CLAIMS

1. A pallet cover suitable for use in covering at least a portion of a payload on a pallet, the pallet cover comprising:

(a) a top wall;

(b) a front wall;

(c) a rear wall;

(d) a left side wall;

(e) a right side wall; and

(f) the pallet cover,

being characterized in that at least one of said top wall, said front wall, said rear wall, said left side wall, and said right side wall comprises an inner fabric sheet, an outer fabric sheet, a first plurality of temperature-control members, and at least one insulating member, the first plurality of temperature-control members being disposed between the inner fabric sheet and the outer fabric sheet and comprising at least one phase-change material, the at least one insulating member being disposed between the inner fabric sheet and the outer fabric sheet and comprising foam insulation, the first plurality of temperature-control members arranged to circumscribe at least one void, the at least one insulating member being positioned within the at least one void.

2. The pallet cover as claimed in claim 1 wherein each of said top wall, said front wall, said rear wall, said left side wall, and said right side wall comprises an inner fabric sheet, an outer fabric sheet, a first plurality of temperature-control members, and a plurality of insulating members, each of the temperature-control members being disposed between the inner fabric sheet and the outer fabric sheet and comprising at least one phase-change material, the temperature-control members of each of said top wall, said front wall, said rear wall, said left side wall and said right side wall being arranged to circumscribe two voids, and wherein an insulating member is positioned within each of the two voids and between the inner fabric sheet and the outer fabric sheet, the insulating member comprising foam insulation.

3. The pallet cover as claimed in claim 2 wherein each of said top wall, said front wall, said rear wall, said left side wall, and said right side wall comprises at least one additional insulation member disposed between the inner fabric sheet and the outer fabric sheet, the at least one additional insulation member being arranged similarly to and in contact with the first plurality of temperature-control members.

4. The pallet cover as claimed in claim 2 wherein each of said top wall, said front wall, said rear wall, said left side wall, and said right side wall comprises a second plurality of temperature-control members, the second plurality of temperature-control members being arranged similarly to and in contact with the first plurality of temperature-control members.

5. The pallet cover as claimed in claim 4 wherein the second plurality of temperature-control members comprises a phase-change material and wherein the phase-change material of the second plurality of temperature-control members differs from the phase-change material of the first plurality of temperature-control members.

6. The pallet cover as claimed in claim 1 further comprising a bottom wall, the bottom wall comprising a third plurality of temperature-control members.

7. The pallet cover as claimed in claim 6 wherein each of the third plurality of temperature-control members comprises a phase-change material and wherein the third plurality of temperature-control members are arranged to circumscribe a void.

8. The pallet cover as claimed in claim 7 wherein the void of the bottom wall is unoccupied.

9. The pallet cover as claimed in claim 1 wherein the at least one phase-change material is a gelled organic phase-change material comprising at least one n-

alkane and a gelling agent selected from the group consisting of a styrene-ethylene-butylene-styrene triblock copolymer and a styrene-ethylene-propylene-styrene triblock copolymer.

10. The pallet cover as claimed in claim 1 wherein the first plurality of temperature-control members comprises a single type of temperature-control member.

11. The pallet cover as claimed in claim 1 wherein the first plurality of temperature-control members comprises a plurality of different types of temperature-control members that may vary from one another in phase-change material composition, quantity and/or dimensions.

12. The pallet cover as claimed in claim 1 wherein the top wall, the front wall, the rear wall, the left side wall, and the right side wall are formed by the assembly of a first subassembly and a second subassembly, the first subassembly comprising a first central portion, a first end portion disposed at a first end of the first central portion, and a second end portion disposed at a second end of the first central portion, the second subassembly comprising a second central portion, a first end portion disposed at a first end of the second central portion, and a second end portion disposed at a second end of the second central portion.

13. The pallet cover as claimed in claim 12 wherein the first subassembly and the second subassembly are detachably joined to one another.

14. The combination of the pallet cover of claim 1 and a thermal insulation wrap, the thermal insulation wrap being removably inserted over the pallet cover.