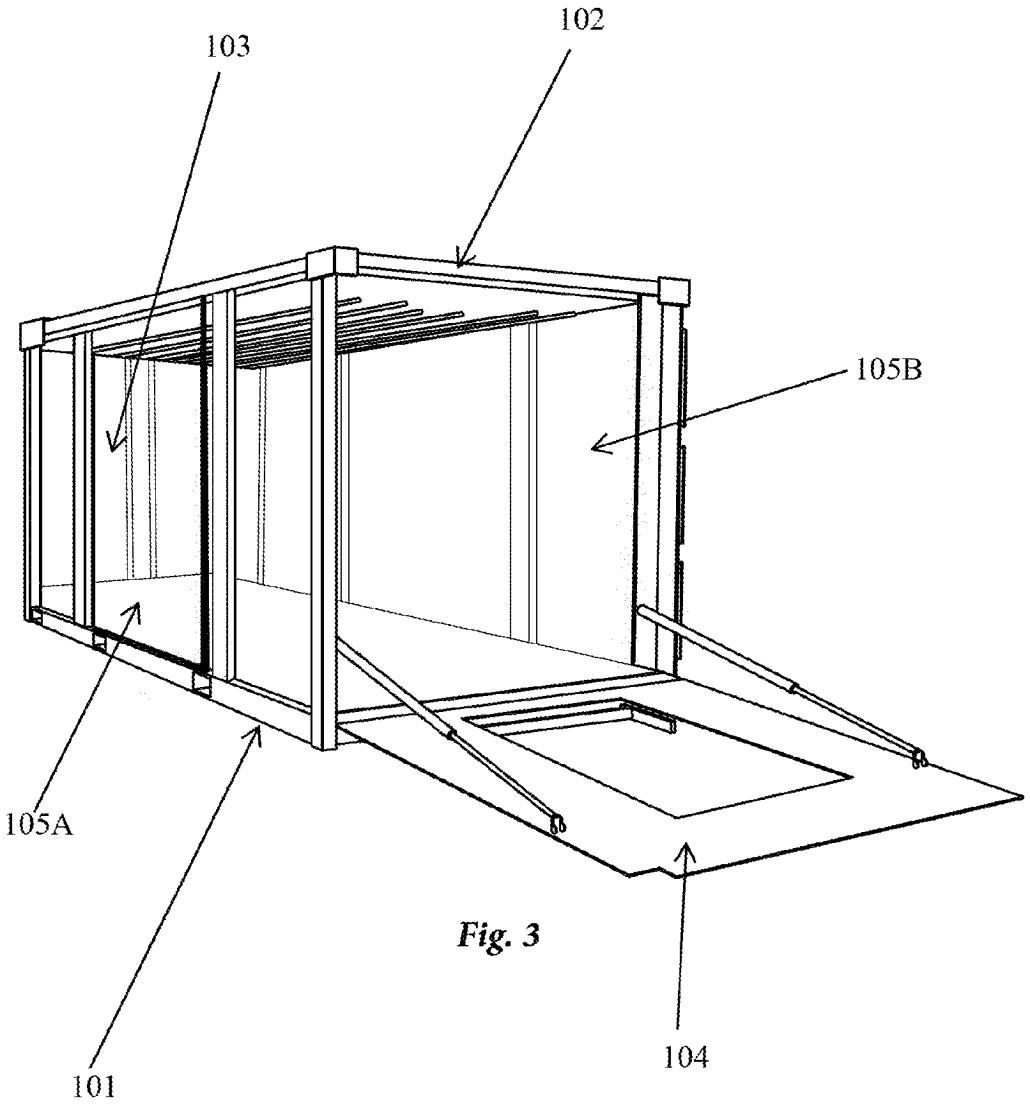

Fig. 3

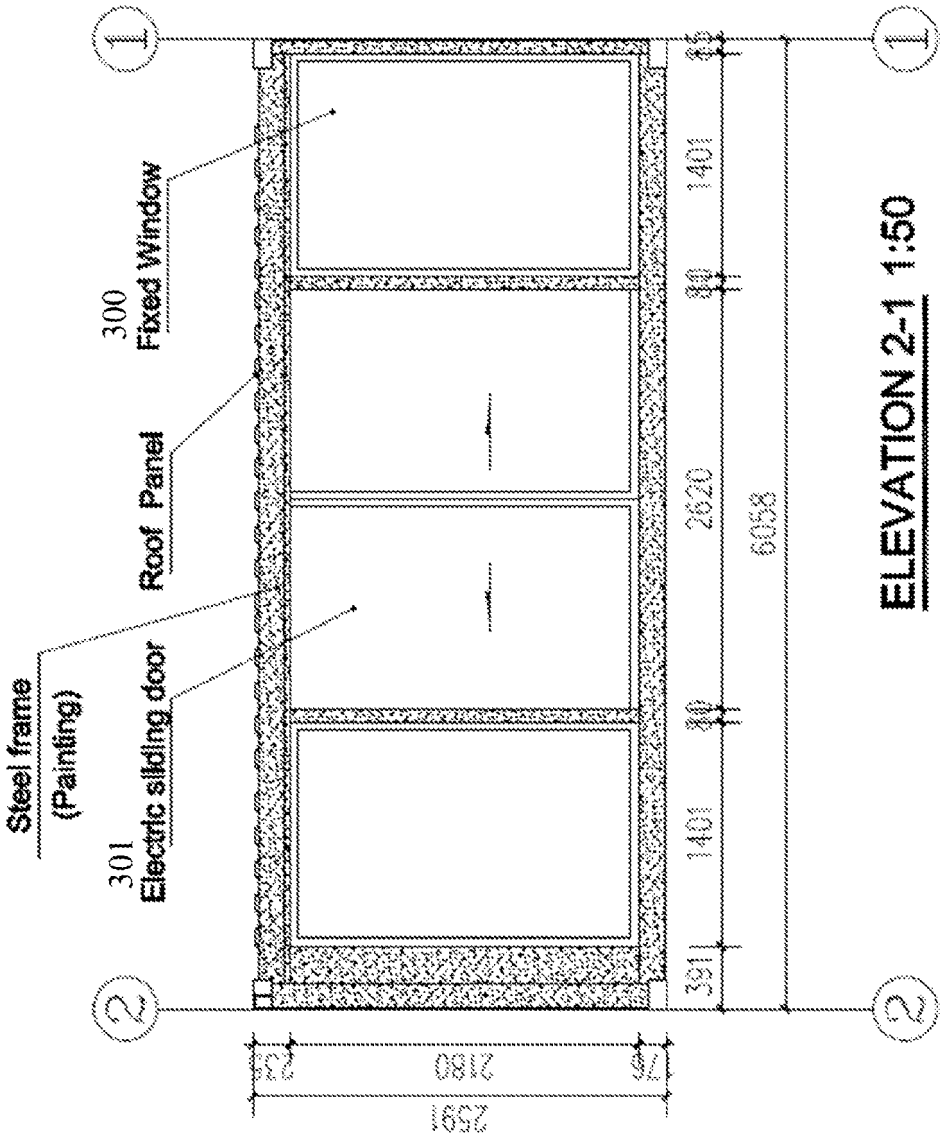
ELEVATION 2-1 1:50
Steel frame
(Painting)
300
Fixed Window
Roof Panel
301
Electric sliding door
1401
80
2620
80
1401
391
6093
2591
2180

