PORTABLE COOLER WITH DRAWERS

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ABSTRACT

A portable food storage chest comprising an open topped rectangular container body comprising a bottom wall, a rear wall, a front wall, and two sidewalls. The bottom wall, rear wall, front wall and two sidewalls are attached along peripheral edges thereof. The interior of the body is segmented into four sections: first and second wet compartments; a dry compartment located intermediate between the first and second wet compartments; and a third wet compartment located between the first and second wet compartments and between the dry compartment and the rear wall of the body. The dry compartment has slideable drawers that are capable of containing a variety of food items. Preferably, there are three slideable drawers in the dry compartment. Each of the slideable drawers are insertable into a drawer body, which has a bottom wall, top wall, rear wall and two side walls, thereby forming a watertight drawer enclosure.
PORTABLE COOLER WITH DRAWERS

[0001] This invention relates to a cooler that includes drawers. More specifically, the present invention relates to a cooler that includes drawers.

BACKGROUND AND PRIOR ART

[0002] Portable coolers, or ice chests, typically comprise a single insulated chamber where ice is placed in the chamber in direct contact with items to be cooled. A major disadvantage of such portable coolers is that food items are in direct contact with melting ice, often ruining the food items since not all food items survive immersion in water. Further, not all food items need to be kept at ice temperatures or below. Frequently all that is needed is a gentle cooling, such as found in the interior of a household refrigerator.

[0003] These problems have been recognized in the prior art and various configurations of ice chests have been used for separating food from melting ice. However, cooling units designed to solve this problem generally have been constructed in an elaborate manner and are often clumsy to transport and too expensive for casual users, for example, for family picnics and the like.

[0004] The novel features that are considered characteristic of the invention are set forth with particularity in the appended claims. The invention itself, however, both as to its structure and its operation together with the additional object and advantages thereof will best be understood from the following description of the preferred embodiment of the present invention when read in conjunction with any accompanying drawings. Unless specifically noted, it is intended that the words and phrases in the specification and claims be given the ordinary and accustomed meaning to those of ordinary skill in the applicable art or arts. If any other meaning is intended, the specification will specifically state that a special meaning is being applied to a word or phrase. Likewise, the use of the words “function” or “means” in the Description of Preferred Embodiments is not intended to indicate a desire to invoke the special provision of 35 U.S.C. §112, paragraph 6 to define the invention. To the contrary, if the provisions of 35 U.S.C. §112, paragraph 6, are sought to be invoked to define the invention(s), the claims will specifically state the phrases “means for” or “step for” and a function, without also reciting in such phrases any structure, material, or act in support of the function. Even when the claims recite a “means for” or “step for” performing a function, if they also recite any structure, material or acts in support of that means of step, then the invention is not to invoke the provisions of 35 U.S.C. §112, paragraph 6. Moreover, even if the provisions of 35 U.S.C. §112, paragraph 6, are invoked to define the invention, it is intended that the inventions not be limited only to the specific structure, material or acts that are described in the preferred embodiments, but in addition, include any and all structures, materials or acts that perform the claimed function, along with any and all known or later-developed equivalent structures, materials or acts for performing the claimed function.

BRIEF DESCRIPTION OF THE DRAWING

[0009] FIG. 1 is a perspective view of the device according to the present invention.

[0010] FIG. 2 illustrates the device according to the present invention with the three lids open.

[0011] FIG. 3 is a front view of the device according to the present invention.

[0012] FIG. 4 is a top view of the device according to the present invention.

[0013] FIG. 5 is a perspective view of the device according to the present invention showing the back of the device.

[0014] FIG. 6 illustrates the drawers of the present invention.

[0015] FIG. 7 is a cutaway view of the present invention illustrating the combination of the drawer and drawer lids of the present invention.

SUMMARY OF THE INVENTION

[0005] It is an object of the present invention to provide a portable ice chest having dry compartments in thermal contact with wet compartments.

[0006] It is another object of the present invention to provide an ice chest having three wet compartments and one segmented dry compartment that is in thermal contact with at least one of the three wet compartments.

[0007] It is a further object of the present invention to provide an ice chest have first, second and third wet compartments and a dry compartment in thermal contact with the third wet compartment, said dry compartment comprising at least two separate drawers.

