Claims

1. A collapsible intermodal container, comprising:

first and second opposing side walls, the first side wall extending substantially parallel to the second side wall, each of the first and second side walls having a lower end portion and an upper end portion;

an upper wall hingedly attached to the upper end portion of the first side wall;

a lower wall hingedly attached to the lower end portion of the second side wall; and

a door assembly, wherein the door assembly comprises a corner casting, and wherein the door assembly is hingedly attached to one of the first and second side walls,

wherein the collapsible intermodal container is configurable between:

an erected configuration in which the upper wall extends from the upper end portion of the first side wall to the upper end portion of the second side wall, and the lower wall extends from the lower end portion of the second side wall to the lower end portion of the first side wall, such that the first and second side walls are spaced apart by a first distance to define an interior for storing goods; and

a collapsed configuration in which the upper wall extends downwardly from the upper end portion of the first side wall to the lower end portion of the first side wall, and the lower wall extends upwardly from the lower end portion of the second side wall to the upper end portion of the second side wall, such that the first and second side walls are spaced apart by a second distance which is less than the first distance.

2. The collapsible intermodal container according to claim 1, wherein, as the collapsible intermodal container configures from the erected configuration to the collapsed configuration, the upper wall pivots towards the first side wall and the lower wall pivots towards the second side wall.

3. The collapsible intermodal container according to claim 1, wherein, in the collapsed configuration, the upper wall is substantially adjacent the lower wall and the upper wall extends substantially parallel to the lower wall.

4. The collapsible intermodal container according to claim 1, wherein, in the erected configuration, the upper wall is spaced apart from the lower wall and the upper wall extends substantially parallel to the lower wall.

5. The collapsible intermodal container according to claim 1, further comprising an upper link member having a first end hingedly attached to the upper end portion of the second side wall and a second end hingedly attached to the upper wall, and further comprising a lower link member having a first end hingedly attached to the lower end portion of the first side wall and a second end hingedly attached to the lower wall.

6. The collapsible intermodal container according to claim 5, wherein, as the collapsible intermodal container configures from the erected configuration to the collapsed configuration, the upper link member pivots towards the second side wall and the lower rigid member pivots towards the first side wall.

7. The collapsible intermodal container according to claim 5, further comprising a plurality of said upper link members and said lower link members.

8. The collapsible intermodal container according to claim 1, wherein the door assembly is hingedly attached to one of the first and second side walls such that the door assembly is pivotable between:

a closed position in which the door assembly extends substantially perpendicularly from said one of the first and second side walls such that the corner casting is adjacent one of the first side wall and the second side wall, and

an open position in which the door assembly extends substantially parallel and adjacent to said one of the first and second side walls such that the corner casting is adjacent an outer side of the side wall to which the respective door assembly is attached.

9. The collapsible intermodal container according to claim 8, wherein, in the erected configuration, the door assembly in the closed position is engageable with the other of the first and second side walls to lock the collapsible intermodal container in the erected configuration.

10. The collapsible intermodal container according to claim 9, wherein each of the first and second side walls comprises a pair of engagement members, and wherein the door assembly comprises a peripheral rigid frame defining four openings for respectively receiving the engagement members such that movement between the first and second side walls is substantially limited and the first and second side walls are substantially supported by the peripheral rigid frame.

11. The collapsible intermodal container according to claim 10, wherein ~~each~~ the corner casting is one of a plurality of corner castings disposed on a respective corner of the peripheral rigid frame for twistlock engagement.

12. The collapsible intermodal container according to claim 11, wherein the engagement members respectively abut with the corner castings when received in the openings of the peripheral rigid frame.

13. The collapsible intermodal container according to claim ~~8~~1, further comprising two of said door assemblies.

14. The collapsible intermodal container according to claim 1, wherein the first distance is between 201 centimetres and 226 centimetres.

15. The collapsible intermodal container according to claim 14, wherein the first distance is about 221 centimetres.

16. The collapsible intermodal container according to claim 15, wherein the second distance is between 23 centimetres and 98 centimetres.

17. The collapsible intermodal container according to claim 16, wherein the second distance is about 33 centimetres.

18. The collapsible intermodal container according to claim 1, further comprising one or more lifting systems for use in configuring the container to the erected configuration, each lifting system comprising an elongate line or tension member for use in lifting the upper wall when configuring the container to the erected configuration.

19. The collapsible intermodal container according to claim 18, wherein each lifting system further comprises a roller mechanism for supporting travel of the flexible line or tension member as it is pulled or drawn, and a hold member for an operator to hold and drawn the elongate line or tension member;

wherein one end region of the elongate line or tension member is fastened or secured to a free edge region of the upper wall, from which the elongate line or tension member extends to pass through or over the roller mechanism to an outer side of the other side wall, and

wherein the hold member is secured to an opposite end region of the elongate line or tension member for an operator to hold and drawn the elongate line or tension member through or over the roller mechanism to lift the free edge region of the upper wall as the container is configured to the erected configuration.

20. The collapsible intermodal container according to claim 19, wherein each lifting system includes a track or rail attached to the outer side of the side wall for guiding

movement of the hold member as the collapsible intermodal container is configured to the erected configuration.

21. The collapsible intermodal container according to claim 19, wherein each lifting system includes a bracket attached to the outer side of the side wall to which the hold member is fixed or secured when the intermodal container is in the erected configuration.

22. The collapsible intermodal container according to claim 18, comprising a plurality of the lifting systems arranged spaced apart along a length of the side wall.

