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(54) **COOLING PACK**

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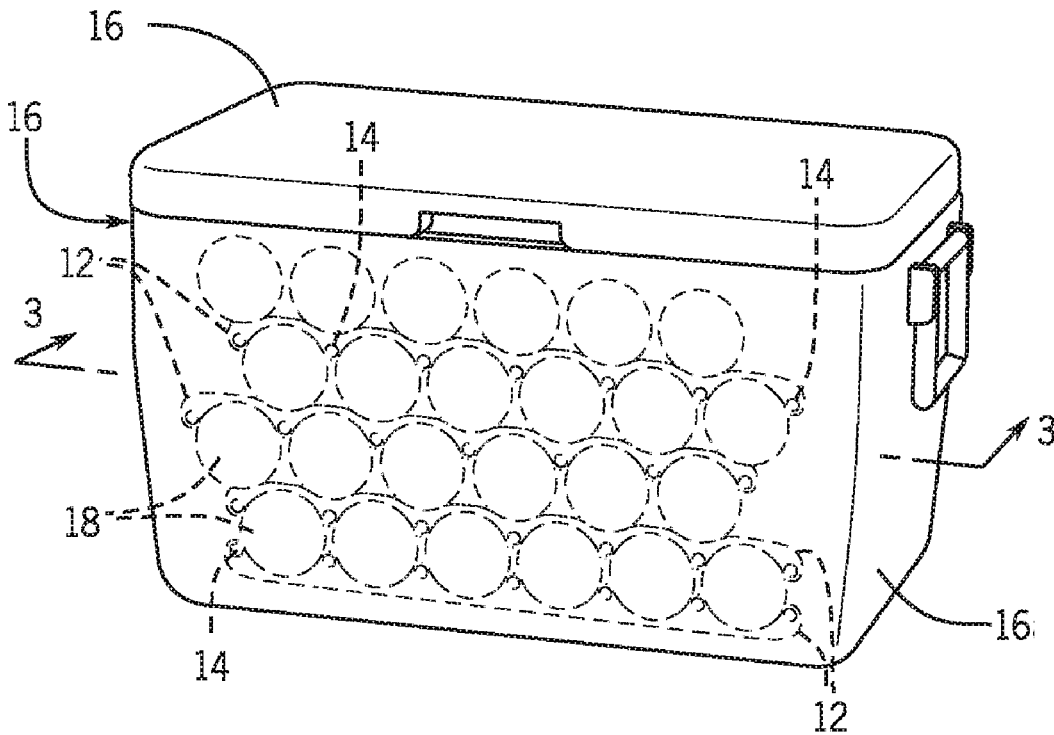
(57) **ABSTRACT**

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A cooling pack including a flexible membrane defining an internal compartment. The cooling pack has an elongated shape having a first side edge, a second side edge, a top edge, a bottom edge, a front surface, and a rear surface. A cooling gel is disposed within the internal compartment of the flexible membrane. A plurality of dowels are disposed within the internal compartment. The plurality of dowels extend from the bottom edge to the top edge.

**Related U.S. Application Data**

(60) Provisional application No. 62/598,124, filed on Dec. 13, 2017.