Fig. 4

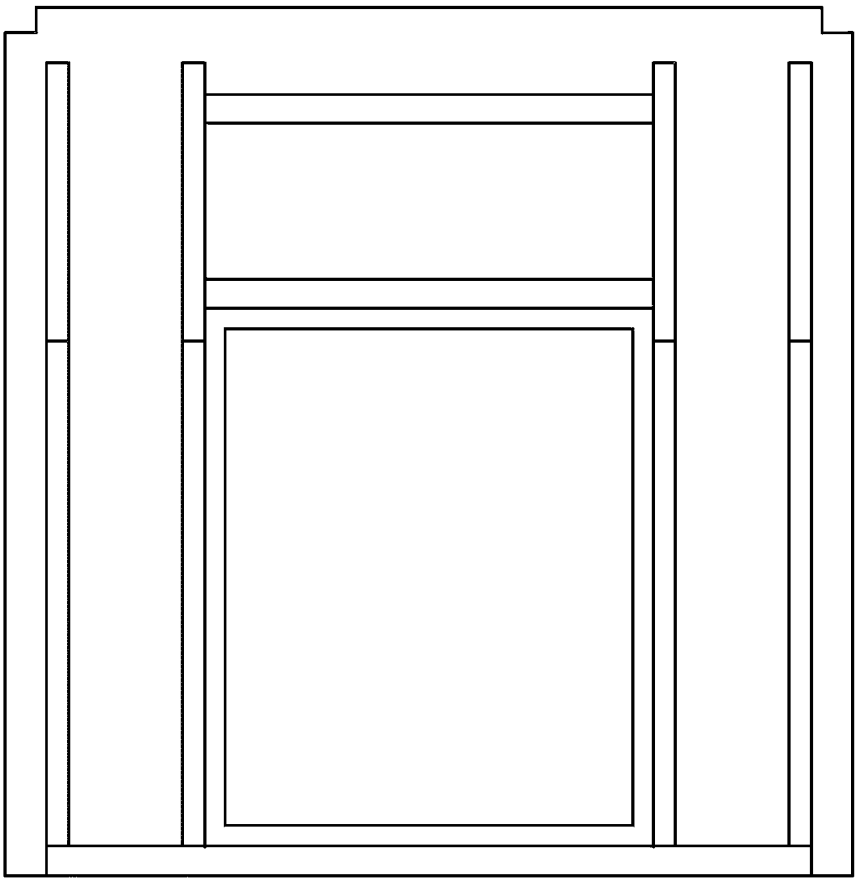

Fig. 5

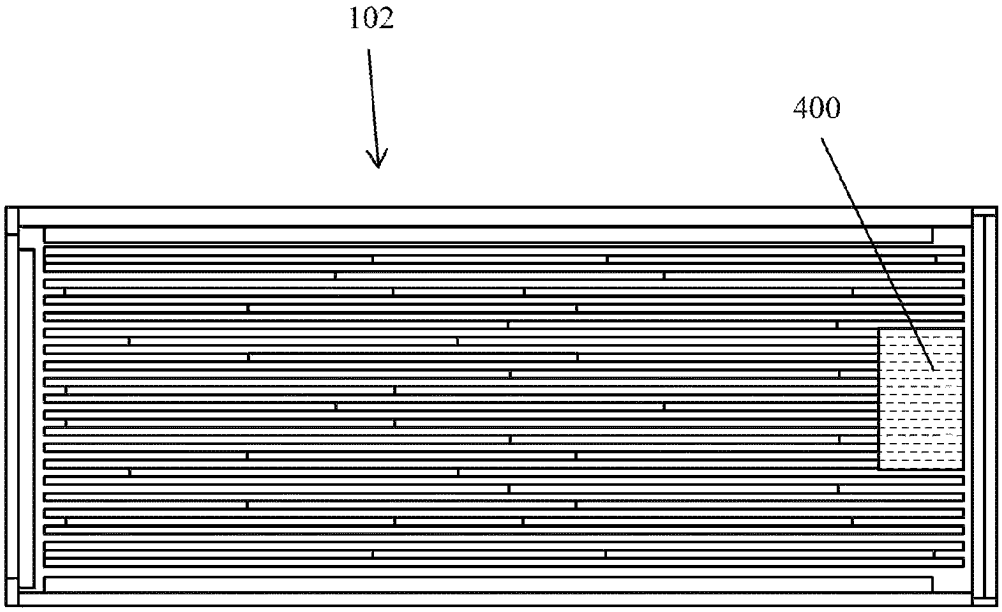

Fig. 6

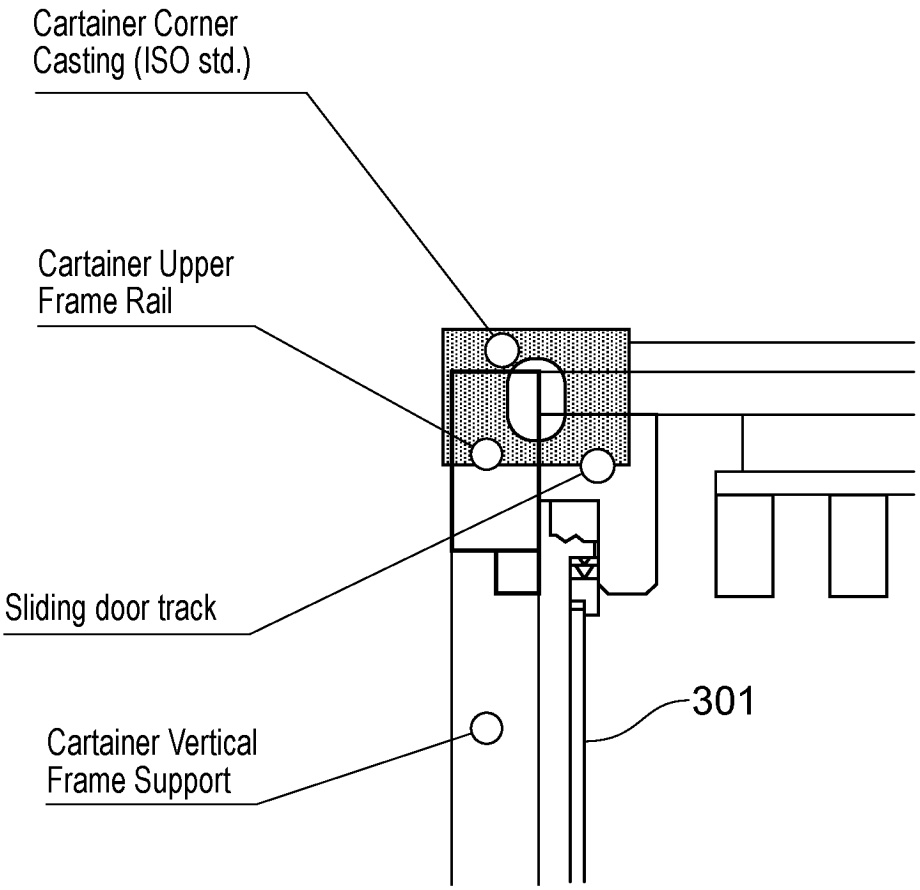
Cartainer Corner
Casting (ISO std.)
Cartainer Upper
Frame Rail
Sliding door track
