Claims

1. Galley container ~~(1)~~ for use in an aircraft, comprising at least two container sidewalls ~~(6)~~, a container floor element ~~(7)~~ and a container ceiling element ~~(8)~~, forming a hollow inner shell casing ~~(2)~~ with a circumferential first rim ~~(12)~~ and a circumferential second rim ~~(12')~~, whereby a composite tape ~~(11)~~ is spun around the inner shell casing and along the circumference of the rims, forming at least part of a construction layer ~~(5)~~ of the galley container, whereby the composite tape comprises at least one fibre and a matrix material.

2. Galley container according to claim 1, whereby the composite tape is spun across the inner shell casing and along the circumference of the rims in a direction having an angle equal to or greater than 0° and smaller than or equal to 90° with an axial axis ~~(A)~~ of the inner shell casing, whereby the direction is parallel to the surface of the inner shell casing.

3. Galley container according to claim 2, wherein the composite tape ~~(10)~~ is wound around the inner shell casing ~~(2)~~ in a direction substantially parallel to the first and second rim circumferences.

4. Galley container according to claim 2, wherein the composite tape ~~(11)~~ is spun back and forth between the first rim and the second rim across the inner shell casing and along the circumference of the rims.

5. Galley container according to claim 4, whereby the composite tape is spun across the inner shell casing in a square wavelike manner.

6. Galley container according to claim 4, whereby the composite tape is spun across the inner shell in a zigzag manner.

7. Galley container according to claim 4 or 6, whereby the composite tape is spun in a diagonal direction relative to the axial axis ~~(A)~~ of the inner casing across the inner shell casing.

8. Galley container according to any of the preceding claims, whereby the composite tape engages connecting means, such as hooks, provided along the circumference of the first and second rims.

9. Galley container according to any of claims 1-7, whereby the composite tape connects to the first and second rims through a weld.

10. Galley container according to any of the proceeding claims, comprising a first frame ~~(3)~~ provided along the first rim ~~(12)~~ and a second frame ~~(3')~~ provided along the second rim ~~(12')~~, whereby the first frame and the second frame are mutually connected by the composite tape.

11. Galley container according to claim 10, whereby the connecting means are provided along the circumference of the first and second frames.

12. Galley container according to claim 10, whereby the composite tape connects to the first and second frames through a weld, thereby forming a connection between the frames.

13. Galley container according to any of the preceding claims, whereby a further composite tape ~~(10)~~ comprising at least one fibre and a matrix material, is wound around the inner shell casing in a direction substantially parallel to the first and second rim circumferences forming a further construction layer ~~(9)~~ of the galley container.

14. Galley container according to any of the preceding claims, whereby between the inner shell casing and at least one of the construction layers at least one other layer of material ~~(4)~~ is provided, such as a thermally insulating layer.

15. Galley container according to any of claims 10-14, whereby the first frame and second frame are clamped between the tightly wound further composite tape, whereby the further construction layer forms a connection means between the frames.

16. Galley container according to any of the preceding claims, whereby the composite tapes comprise at least one of carbon and aramide fibre, respectively.

17. Galley container according to any of the preceding claims, whereby the matrix material of the composite tapes comprises a thermoplastic resin, such as one of polyetherimide (PEI) and polyether ether ketone (PEEK).

18. Galley container according to any of the claims 1-8 or 10-16, whereby the matrix material of the composite tapes comprises a thermosetting resin, such as an epoxy.

19. Galley container according to any of the preceding claims, whereby the fibres of the composite tapes are stretched under a tensile stress of 1-135 N, preferably 5-50 N.

20. Method of manufacturing a galley container ~~(1)~~ for an aircraft, comprising:

- providing a hollow inner shell casing ~~(2)~~ with a circumferential first rim ~~(12)~~ and a circumferential second rim ~~(12')~~, the inner shell casing comprising at least two container sidewalls ~~(6)~~, a container floor element ~~(7)~~ and a container ceiling element ~~(8)~~;

- spanning a composite tape ~~(11)~~ across the inner shell casing and along the circumference of the rims, whereby the composite tape comprises at least one fibre and a matrix material, thereby forming at least part of a construction layer ~~(5)~~ of the spun composite tape.

21. Method according to claim 20, comprising connecting the composite tape to at least one of the first and second rim of the inner shell casing.

22. Method according to claim 21, comprising engaging the composite tape with connecting means, such as hooks, provided along the circumference of the first and second rims.

23. Method according to claim 21, comprising connecting the composite tape to the first and second rims through a weld.

24. Method according to any of claims 20-23, whereby spanning a composite tape across the inner shell casing comprises spanning the composite tape across the inner shell casing in a direction having an angle equal to or greater than 0° and smaller than or equal to 90° with the axial axis of the inner shell casing, thereby forming at least part of the construction layer ~~(5)~~ of the spun composite tape along the circumference of the rims.

25. Method according to claim 24, wherein the composite tape ~~(10)~~ is wound around the inner shell casing ~~(2)~~ in a direction substantially parallel to the first and second rim circumferences.

26. Method according to claim 24, whereby the composite tape ~~(11)~~ is spun across the inner shell casing back and forth between the first rim and the second rim.

27. Method according to claim 24, whereby the composite tape is spun across the inner shell casing in a square wavelike manner.

28. Method according to claim 24, whereby the composite tape is spun across the inner shell in a zigzag manner.

29. Method according to claim 26 or 28, whereby the composite tape is spun in a diagonal direction relative to the axial axis ~~(A)~~ of the inner casing across the inner shell casing.

30. Method according to any of claims 20-29, comprising providing a first frame ~~(3)~~ along the first rim and a second frame ~~(3')~~ along the second rim.

31. Method according to claim 30, comprising:

- connecting the composite tape to the first frame;
- spanning the composite tape back and forth between the first frame and the second frame across the inner shell casing, thereby mutually connecting the first frame and the second frame by the composite tape.

32. Method according to claim 30 or 31, whereby the connecting means are provided along the circumference of the first and second frames.

33. Method according to claim 30 or 31, comprising connecting the composite tape to the first and second frames through a weld, thereby forming a connection between the frames.

34. Method according to any of claims 20-33, comprising winding a further composite tape ~~(10)~~ comprising at least one fibre and a matrix material around the inner shell casing in a direction substantially parallel to the first and second frame circumferences, thereby forming a further construction layer ~~(9)~~ of the galley container.

35. Method according to any of claims 20-34, comprising providing between the inner shell casing and at least one of the construction layers at least one layer of material ~~(4)~~, such as a thermally insulating layer.

36. Method according to claim 34 or 35, comprising tightly winding the further composite tape, thereby connecting the first frame and second frame by clamping the frames between the tightly wound further composite tape.

37. Method according to any of claims 20-36, comprising stretching the fibres of the composite tapes under a tensile stress of 1-135 N, preferably 5-50 N.