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DeGennaro et al.

(54) **COOLER FOR USE WITH A BEVERAGE KEG**

(76) Inventors: **Kenneth DeGennaro**, Huntington, NY (US); **Christopher Amenita**, Huntington, NY (US)

Correspondence Address:
CARTER, DELUCA, FARRELL & SCHMIDT, LLP
445 BROAD HOLLOW ROAD, SUITE 420
MELVILLE, NY 11747 (US)

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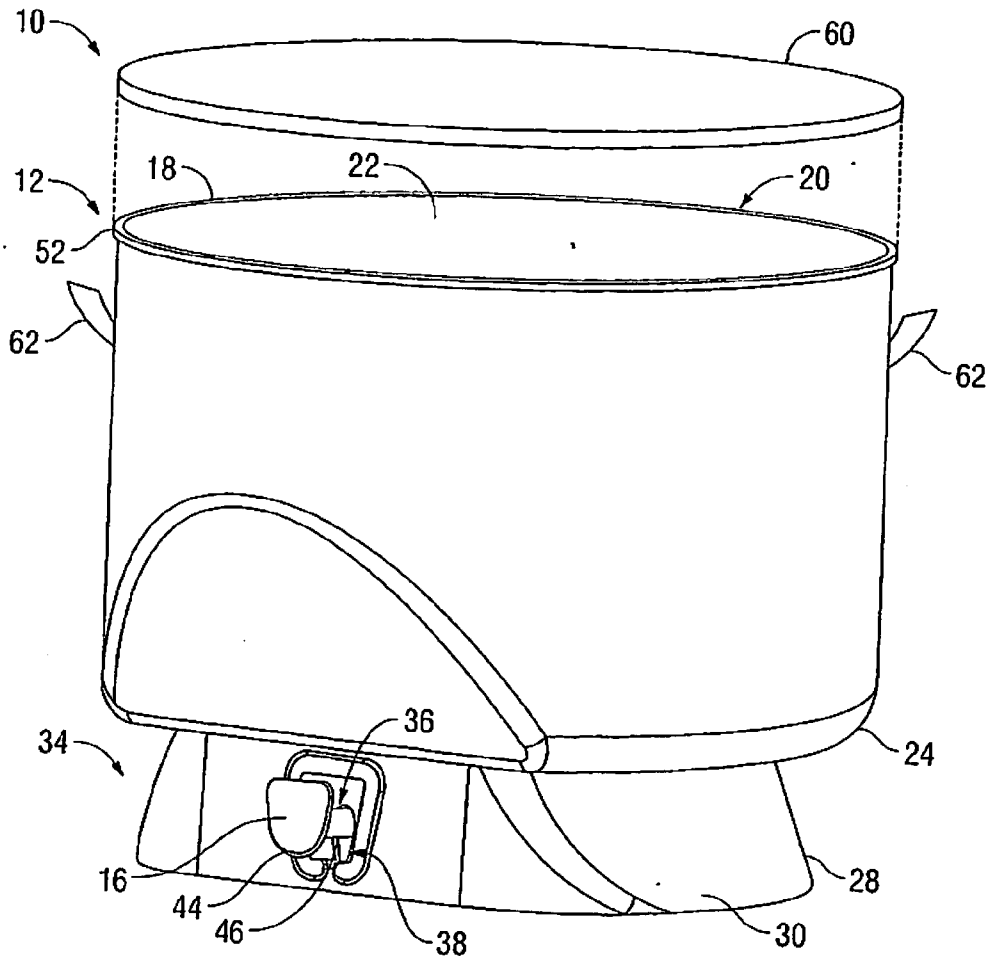
(57) **ABSTRACT**

A cooler is provided and includes a housing having a sidewall portion defining an open compartment of a size larger than a beverage keg. The housing also having a wall portion defining a partially opened base member configured to support the compartment and provide a seat for at least a portion of the beverage keg. The base member includes an opening configured to receive a spout operatively associated with the beverage keg. A sealing member is configured to provide a substantially fluid tight seal between at least a portion of the beverage keg and the base member. An anti-lift plug is operatively associated with the housing and is adapted to releasably couple to the spout of the beverage keg and contact a portion of the opening of the base member such that the beverage keg is prevented from floating during dispensing of a beverage contained within the beverage keg.