[0008] The novel features that are considered characteristic of the invention are set forth with particularity in the appended claims. The invention itself, however, both as to its structure and its operation together with the additional object and advantages thereof will best be understood from the following description of the preferred embodiment of the present invention when read in conjunction with the accompanying drawings. Unless specifically noted, it is intended that the words and phrases in the specification and claims be given the ordinary and accustomed meaning to those of ordinary skill in the applicable art or arts. If any other meaning is intended, the specification will specifically state that a special meaning is being applied to a word or phrase. Likewise, the use of the words “function” or “means” in the Description of Preferred Embodiments is not intended to indicate a desire to invoke the special provision of 35 U.S.C. §112, paragraph 6 to define the invention. To the contrary, if the provisions of 35 U.S.C. §112, paragraph 6, are sought to be invoked to define the invention(s), the claims will specifically state the phrases “means for” or “step for” and a function, without also reciting in such phrases any structure, material, or act in support of the function. Even when the claims recite a “means for” or “step for” performing a function, if they also recite any structure, material or acts in support of that means of step, then the invention is not to invoke the provisions of 35 U.S.C. §112, paragraph 6. Moreover, even if the provisions of 35 U.S.C. §112, paragraph 6, are invoked to define the invention, it is intended that the inventions not be limited only to the specific structure, material or acts that are described in the preferred embodiments, but in addition, include any and all structures, materials or acts that perform the claimed function, along with any and all known or later-developed equivalent structures, materials or acts for performing the claimed function.
DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

[0016] The present invention is useful for cooling food and beverages. The present invention is a portable ice chest 10 with dry compartments that are in thermal contact with wet compartments.

[0017] The present invention is a portable ice chest 10, such as a food and beverage cooler. The device 10 according to the present invention comprises an open topped rectangular container body 12 comprising a bottom wall 14, a rear wall 16, a front wall 18, and two sidewalls 20. The bottom wall 14, rear wall 16, front wall 18 and two sidewalls 20 are attached along peripheral edges thereof. This attachment is preferably unitary in that they are injection molded in a single piece, however other non-unitary attachments may be performed and still fall within the scope of the present invention. The bottom wall 14, rear wall 16, front wall 18 and two sidewalls 20 are insulating and preferably double walled having the space between the double walls evacuated for a vacuum or filled with either air or other suitable insulation materials.

[0018] The interior of the body 12 is segmented into four sections: first and second wet compartments 22 and 24; a dry compartment 26 located intermediate between the first and second wet compartments, 22 and 24; and a third wet compartment 28 located between the first and second wet compartments 22 and 24 and between the dry compartment 26 and the rear wall 16 of the body 12.

[0019] Each of the three wet compartments, 22, 24, and 28 further preferably include fluid egress apertures 30 (drains) that allows fluids to flow selectively out of the body 12. Preferably, these drains 30 are located in the rear wall 16 of the body 12. Alternatively, the three wet compartments, 22, 24 and 28 may be in fluid communication with each other and any fluid contained therein may then be drained using a single egress aperture 30 (drain), located in any one of the first, second or third wet compartments.

[0020] The dry compartment 26, which is critical to the present invention, is in thermal communication, but not fluid communication, with at least one of the three wet compartments, 22, 24, and 28. In one embodiment, the dry compartment 26 is in thermal communication with all three of the wet compartments, 22, 24, and 28. In an alternate embodiment, the dry compartment 26 is in thermal contact with the first and second wet compartments 22 and 24, but not the third wet compartment 28. In yet another alternate embodiment, the dry compartment 26 is in thermal contact with the third wet compartment 28, but is not in thermal contact with the first and second wet compartments 22 and 24. In this manner, items contained in the dry compartment 26 are cooled via thermal conduction without direct contact with melting ice.

[0021] The dry compartment 26 has at least one slidable drawers 32 that are capable of containing a variety of food items. Preferably, there are three slidable drawers 32 in the dry compartment 26, one of the slidable drawers have a depth that is at least twice that of the largest of the other two drawers. Each of the slidable drawers 32 are insertable into a drawer body 60, which has a bottom wall 61, top wall 62, rear wall 53 and two side walls 64, thereby forming a watertight drawer enclosure.