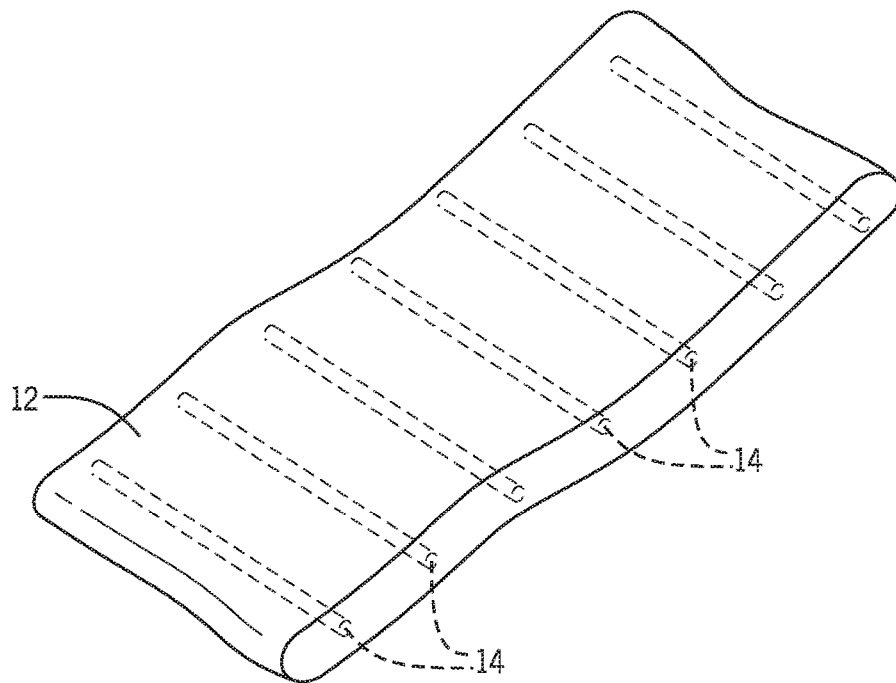


FIG. 1

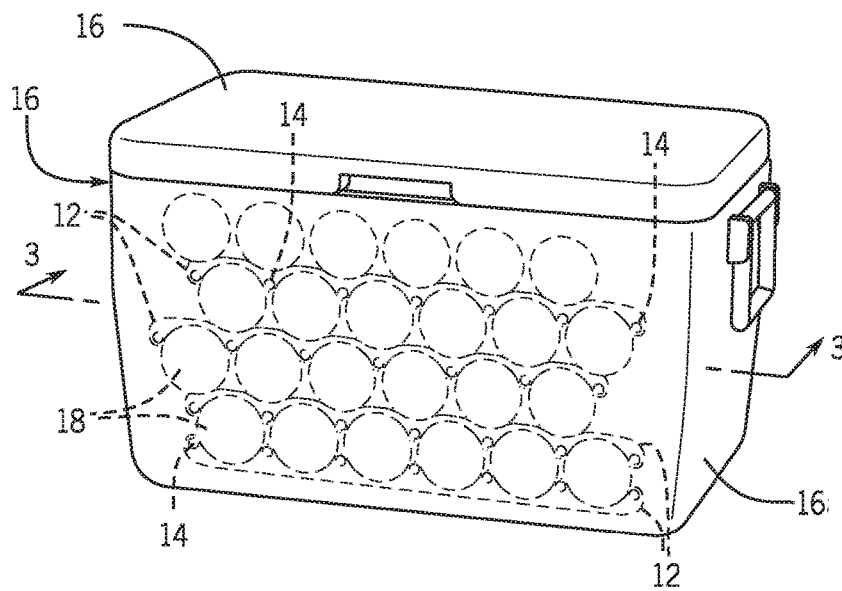


FIG. 2

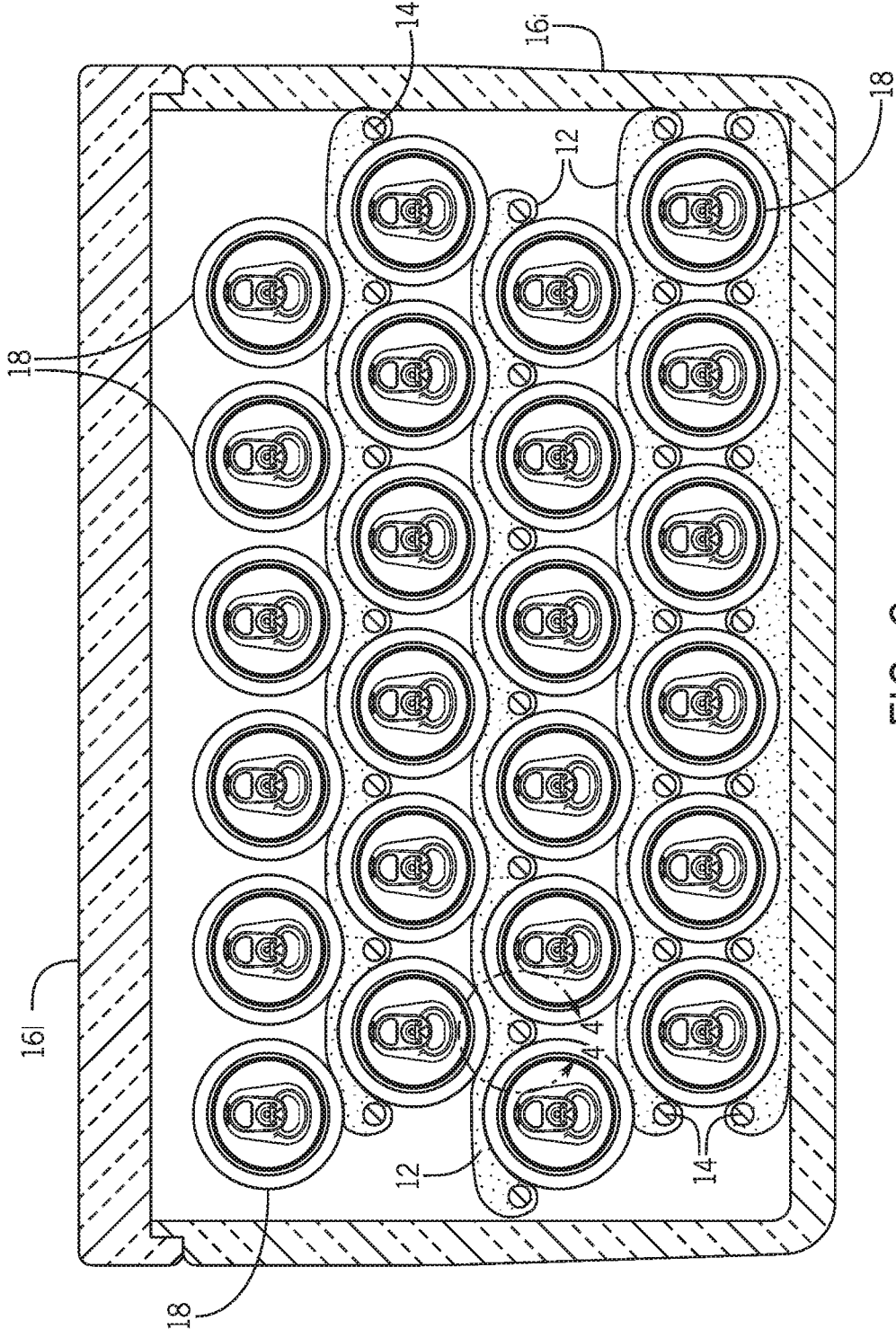


FIG. 3

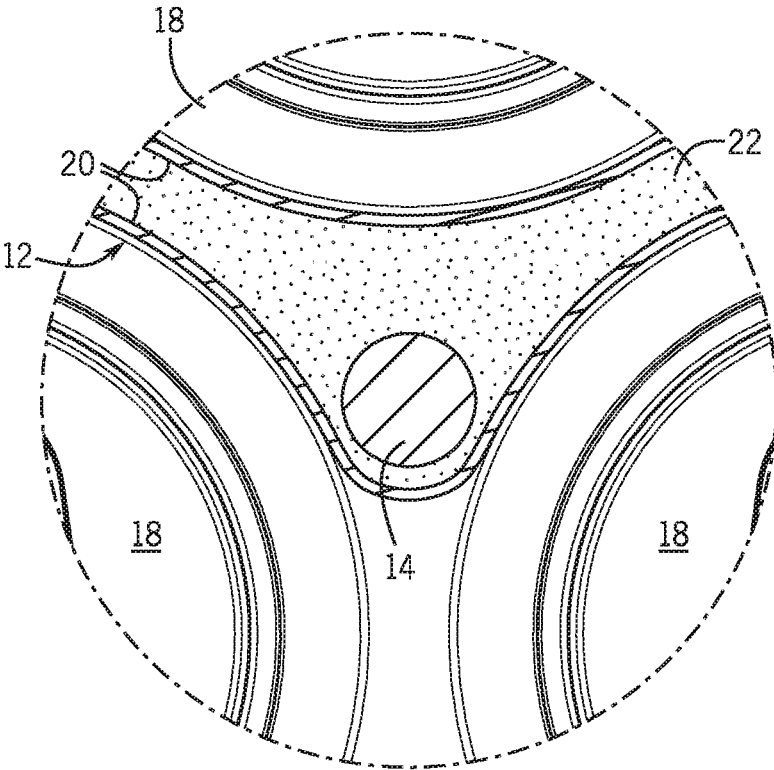


FIG. 4

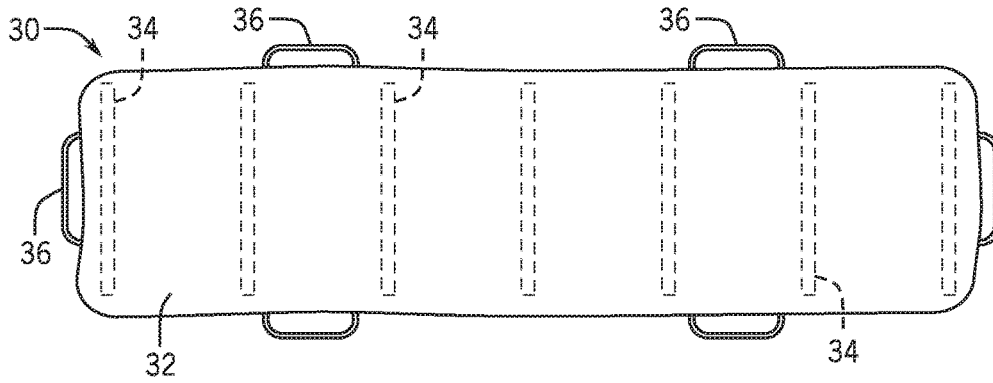


FIG. 5

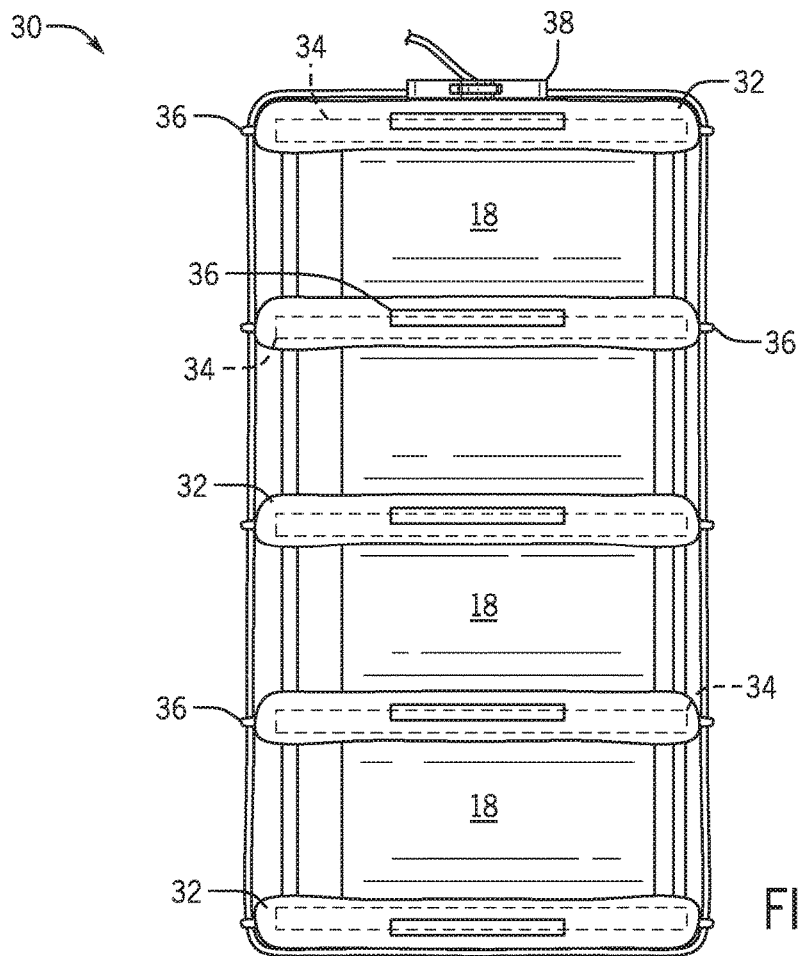


FIG. 6

**COOLING PACK****CROSS-REFERENCE TO RELATED APPLICATION**

**[0001]** This application claims the benefit of priority of U.S. provisional application No. 62/598,124, filed Dec. 13, 2017, the contents of which are herein incorporated by reference.

**BACKGROUND OF THE INVENTION**

**[0002]** The current invention relates to beverage coolers, and more particularly, to a refrigerated pack to efficiently cool cans and bottles.

**[0003]** Ice bags for coolers are costly with recurring use, bulky, and do not efficiently and quickly cool cans/bottles. Most of the ice does not come in direct contact with the can/bottles, thus not allowing for the most effective cooling.