Cartainer Vertical
Frame Support
301

FIG. 7

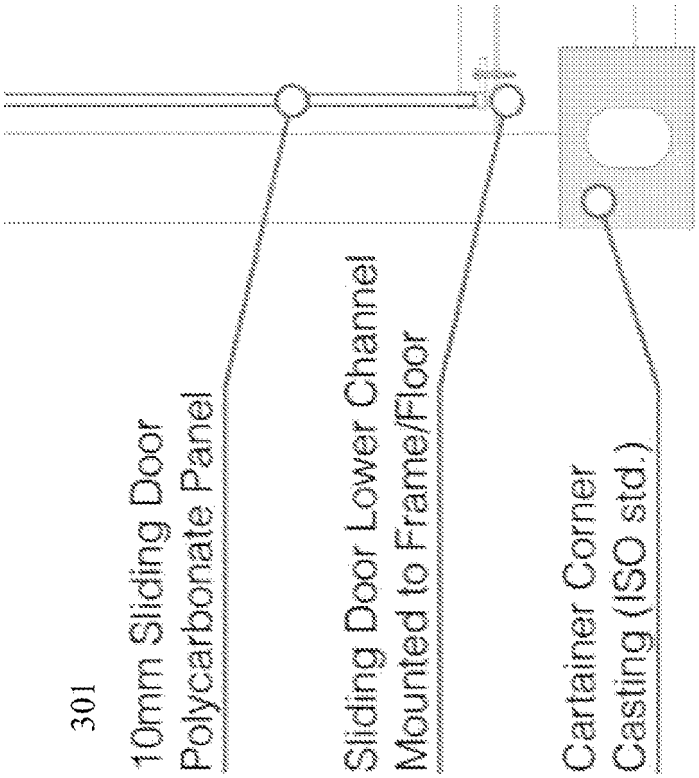
301
10mm Sliding Door
Polycarbonate Panel
Sliding Door Lower Channel
Mounted to Frame/Floor
Cartainer Corner
Casting (ISO std.)