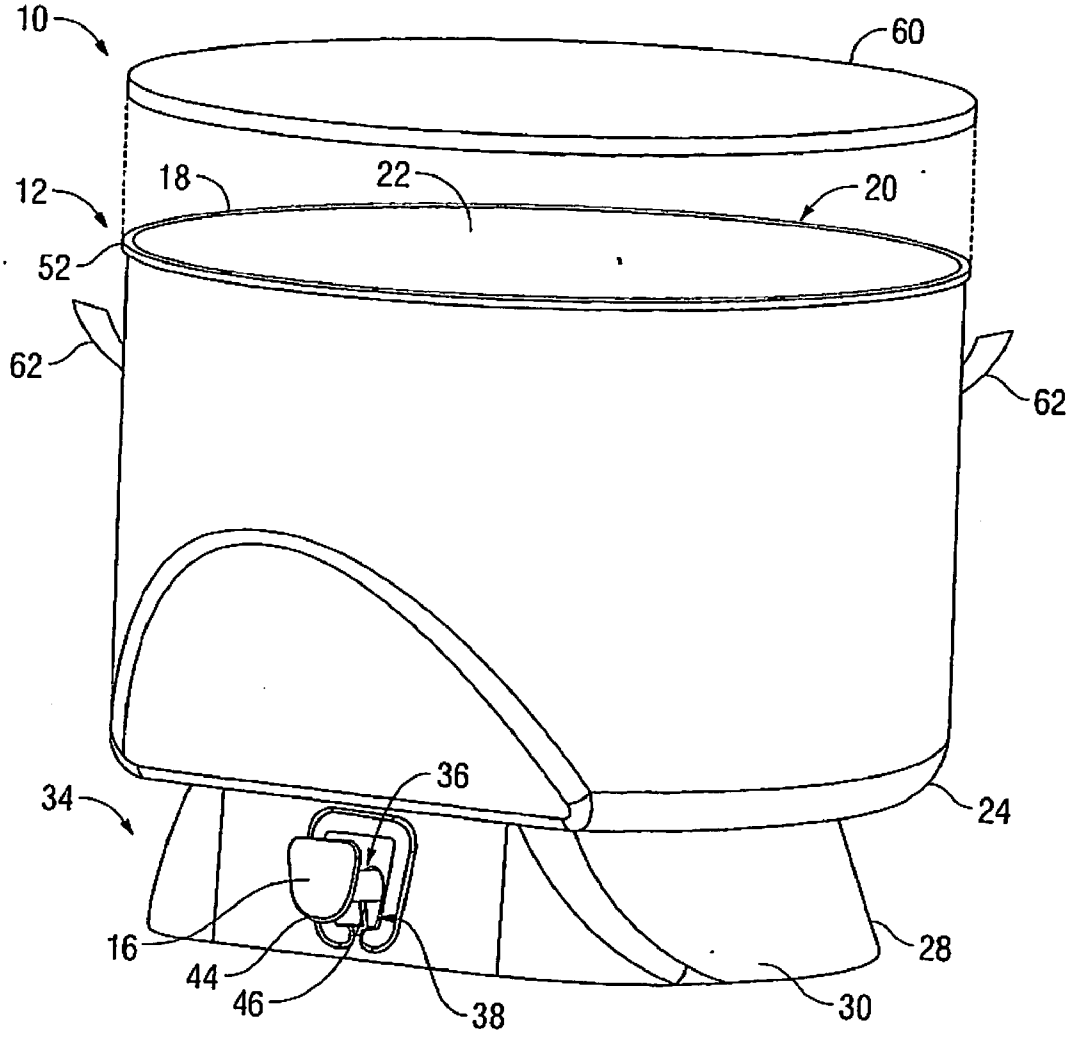


FIG. 1

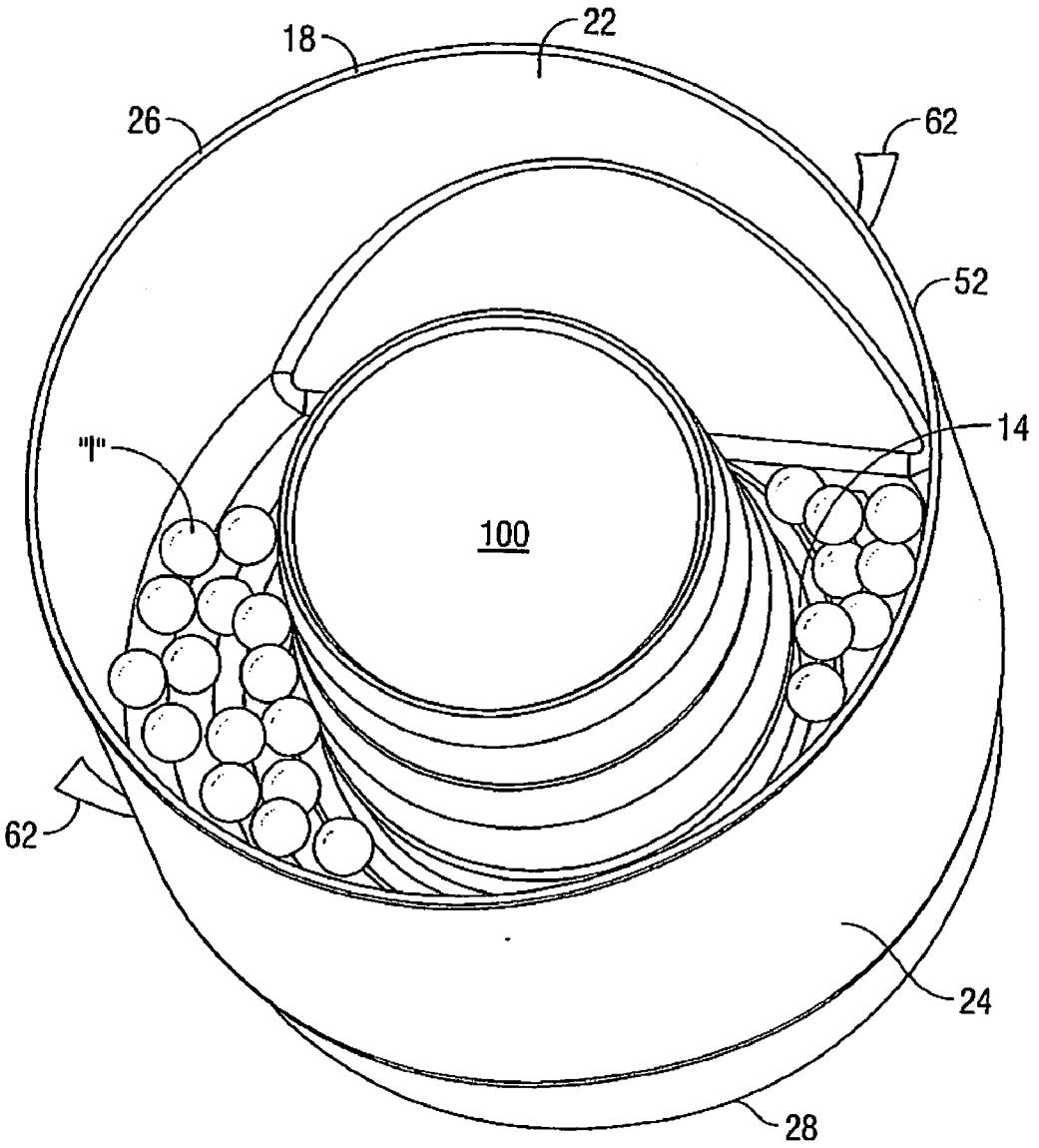


FIG. 2

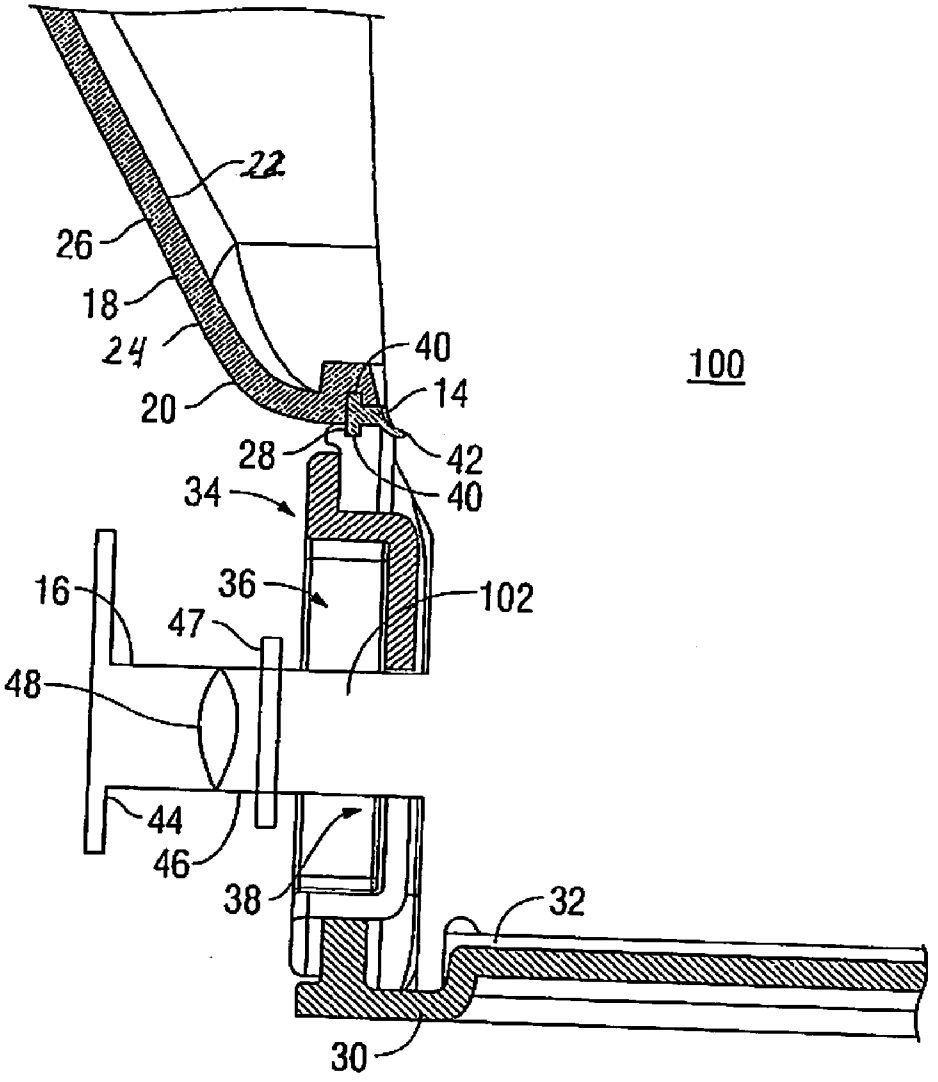


FIG. 3

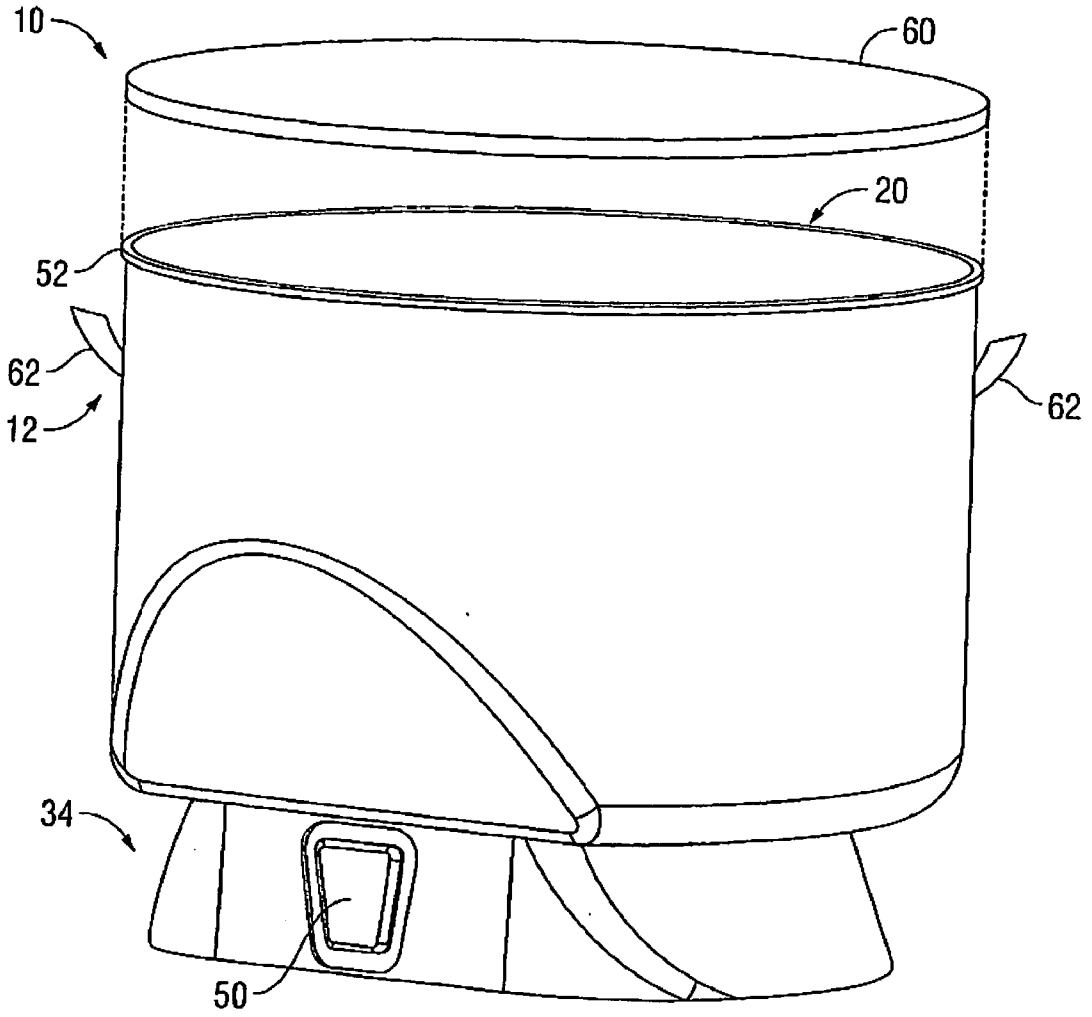


FIG. 4

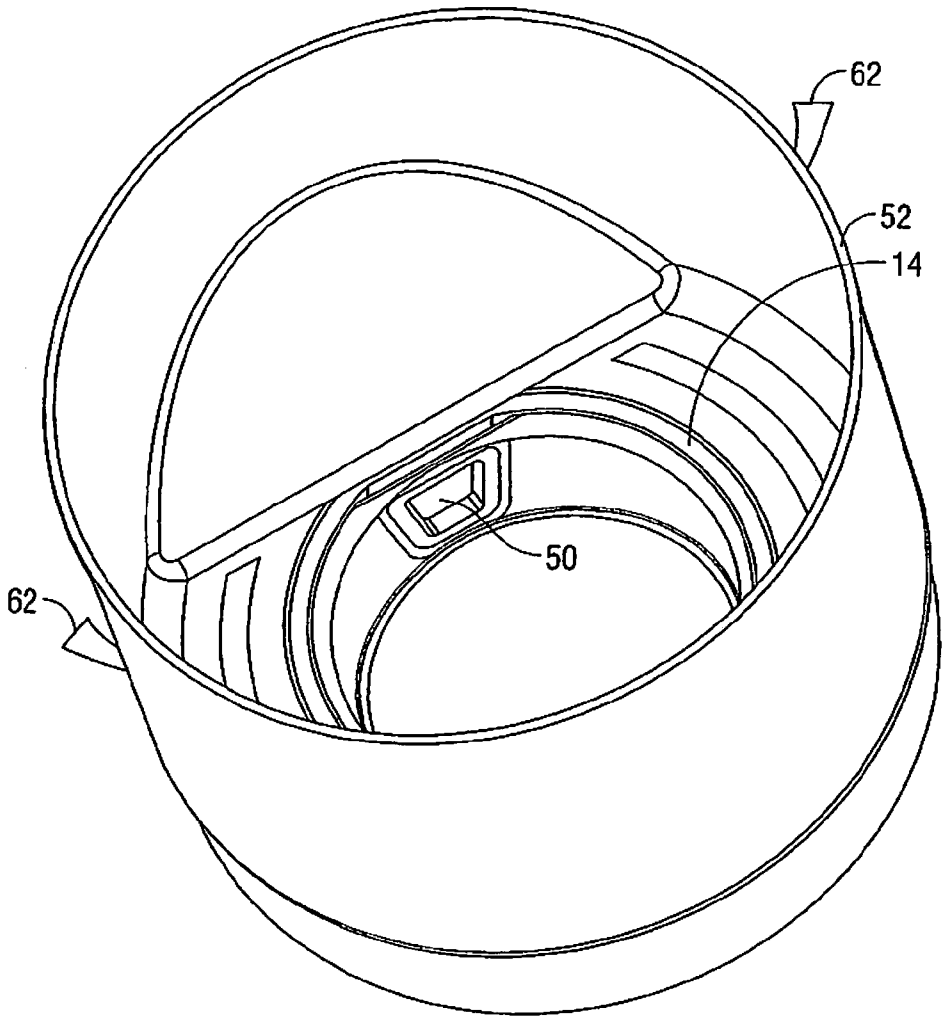


FIG. 5

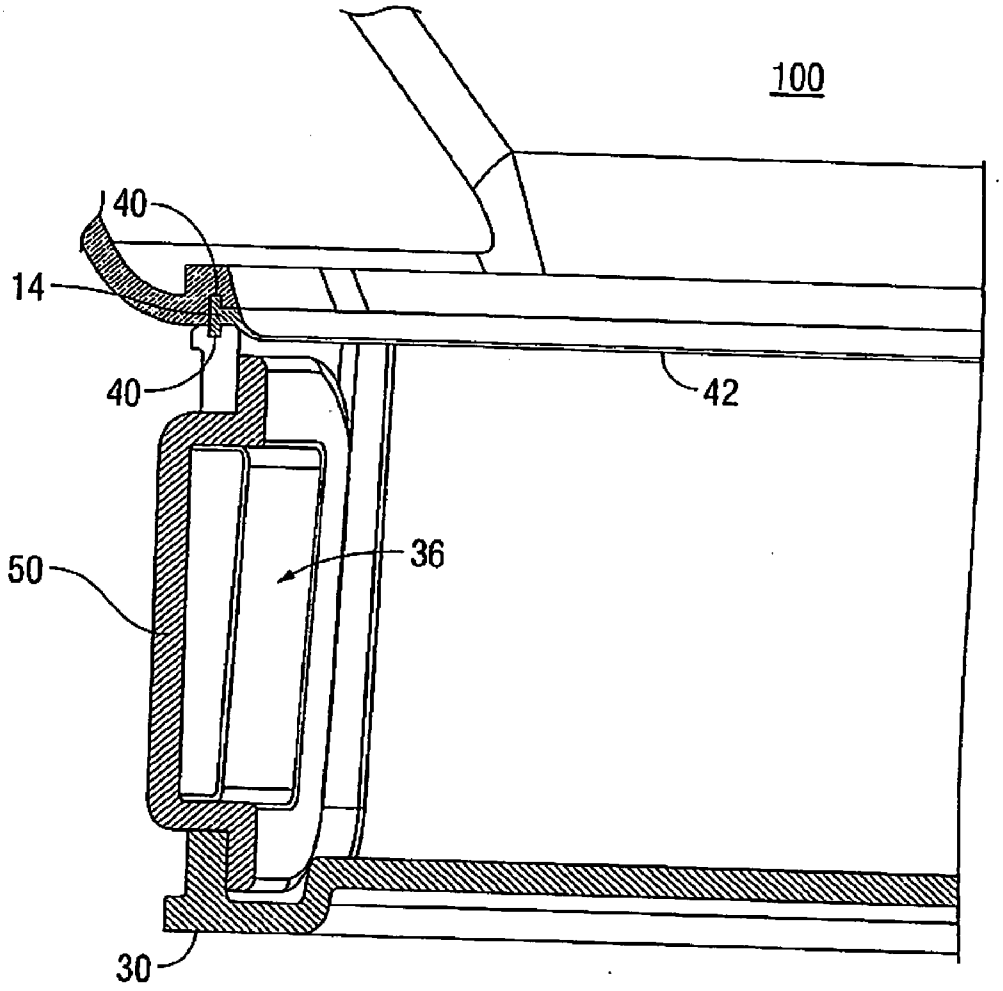


FIG. 6

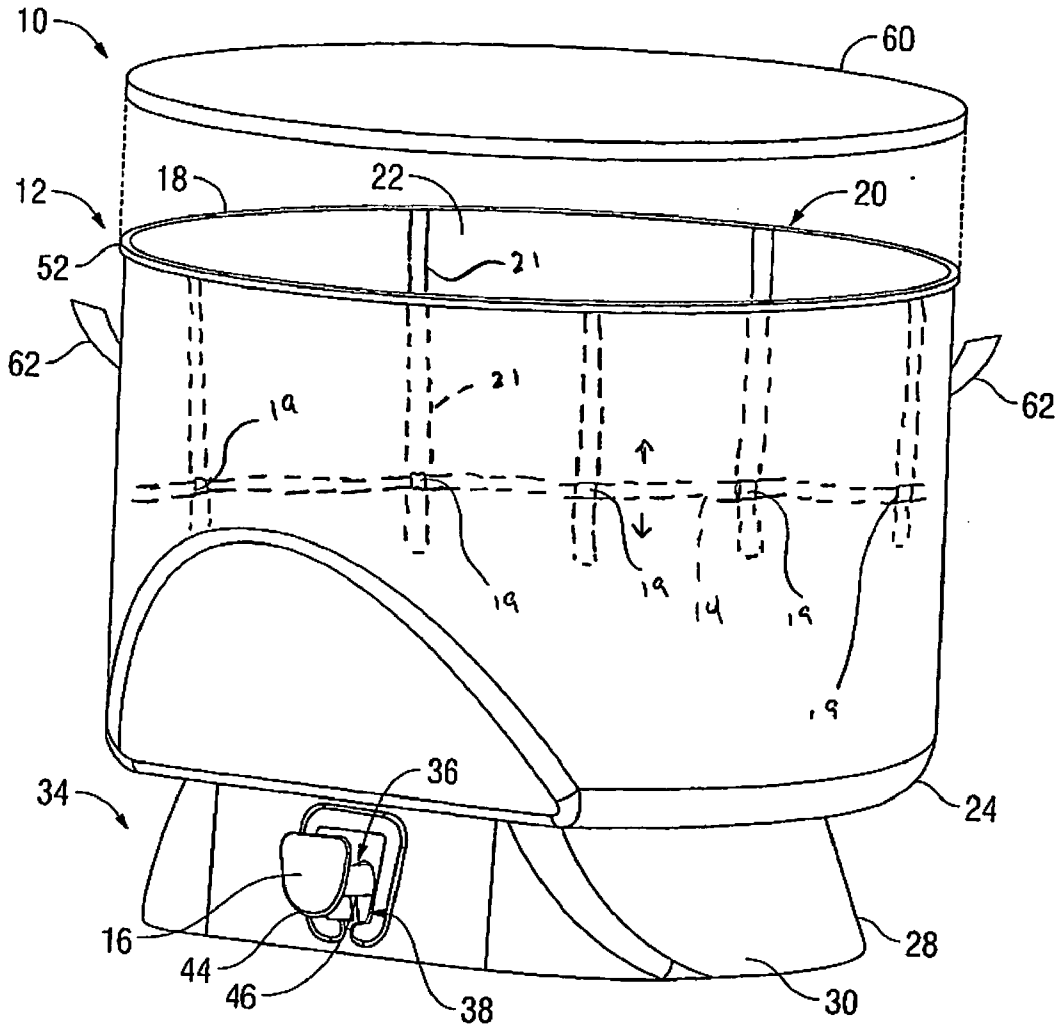

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FIG. 7

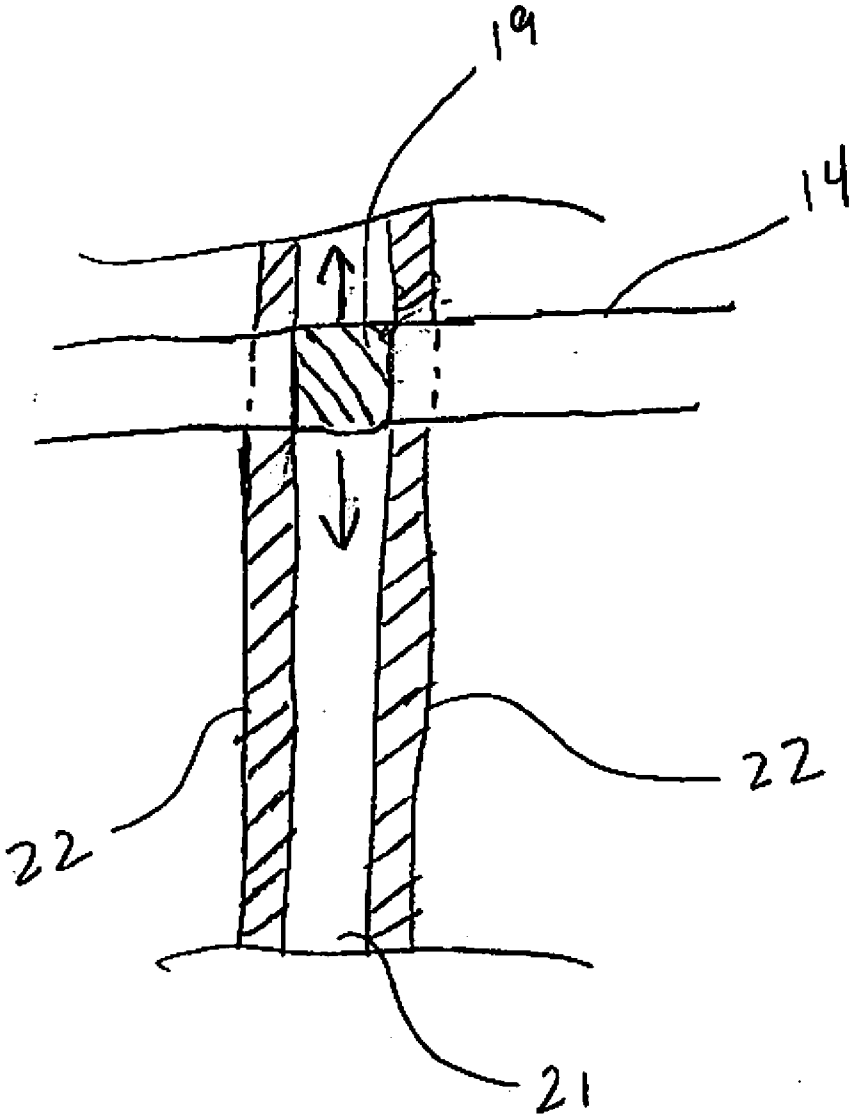

FIG. 8

COOLER FOR USE WITH A BEVERAGE KEG

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to, and the benefit of, U.S. Provisional Patent Application Ser. No. 61/139,780 filed on Dec. 22, 2008, the entire content of which is incorporated by reference herein.

BACKGROUND

[0002] 1. Technical Field

[0003] The present disclosure relates to a cooler configured for use with a beverage keg and, more particularly, to a cooler configured to receive ice or other cooling material while holding the beverage keg in a fixed upright position such that a beverage contained within the beverage keg is maintained in a chilled state relative to an ambient environment.