**[0004]** There exists a need for a more efficient beverage cooling device which cools the beverages quickly, is light-weight, and is easily storable.

**SUMMARY OF THE INVENTION**

**[0005]** In one aspect of the present invention, a cooling pack comprises: a flexible membrane defining an internal compartment and comprising an elongated shape having a first side edge, a second side edge, a top edge, a bottom edge, a front surface, and a rear surface; a cooling gel disposed within the internal compartment; and a plurality of dowels disposed within the internal compartment, wherein the plurality of dowels extend from the bottom edge to the top edge.

**[0006]** In another aspect of the present invention, a method of cooling beverage containers comprises: providing a first cooling pack comprising: a flexible membrane defining an internal compartment and comprising an elongated shape having a first side edge, a second side edge, a top edge, a bottom edge, a front surface, and a rear surface; a cooling gel disposed within the internal compartment; and a plurality of dowels disposed within the internal compartment, wherein the plurality of dowels extend from the bottom edge to the top edge; placing the cooling pack within a cooler; and placing beverage containers on top of the front surface of the flexible membrane, in between the plurality of dowels.

**[0007]** These and other features, aspects and advantages of the present invention will become better understood with reference to the following drawings, description and claims.

**BRIEF DESCRIPTION OF THE DRAWINGS**

**[0008]** FIG. 1 is a perspective view of an embodiment of the present invention;

**[0009]** FIG. 2 is a front perspective view of an embodiment of the present invention shown in use;

**[0010]** FIG. 3 is a cross-sectional view of the present invention taken along line 3-3 of FIG. 2;

**[0011]** FIG. 4 is a detail elevation view indicated by the line 4-4 of FIG. 3;

**[0012]** FIG. 5 is a top plan view of an embodiment of the present invention; and

**[0013]** FIG. 6. is side elevation view of an embodiment of the present invention.

**DETAILED DESCRIPTION OF THE INVENTION**

**[0014]** The following detailed description is of the best currently contemplated modes of carrying out exemplary embodiments of the invention. The description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating the general principles of the invention, since the scope of the invention is best defined by the appended claims.

**[0015]** Broadly, an embodiment of the present invention is a preset frozen gel pack that forms around each can/bottle and allows direct contact with each can/bottle for a quicker cooling. The packs are materially lighter, and reusable compared to traditional ice. Thus, the packs can be used when bagged ice is not readily available. The packs are reusable and provide a colder can in a more cost-effective way. The pack further allows more room in recreational coolers than typical ice. Over the long term, the cost of purchasing new ice far exceeds the price of an equivalent set of ice packs to quickly cool the same amount of product.

**[0016]** Referring to FIGS. 1 through 4, the present invention includes a cooling pack 12. The cooling pack 12 includes a flexible membrane 20 defining an internal compartment. The cooling pack 12 has an elongated shape having a first side edge, a second side edge, a top edge, a bottom edge, a front surface, and a rear surface. A cooling gel 22 is disposed within the internal compartment of the flexible membrane 20. A plurality of dowels 14 are disposed within the internal compartment. The plurality of dowels 14 extend from the bottom edge to the top edge.

**[0017]** In certain embodiments, the plurality of dowels 14 are evenly spaced apart and parallel relative to one another. The plurality of dowels 14 are each elongated cylinders. The plurality of dowels 14 may be within the internal compartment and in contact with the cooling gel 22. For example, the cooling gel 22 may surround the plurality of dowels 14. The cooling gel 22 flows around the dowels 14 to allow for more direct contact. The dowels 14 may be movable so different cans or bottles can easily fit within the cooling pack 12.

**[0018]** The cooling pack 12 and the beverage containers 18 are layered within a cooler 13. As illustrated in FIG. 3, the cooling pack 12 touches virtually the entire beverage containers 18 which cools the liquid quicker. The cooling pack 12 allows for efficient stacking, thus saving a significant amount of space and weight.

**[0019]** The present invention may include the following dimensions: about a 20 inch (length) by 4 inch (height) by ¾ inch (diameter). The flexible membrane 20 may be made of clear plastic. The present invention may include four up to twelve dowels 14, such as about seven dowels 14. The dowels may be about 2.5 inches in height and may be a pre-formed plastic, wherein two dowels 14 are on each end and the remaining five dowels 14 are separated by about 2.5 to 3.25 inches. The above dimensions may be altered to fit different sized coolers 16.