Fig. 8

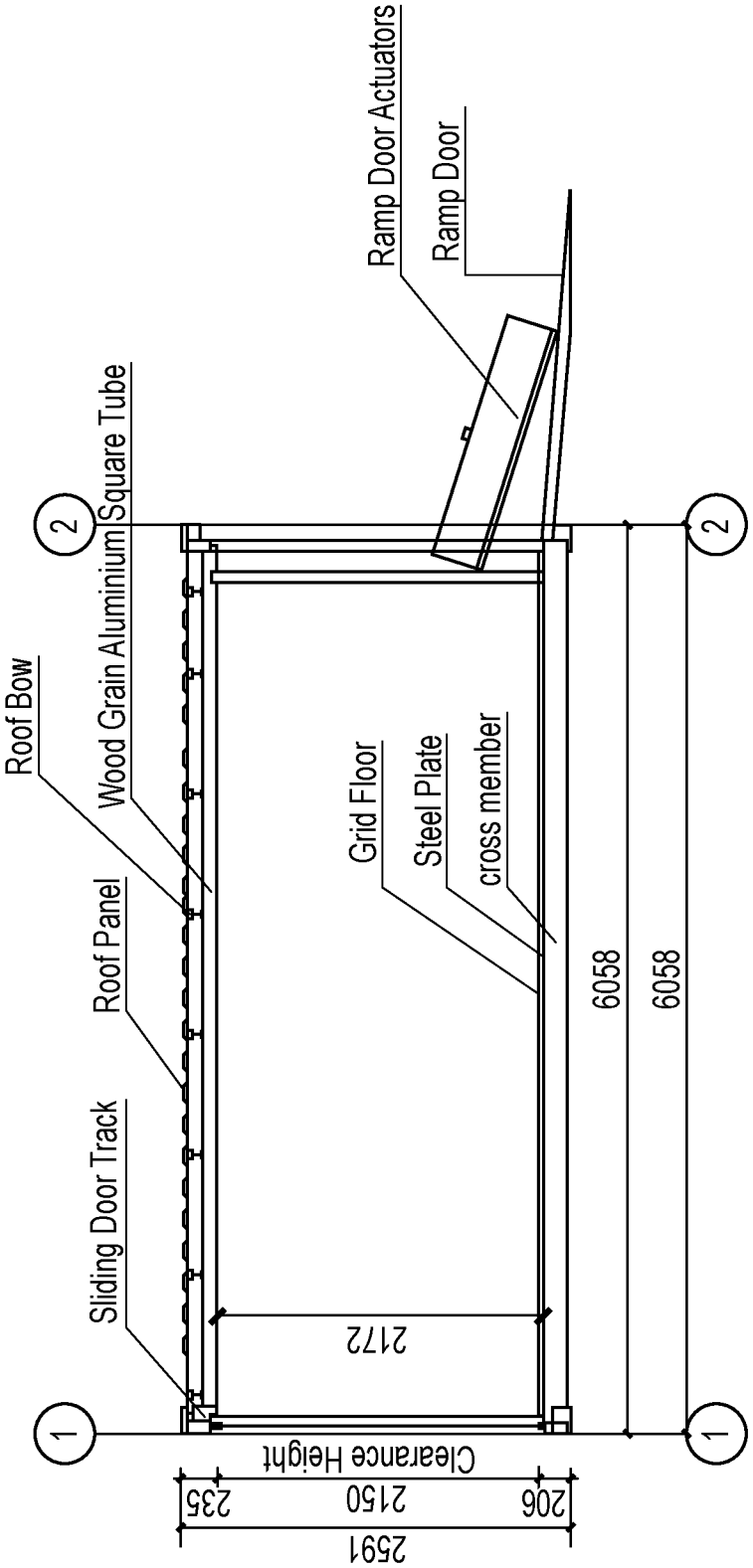
Ramp Door Actuators
Ramp Door
Square Tube
Wood Grain Aluminium
Roof Bow
Roof Panel
Sliding Door Track
Grid Floor
Steel Plate
cross member
6058
6058
2172
Clearance Height
235
2150
206
2591
1
2

FIG. 9

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EUROPEAN SEARCH REPORT

Application Number
EP 24 21 0016

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Place of search	Date of completion of the search	Examiner
Munich	17 March 2025	Piolat, Olivier

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