[0004] 2. Related Art

[0005] Beverages, and especially carbonated beverages, are sometimes supplied in bulk quantities (e.g., a bulk quantity of beverage, especially a carbonated beverage such as beer), for example, for use in dispensing individual servings. Such bulk quantities are often purchased as barrels or as fractions of barrels referred to as kegs. The keg family typically refers to a domestic keg (15.5 gallons), an import keg (13.2 gallons), a pony or quarter barrel keg (7.75 gallons), a 6^{th}-barrel keg (5.23 gallons) and a mini-keg (1.32 gallons).

[0006] Kegs of beverages are often purchased by consumers as an adjunct to large get-togethers, such as special events, family reunions, picnics, etc. Even where such gatherings have sufficient attendance to consume the bulk quantity of beverage, nonetheless, certain problems exist where a consumer without special equipment seeks to dispense a beverage, such as a carbonated beverage, acquired in keg quantities. For example, typically, it is necessary to keep the bulk quantity of beverage in a chilled environment. This is especially true where the event is held in an outdoor environment during warmer times, such as in the summer.

[0007] In order to maintain the beverage in a chilled state for consumption, the keg is often placed in a tub or vat (commonly referred to as a keg cooler) that may contain a coolant (e.g., crushed ice or the like) to maintain a reduced temperature for the beverage. However, because of the ambient environment, the ice melts, which, in turn, causes an excess of water to pool in the interior of the keg cooler. This excess water in the interior of the keg cooler can make dispensing the beverage from the beverage keg a burdensome procedure (especially considering the weight of the bulk quantity of beverage along with the weight of the water from the melted ice). For example, as the beverage is dispensed and