~~14.~~23. A collapsible intermodal container, comprising:

first and second opposing side walls, the first side wall being connected to the second side wall such that the collapsible intermodal container is configurable between an erected configuration in which the first and second side walls are substantially parallel and spaced apart by a first distance to define an interior for storing goods, and a collapsed configuration in which the first and second side walls are substantially parallel and spaced apart by a second distance which is less than the first distance; and

an upper wall hinged to an upper end portion of one of the first and second side walls, and a lower wall hinged to a lower end portion of the other of the first and second side walls; and

front and rear end assemblies for closing front and rear ends of the container and controlling access to the interior in the erected configuration, each of the front and rear end assemblies comprising a corner casting, the front and rear assemblies being hingedly attached to the first side wall and pivotable between a closed position, in which the respective end assembly extends substantially perpendicularly from the first side wall such that the corner casting is adjacent the upper wall and one of the first side wall and the second side wall, and an open position, in which the respective end assembly extends substantially parallel and adjacent to the first side wall such that the corner

casting is adjacent an outer side of the side wall to which the respective ~~door~~ end assembly is attached;

wherein, when the collapsible intermodal container is in the erected configuration, the front and rear end assemblies are engageable with the second side wall to secure the first side wall with respect to the second side wall in the closed position, and, when the collapsible intermodal container is in the collapsed configuration, the front and rear end assemblies are engageable with the first side wall and extend substantially parallel and adjacent to the first side wall in the open position.

~~15.~~24. The collapsible intermodal container according to claim ~~14~~23, wherein the second side wall comprises:

upper and lower forwardly extending members; and

upper and lower rearwardly extending members;

wherein the upper and lower forwardly extending members of the second side wall are adapted to engage with the front end assembly in the closed position and the upper and lower rearwardly extending members of the second side wall are adapted to engage with the rear end assembly in the closed position, such that the second side wall is at least partly supported by the front and rear end assemblies.

~~16.~~25. The collapsible intermodal container according to claim ~~15~~24, wherein each of the front and rear end assemblies comprises a peripheral rigid frame, the rigid frame comprising:

first and second side uprights, each of the first and second side uprights having upper and lower ends;

four corner parts respectively mounted to the ends of the first and second side uprights; and

upper and lower cross bars, the upper cross bar extending from the corner part mounted to the upper end of the first side upright to the corner part mounted to the upper end of the second side upright, and the lower cross bar extending from the corner

part mounted to the lower end of the first side upright to the corner part mounted to the lower end of the second side upright.

~~17.~~26. The collapsible intermodal container according to claim ~~16~~25, wherein, when the upper and lower forwardly extending members of the second side wall are engaged with the front end assembly, the upper forwardly extending member abuts with the corner part mounted to the upper end of the second side upright of the front end assembly or the upper cross bar of the front end assembly and the lower forwardly extending member abuts with the corner part mounted to the lower end of the second side upright of the front end assembly or the lower cross bar of the front end assembly.

~~18.~~27. The collapsible intermodal container according to claim ~~16~~25, wherein, when the upper and lower rearwardly extending members of the second side wall are engaged with the rear end assembly, the upper rearwardly extending member abuts with the corner part mounted to the upper end of the second side upright of the rear end assembly or the upper cross bar of the rear end assembly and the lower rearwardly extending member abuts with the corner part mounted to the lower end of the second side upright of the rear end assembly or the lower cross bar of the rear end assembly.

~~19.~~28. The collapsible intermodal container according to claim ~~14~~23, wherein, in the erected configuration, the upper wall extends between upper end portions of the first and second side walls, and the lower wall extends between lower end portions of the first and second side walls, and wherein, in the collapsed configuration, the upper wall extends downwardly from the upper end portion of the said one of the first and second side walls to which it is hinged, and the lower wall extends upwardly from the lower end portion of the other of the first and second side walls to which it is hinged.

~~20. The collapsible intermodal container according to claim 1, wherein the first distance is between 201 centimetres and 226 centimetres.~~

~~21. The collapsible intermodal container according to claim 20, wherein the first distance is about 221 centimetres.~~

~~22. The collapsible intermodal container according to claim 21, wherein the second distance is between 23 centimetres and 98 centimetres.~~

~~23. The collapsible intermodal container according to claim 22, wherein the second distance is about 33 centimetres.~~

~~24. The collapsible intermodal container according to claim 1, further comprising one or more lifting systems for use in configuring the container to the erected configuration, each lifting system comprising an elongate line or tension member for use in lifting the upper wall when configuring the container to the erected configuration.~~

~~25. The collapsible intermodal container according to claim 24, wherein each lifting system further comprises a roller mechanism for supporting travel of the flexible line or tension member as it is pulled or drawn, and a hold member for an operator to hold and drawn the elongate line or tension member;~~

~~wherein one end region of the elongate line or tension member is fastened or secured to a free edge region of the upper wall, from which the elongate line or tension member extends to pass through or over the roller mechanism to an outer side of the other side wall, and~~

~~wherein the hold member is secured to an opposite end region of the elongate line or tension member for an operator to hold and drawn the elongate line or tension member through or over the roller mechanism to lift the free edge region of the upper wall as the container is configured to the erected configuration.~~

~~26. The collapsible intermodal container according to claim 25, wherein each lifting system includes a track or rail attached to the outer side of the side wall for guiding~~

~~movement of the hold member as the collapsible intermodal container is configured to the erected configuration.~~

~~27. The collapsible intermodal container according to claim 24, comprising a plurality of the lifting systems arranged spaced apart along a length of the side wall.~~

~~28. The collapsible intermodal container according to claim 25, wherein each lifting system includes a bracket attached to the outer side of the side wall to which the hold member is fixed or secured when the intermodal container is in the erected configuration.~~