**[0020]** A first layer of beverage containers 18 are placed in the cooler 16. In one embodiment, a first cooling pack 12 may allow for six individual beverage containers 18 to fit in between the dowels 14 with substantial direct contact to the frozen gel 22. The first cooling pack 12 is placed below the first layer of beverage containers 18. A second cooling pack 12 is placed on top of the first layer of beverage containers 18. The dowels 14 act as a guide. When the second cooling

pack **12** is put on top of the beverage containers **18**, the present invention allows the bottom beverage containers **18** to be additionally chilled from the above second cooling pack **12** thus essentially chilling all sides of the beverage container **18**.

[0021] In one embodiment, the beverage containers **18** are stacked. The first layer of beverage containers **18** benefit from the cooling pack **12** above them, while the second layer of beverage containers **18** fit snugly into the slots formed by the dowels **14**. With a slight shift of less than 1 inch, the different levels of cooling packs **12** create an effective interlocking mechanism that allows the cooling packs **12** to maximize contact with the surface area of the beverage containers **18**. This slight staggering allows for efficient use of space in a cooler **16**, as well as the beverage containers **18** being in full contact with the semi frozen gel **22**. The stacking further reduces the potential of beverage containers **18** sliding and consuming additional space. A third cooling pack **12** may cover the second layer of beverage containers **18** and so on. A full case of beverage containers **18** can be completely chilled with four cooling packs **12**. It can also be adequately chilled with three cooling packs **12**, while leaving the top row of beverage containers **18** exposed.

[0022] In one embodiment, team logos or any sort of ornamental designs may be printed on the flexible member **20** of the cooling pack **12**. In an alternative embodiment, the cooling packs **12** can be used to cool medications, baby formula/milk, or any additional items that require cooling.

[0023] Referring to FIGS. **5** and **6**, the present invention includes a cooling pack **30**. The cooling pack **30** includes a flexible membrane **32** defining an internal compartment. The cooling pack **32** has an elongated shape having a first side edge, a second side edge, a top edge, a bottom edge, a front surface, and a rear surface. A cooling gel is disposed within the internal compartment of the flexible membrane **32**. A plurality of dowels **34** are disposed within the internal compartment. The plurality of dowels **34** extend from the bottom edge to the top edge. A plurality of loops **36** may be coupled to the first side edge, the second side edge, the top edge, and the bottom edge. The loops **36** allow the cooling packs **30** to secure to one another while being stored. A cord and buckle **38** run through the loops **36** and attach the cooling packs **30** together.

[0024] It should be understood, of course, that the foregoing relates to exemplary embodiments of the invention

and that modifications may be made without departing from the spirit and scope of the invention as set forth in the following claims.

What is claimed is:

1. A cooling pack comprising:
  - a flexible membrane defining an internal compartment and comprising an elongated shape having a first side edge, a second side edge, a top edge, a bottom edge, a front surface, and a rear surface;
  - a cooling gel disposed within the internal compartment; and
  - a plurality of dowels disposed within the internal compartment, wherein the plurality of dowels extend from the bottom edge to the top edge.
2. The cooling pack of claim 1, wherein the cooling gel surrounds the plurality of dowels.
3. The cooling pack of claim 1, wherein the plurality of dowels are parallel relative to one another.
4. The cooling pack of claim 1, wherein the plurality of dowels are each elongated cylinders.
5. A method of cooling beverage containers comprising steps of:
  - providing a first cooling pack comprising:
    - a flexible membrane defining an internal compartment and comprising an elongated shape having a first side edge, a second side edge, a top edge, a bottom edge, a front surface, and a rear surface;
    - a cooling gel disposed within the internal compartment; and
    - a plurality of dowels disposed within the internal compartment, wherein the plurality of dowels extend from the bottom edge to the top edge;
  - placing the cooling pack within a cooler; and
  - placing beverage containers on top of the front surface of the flexible membrane, in between the plurality of dowels.
6. The method of claim 5, further comprising a step of:
  - placing a second cooling pack on top of the beverage containers within the cooler such that the beverage containers are in between a plurality of dowels of the second cooling pack.
7. The method of claim 5, wherein the plurality of dowels are evenly spaced apart and parallel relative to one another.
8. The method of claim 5, wherein the plurality of dowels are each elongated cylinders.

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