consumed, the beverage keg may become buoyant in the water from the melted ice, which, may result in the keg floating in an unstable manner in the keg cooler making it difficult to dispense the beverage from the beverage keg. In addition, as the beverage keg floats on the water, more of the surface of the beverage keg (which is typically constructed of metal) is exposed to a warmer environment which increases the thermal transfer of heat to the contents of the beverage keg.

[0008] While various efforts have been made in the past to resolve one or more of the above identified difficulties and problems, there exists a need for an cooler that facilitates transport of a bulk quantity of beverage, that maintains the beverage at a reduced temperature in a convenient manner and which allows for the dispensing of the beverage in a more convenient manner.

SUMMARY

[0009] A cooler adapted for use with a beverage keg is provided. The cooler includes a housing having a sidewall portion defining an open compartment of a size larger than the beverage keg to provide space for ice around the keg within the compartment. The housing also has a wall portion defining a partially opened rigid base member configured to support the compartment and provide a seat for at least a portion of the beverage keg. The rigid base member includes an opening configured to receive a spout operatively associated with the beverage keg. A sealing member is configured to provide a substantially fluid tight seal between at least a portion of the beverage keg and the rigid base member when the beverage keg is positioned in the compartment of the housing and seated on the rigid base member. An anti-lift plug is operatively associated with the housing. In an embodiment the anti-lift plug may be adapted to releasably couple to the spout of the beverage keg and contact a portion of the opening of the rigid base member such that the beverage keg is prevented from floating during dispensing of a beverage contained within the beverage keg.

