Patent claims

1. A pallet container for storing and transporting a liquid filling material, said pallet container comprising: a thin-walled rigid internal container made from a thermoplastic plastics material, said internal container including an upper filling connector that is closed off by a screw cap; a tubular lattice frame forming a supporting jacket to tightly enclose the internal container; a base pallet for support of the internal container, said tubular lattice frame being fixedly connected to the base pallet; and a fire-protection insulation mat composed of individual composite parts and laterally enclosing the internal container within the tubular lattice frame, said fire-protection insulation mat being configured such that mutually adjacent lateral edges of the individual composite parts of the fire-protection insulation mat overlap in four vertical rectangular corner regions and in horizontal upper and lower rectangular corner regions along lateral edges of the internal container, said fire-protection insulation mat including in a first region about the screw cap an overlapping first cover flap, to completely cover the first region, when closed, and to enable the screw cap to be accessible at all times, when opened.

2. The pallet container of claim 1 for storing and transporting a flammable or easily ignitable liquid filling material.

3. The pallet container of claim 1, wherein the fire-protection insulation mat includes four separate blank panels configured for four side walls of the internal container and including affixed overlapping strips, respectively, each said blank panel being composed of two equally sized and two dissimilarly sized composite parts, said overlapping strips being sized sufficient to provide a large-area overlapping coverage of an upper base, including a filling opening of the upper filling connector.

4. The pallet container of claim 3, wherein two of the four separate blank panels are of equal size and provided for two longer ones of the side walls, said overlapping strips of the two blank panels having each a width of approx. 100 mm to 450 mm to define wide overlapping strips which for coverage are laterally foldable onto the upper base.

5. The pallet container of claim 3, wherein two of the four separate blank panels are dissimilar in size and provided for two shorter ones of the side walls, said overlapping strips of the two blank panels having different widths to define for the upper base a cover flap comprised of the first cover flap and a third cover flap, with the overlapping strip of one of the two dissimilar blank panels, provided for a rearward one of the shorter side walls, being defined by a width of approx. 300 mm to 550 mm and with the overlapping strip of the other one of the two dissimilar blank panels, provided for a front-side one of the shorter side walls, being defined by a width of approx. 1100 mm to 600 mm.

6. The pallet container of claim 3, wherein at least one of the blank panels of the fire-protection insulation mat for a front or rear one of the side walls of the internal container is extended upwards to allow placement thereof in a manner of a cover flap on top of the screw cap or in a direction toward the opposite one of the blank panels so as to be on top thereof, thereby completely and securely covering the screw cap.

7. The pallet container of claim 1, wherein the fire-protection insulation mat includes a blank panel provided for a base face of the internal container and having four lateral edges, each said lateral edge including an overlapping strip, with two opposite narrow ones of the overlapping strips on longer ones of the lateral edges of the internal container having an equal width of approx. 50 mm to 125 mm.

8. The pallet container of claim 7, further comprising a retrieval connector disposed in a base region of the internal container and having an attached retrieval fitting, wherein the blank panel for the base face of the internal container on a shorter rearward one of the lateral edges of the internal container has an overlapping strip defined by a width of approx. 100 mm to 200 mm and on a shorter front-side lateral edge of the internal container has an overlapping strip defined by a width of approx. 100 mm to 300 mm with the overlapping strip of the blank panel on the shorter front-side lateral edge of the internal container being centrically interrupted and provided with a clearance for accessing the retrieval fitting.

9. The pallet container of claim 8, wherein a rectangular one of the individual

composite parts of the fire-protection insulation mat is sewn to the shorter front-side lateral edge of the internal container on a lower side of the blank panel for the base face, in front of the clearance in the overlapping strip, said rectangular composite part being configured to cover the clearance for the retrieval fitting on the lateral edges thereof in a completely overlapping manner.

10. The pallet container of claim 1, wherein the fire-protection insulation mat is configured with two layers, with one of the two layers embodying an external heat-resistant woven-fabric textile layer and the other one of the two layers embodying an internal layer being made from a heat-resistant fibrous non-woven.

11. The pallet container of claim 10, wherein the external heat-resistant woven-fabric textile layer includes a metal-powder-containing polyurethane coating filled with aluminum powder so as to be electrically conductive (dissipating).

12. The pallet container of claim 10, wherein the internal layer and the external heat-resistant woven-fabric textile layer of the fire-protection insulation mat are configured for a unilateral short-term temperature stress of at least approx. 600°C.

13. The pallet container of claim 10, wherein the internal layer and the external heat-resistant woven-fabric textile layer of the fire-protection insulation mat are configured for a unilateral long-term temperature stress of approx. 550°C.

14. The pallet container of claim 10, wherein the internal layer and the external heat-resistant woven-fabric textile layer of the fire-protection insulation mat are configured for a unilateral short-term temperature stress of approx. 1600°C.

15. The pallet container of claim 10, wherein the internal layer and the external heat-resistant woven-fabric textile layer of the fire-protection insulation mat are configured for a unilateral long-term temperature stress of 1200°C.

16. The pallet container of claim 10, wherein the fire-protection insulation mat has an overall thickness between 5 mm and 8 mm with a thickness of the external heat-

resistant woven-fabric textile layer ranging from 1 mm to 2 mm.

17. The pallet container of claim 1, further comprising a retrieval connector disposed in a base region of the internal container and having an attached retrieval fitting, said fire-protection insulation mat including in a second region about the retrieval fitting an overlapping second cover flap to completely cover the second region, when closed, and to enable the retrieval fitting to be accessible at all times, when opened.

18. The pallet container of claim 17, wherein the first cover flap of the fire-protection insulation mat for the screw cap and the second cover flap of the fire-protection insulation mat for the retrieval fitting have an internal side provided with an electrically conductive woven-fabric textile layer.

19. The pallet container of claim 17, wherein the fire-protection insulation mat includes a separate rectangular blank panel configured to form the second cover flap and sized to completely cover a base-side rectangular clearance in a front side-wall blank panel of the fire-protection insulation mat for protecting the retrieval fitting, said separate rectangular blank panel being sized larger than the base-side rectangular clearance and having a lower periphery which on the base side is sewn to the fire-protection insulation mat below the internal container such that the blank panel of the fire-protection insulation mat is foldable from bottom to top in front of the base-side rectangular clearance and fixedly clampable behind a horizontal lattice bar of the internal container.

20. The pallet container of claim 17, wherein the internal container has a lower front wall formed with a recess below the second cover flap, and further comprising a bowl-shaped thermal-protection hood made from a same material as the fire-protection insulation mat and push-fitted as an additional separate protection cap over the retrieval fitting, when the second cover flap is in a closed state.

21. The pallet container of claim 17, wherein the second flap is sized smaller than the first cover flap.