[0022] Preferably each of the slidable drawers 32 are removable from the body 12 and are each separately lidded. The lids 24 for each of the at least one slidable drawers is attachable to the individual drawer 32 via a watertight seal, such as those commonly found in the food storage and preservation industry. Each lid 34 may also have a centered lifting/removing handle 36. Further, the front of each drawer 32 may include a pull handle 38 such as those commonly found in the food storage industry. Finally, the drawers 32 may include any of a variety of inserts, such as separators for cutlery, condiments and other contained objects.

[0023] A partition 27 that separates the dry compartment 26 from the third wet compartment 28 may be perforated with a multiplicity of apertures that allow fluid to transfer between the third wet compartment 28 and the drawer enclosures 60, thereby allowing for thermal conduction between the fluid and the drawer enclosures 60.

[0024] The body 12 further includes at least one insulated top 40 that is attached to the rear wall 16 via at least one hinge 42. The hinge 42 can be of any form suitable for food storage containers, such as living hinges, barrel and pin hinges, continuous hinges and the like. The at least one insulated top 40 is secured in a closed position either by a friction fit between the top 40 and the front wall 18, the rear wall 16, and the two side walls 20, or via a snap, catch or other closure mechanisms. Further, the uppermost surface of the top 40 may contain interior access apertures; drink cups or other useful additions. Alternatively, there may be a separate insulated top 40 for each of the three wet compartments, 22, 24 and 28. In yet another embodiment, the separate top 40 over the third wet compartment 28 may extend over the dry compartment 26, which may optionally include a recesses surface 44 suitable for either food preparation or the storage of thin, flat objects. Finally, each top 40 may have a handle 46, recessed or otherwise, for lighting the top about the hinge 42 axis.

[0025] The body 12 may also contain carrying handles 50 located on each side 20 such as those commonly found in the food storage and transportation industry.

[0026] The preferred embodiment of the invention is described above in the Drawings and Description of Preferred Embodiments. While these descriptions directly describe the above embodiments, it is understood that those skilled in the art may conceive modifications and/or variations to the specific embodiments shown and described herein. Any such modifications or variations that fall within the purview of this description are intended to be included therein as well. Unless specifically noted, it is the intention of the inventor that the words and phrases in the specification and claims be given the ordinary and accustomed meanings to those of ordinary skill in the applicable art(s). The foregoing description of a preferred embodiment and best mode of the invention known to the applicant at the time of filing the application has been presented and is intended for the purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise form disclosed, and many modifications and variations are possible in the light of the above teachings. The embodiment was chosen and described in order to best explain the principles of the invention and its practical application and to enable others skilled in the art to best
utilize the invention in various embodiments and with various modifications as are suited to the particular use contemplated.

What is claimed is:
1. A portable food storage chest comprising:
   a) an open topped rectangular container body comprising a bottom wall, a rear wall, a front wall, and two sidewalls; the bottom wall, rear wall, front wall and two sidewalls are attached along peripheral edges thereof, thereby defining an interior;
   b) the interior of the body comprising four separated sections: first and second wet compartments; a dry compartment located intermediate between the first and second wet compartments; and a third wet compartment located between the first and second wet compartments and between the dry compartment and the rear wall of the body;
   c) the dry compartment comprising at least one drawer enclosure comprising a bottom wall, top wall, rear wall and two side walls, thereby forming a watertight drawer enclosure and at least one slidable drawers that are capable of insertion into the drawer enclosure, each of said slidable drawer further comprising a sealable drawer top; and
   d) at least one top pivotally attached to the body.
2. The chest according to claim 1 wherein the dry compartment comprises three drawer enclosures and three slidable drawers.
3. The chest according to claim 2 wherein the sealable drawer top further comprises a centered handle.
4. The chest according to claim 2 wherein the drawer enclosures are in fluid communication with the third wet compartment.
5. The chest according to claim 1 where in there are three pivotally attached tops, one for each of the three wet compartments.
6. The chest according to claim 5 wherein the pivotally attached top over the third wet compartment extends over the dry compartment.
7. The chest according to claim 4 further comprising a partition between the third wet compartment and the dry compartment is perforated with a plurality of apertures, thereby allowing fluid communication between the third wet compartment and the dry compartment.

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