[0010] A keg cooler adapted for use with a beverage keg is provided. The keg cooler includes a housing having a sidewall portion defining an open compartment of a size larger than the beverage keg to provide space for ice around the keg within the compartment. The housing includes a wall portion defining a partially opened base member configured to support the compartment and provide a seat for at least a portion of the beverage keg. The rigid base member includes an opening configured to receive a spout operatively associated with the beverage keg. A sealing member is configured to provide a seal between the beverage keg and the rigid base member when the beverage keg is positioned in the compartment of the housing and seated on the rigid base member. An anti-lift plug operatively associated with the housing is configured to removably connect to the spout of the beverage keg and the rigid base member such that the beverage keg is prevented from floating during the dispensing of a beverage contained within the beverage keg.

[0011] A cooler assembly adapted for use with a beverage keg is provided. The cooler assembly includes a housing that defines an open compartment configured to receive the beverage keg therein and to provide a space for ice around the beverage keg. The housing includes a wall portion defining a partially opened rigid base member configured to support the compartment and provide a seat for at least a portion of the beverage keg. The rigid base member includes an opening configured to receive a spout operatively associated with the beverage keg. A sealing member is configured to provide a substantially fluid tight seal between at least a portion of the beverage keg and the rigid base member when the beverage keg is positioned in the compartment of the housing and seated on the rigid base member. An anti-lift plug adapted to releasably couple to the spout of the beverage keg is in operable communication with the housing such that the beverage keg is prevented from floating as the ice melts and as a

beverage contained in beverage keg becomes progressively depleted during dispensing thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] Various embodiments of the present disclosure are described herein with reference to the drawings wherein:

[0013] FIG. **1** is a front perspective view of a cooler adapted for use with a beverage keg in accordance with an embodiment of the present disclosure;

[0014] FIG. **2** is a top view of the cooler depicted in FIG. **1**;

[0015] FIG. **3** is a partial cross-sectional view of the cooler depicted in FIG. **2**;

[0016] FIG. **4** is a front perspective view of the cooler depicted in FIG. **1** with a housing plug connected to a base member of the housing;

[0017] FIG. **5** is a top view of the cooler depicted in FIG. **4**;

[0018] FIG. **6** is a partial cross-sectional view of the cooler depicted FIG. **5**;

[0019] FIG. **7** is a front perspective view shown in partial phantom of a cooler adapted for use with a beverage keg in accordance with an alternate embodiment of the present disclosure; and

[0020] FIG. **8** is an isolated, partial cross-sectional view illustrating a sealing member including a detent configuration that is operably disposed in a track associated with an interior wall of the cooler depicted in FIG. **7**.

DETAILED DESCRIPTION

[0021] For purposes of the present disclosure, a keg refers to any containerized bulk quantity of beverage generally in the keg family to barrel range although it is not limited to these exact gallon quantities.

[0022] The present disclosure provides a cooler adapted for use with a beverage keg that may be used by a consumer to dispense a beverage contained therein. The cooler is intended to maintain the beverage contained in the beverage keg at a desirable temperature and the beverage keg in a substantially fixed position during the dispensing of the beverage.

[0023] With reference to FIGS. **1-6**, and initially with reference to FIG. **1** a cooler **10** adapted for use with a beverage keg **100** (FIG. **2**) is shown. Cooler **10** includes a housing **12**, a sealing member **14** (FIG. **2**) and an anti-lift plug **16**.

[0024] Housing **12** includes a generally cylindrical shape and includes sidewall portion **18** that defines an open compartment **20**. In the embodiment illustrated in FIGS. **1-6**, sidewall portion **18** includes spaced apart walls **22** and **24** having a quantity of insulating material **26** (FIGS. **2** and **3**) contained therebetween. Suitable insulating material **26** may include but is not limited to high density 11/2" polyurethane foam, Eva foam, open or closed cell foam, Thin-Sulate™, Texolite®, neoprener™, etc. Sidewall portion **18** forms a compartment **20** of a size larger than the beverage keg **100** to provide space for a coolant (e.g., ice "I") around the beverage keg **100** when the keg is seated within the compartment **20**.

[0025] With reference to FIGS. **2** and **3**, housing **12** includes wall portion **28** including walls **30** and **32** (as best seen in FIG. **3**) defining a partially opened rigid base member **34**. As used herein rigid is defined as being capable of supporting compartment **20**. Walls **30** and **32** extend across a bottom of the base member **34** closing the latter (see FIG. **5**, for example). Base member **34** is configured to support the compartment **20** and provide a seat for at least a portion of the beverage keg **100**. Walls **30** and **32** may include insulation as previously described herein with respect to sidewalls **22** and **24**.

[0026] Housing **12** includes a cavity **36** that includes an opening **38** (see FIGS. **1** and **3**). In the embodiments illustrated in FIGS. **1-6**, cavity **36** and opening **38** are each operatively disposed on base member **34**. Opening **38** is disposed at a predetermined position within the cavity **36** and configured to receive a spout **102** operatively associated with the beverage keg **100**. Opening **38** may have any suitable configuration. In the embodiments illustrated in FIGS. **1-6**, opening **38** includes a generally circumferential configuration. In embodiments, opening **38** may include one or more suitable sealing structures or other structures (not shown) that are configured to form a seal about a periphery of the spout **102** of the beverage keg **100**.

[0027] A sealing member **14** is operatively connected to the housing **12** between the base member **34** and the compartment **20** (FIGS. **2** and **3**). In the embodiment illustrated in FIGS. **1-6**, sealing member **14** is disposed within a pair of circular grooves **40** (as best seen in FIG. **3**) disposed on each of the base member **34** and compartment **20**. Sealing member **14** may be made from any suitable material (e.g., a low or high Durometer elastomeric material). Sealing member **14** is configured to provide a substantially fluid tight seal between at least a portion of the beverage keg **100** and the base member **34** when the beverage keg **100** is positioned in the compartment **20** of the housing **12** and seated on the base member **34** (see FIG. **2**, for example). In the embodiment illustrated in FIGS. **1-6**, sealing member **14** includes a concave lip portion **42** that extends radially inwardly and along an inner periphery of one of the compartment **20** and the base member **34** (FIG. **3**). In the illustrated embodiment, lip portion **42** of sealing member **14** extends along a periphery of the base member **34**.

