CLAIMS

1. A folding packaging cooler box convertible from a box mode to an unfolding mode or vice versa, comprising:

a box portion having a bottom portion, sidewall portions and joint portions configured to connect with one another and to form a single plane in the unfolding mode; and

a cooling reinforcing portion configured to be inserted to the inside of the box and to form a hexahedron shape together with said box portion when said box portion is converted into the box mode,

wherein said cooling reinforcing portion comprises

a reinforcing bottom portion configured to form a lower surface and to face the bottom portion of the said box portion upon conversion into the box mode;

reinforcing sidewall portions configured to connect with the said reinforcing bottom portion and to face the sidewall portions of said box portion; and

reinforcing joint portions configured to join said reinforcing sidewall portions, to be folded to face itself and to be in close contact with the reinforcing sidewall portions, upon conversion into the box mode,

wherein said reinforcing bottom portion, said reinforcing sidewall portions and reinforcing joint portions form a single plane in the unfolding mode,

wherein said reinforcing joint portions are each configured to face the inside of each joint portion of said box portion, and

wherein each joint portion of said box portion is configured to be folded and inserted to the inside of each reinforcing joint portion when said reinforcing joint portions are each folded to face itself.

2. The packaging cooler box of claim 1, wherein

said reinforcing bottom portion, reinforcing sidewall portions and reinforcing joint portions form a single rectangular shape.

3. The packaging cooler box of claim 2, wherein

said reinforcing joint portions each have a rounded corner.

4. The packaging cooler box of claim 1, wherein

the packaging cooler box further includes a compartment which forms a refrigerated space when provided in the inside of said cooling reinforcing portion in the box mode, and

said cooling reinforcing portion comprises easy adhesive portions so that the compartment can be attached thereto, as the compartment is rolled down.

5. The packaging cooler box of claim 4, wherein

said compartment has an easy adhesive portion at one end, and comprises a mesh portion which can hold a refrigerant.

6. The packaging cooler box of claim 5, wherein

said mesh portion is provided at one surface of said compartment that is configured to face the refrigerated space while the compartment is rolled down so as to keep the refrigerated space at low temperature.