[0028] With reference again to FIGS. **1** and **3**, an anti-lift plug **16** is shown. Anti-lift plug **16** is operatively associated with the housing **20**. Anti-lift plug **16** may be made from any suitable material and may have any suitable configuration. The anti-lift plug **16** is adapted to releasably couple to the spout **102** of the beverage keg **100** and contact a portion of the opening **38** of the base member **34** (FIG. **3**) such that the beverage keg **100** is prevented from floating as the ice melts and as a beverage contained in beverage keg becomes progressively depleted during dispensing thereof. Anti-lift plug **16** includes a proximal end **44** that is configured to be grasped by a user and distal end **46** that is configured to removably connect to the spout **102** (by any suitable connection method) of the beverage keg **100**. In the illustrated embodiment, the distal end **46** operably couples to the spout **102** via a coupling mechanism **47** that couples the anti-lift plug **16** to the spout **102**. Anti-lift plug **16** is movably and/or removably attached to the spout **102** of the beverage keg **100** from an open position wherein the beverage is allowed to dispense from the beverage keg **100**, to a closed position wherein the beverage is prevented from dispensing from the beverage keg **100**. In an embodiment, anti-lift plug **16** may be configured as a dispensing mechanism. To this end, anti-lift plug **16** may include one or more valves **48** and/or apertures (not shown) that ultimately may be employed to dispense the beverage contained within the beverage keg.

[0029] With reference to FIGS. **4-6** and initially with reference to FIG. **4**, cooler **10** is shown including a housing plug **50**. Housing plug **50** is configured to removably attach to the opening **38** and/or cavity **36** of the base member **34** and

provide a substantially fluid tight seal thereto when the spout **102** of the beverage keg **100** is not received therein. To this end, housing plug **50** may have any suitable shape and may be made from any suitable material previously described herein. In the embodiment illustrated in FIGS. **4-6**, housing plug **50** includes a shape that is complementary to the cavity **36**. In certain instances, when the housing plug **50** is attached to the opening **38**, the cooler **10** may function as a bucket cooler for ice.

[0030] In the embodiments illustrated in FIGS. **1-6**, cooler **10** includes a removable closure or lid **60** (see FIG. **1** for example) that may be constructed with spaced apart walls and intermediate insulation in the manner heretofore described with respect to housing **12**. Lid **60** may be attachable to housing **12** by any suitable structure and/or device. In an embodiment, lid **60** is attachable to a circumferential lip **52** of housing **12** via a press or snap fit.

[0031] In order to render the cooler **10** conveniently portable, a pair of carrying handles **62** are secured to the outer wall of the housing **12** (see FIG. **1** for example).

[0032] In use, a consumer may position a beverage keg **100** within compartment **20** of cooler **10** and seat the beverage keg **100** within base member **34** (FIG. **2**). When properly seated, sealing member **14** provides a substantially fluid tight seal about a periphery of the beverage keg **100**. Once properly seated within the cooler **10**, a consumer may add a suitable amount of ice "I" to the compartment **20** and around the beverage keg **100**. If the keg is to be transported, a consumer may secure lid **60** to compartment **20**. Additionally, a consumer may secure the housing plug **50** the opening **38** and/or cavity **36** (FIG. **4**). Once the beverage contained within beverage keg **100** is ready for dispensing, a consumer may remove housing plug **50** from opening **38** and/or cavity **36** and attach anti-lift plug **16** to the spout **102** of beverage keg **100**. If the ice melts and water begins to pool within the compartment **20**, cooler **10** will be maintained in a substantially fixed upright position due to interaction between anti-lift plug **16** and opening **36** and/or cavity **36**.

[0033] From the foregoing and with reference to the various figure drawings, those skilled in the art will appreciate that certain modifications can also be made to the present disclosure without departing from the scope of the same. For example, it is contemplated that cavity **36** and/or opening **38** may be disposed on housing **12** adjacent compartment **20**.

[0034] It is contemplated that in certain embodiments, sealing member **14** may be slidably coupled to the housing **12**, see FIG. **7**, for example. More particularly, sealing member **14** may be slidably coupled to wall **22** of the housing **12**. In this instance, sealing member **14** may operably couple to the wall **22** of the housing **12** via one or more detents **19** (or other suitable device(s), e.g., a clip) that are coupled to the wall **22** such that the detents **19** including the sealing member **14** may be repositioned along the wall **22**. More particularly, the detents **19** may couple to one or more respective spaced-apart tracks **21** that are operably disposed on the wall **22** the housing **12**, see FIG. **7** in combination with FIG. **8**. More particularly, and in this instance, the spaced-apart tracks **21** extend longitudinally along the wall **22** from the base **34** to an area adjacent an upper portion, e.g., adjacent lip **52**, of the housing **12**, as best seen in FIG. **7**. Accordingly, if a user wants to reposition the sealing member **14**, such as, for example, with respect to the beverage keg **100**, a user may slide the sealing member **14** along the wall **22** of the housing **12** via the detent **19** and track **21** configuration.

[0035] While several embodiments of the disclosure have been shown in the drawings, it is not intended that the disclosure be limited thereto, as it is intended that the disclosure be as broad in scope as the art will allow and that the specification be read likewise. Therefore, the above description should not be construed as limiting, but merely as exemplifications of particular embodiments. Those skilled in the art will envision other modifications within the scope and spirit of the claims appended hereto.

What is claimed is:

1. A cooler adapted for use with a beverage keg, the cooler comprising:

a housing having a sidewall portion defining an open compartment of a size larger than the beverage keg to provide space for ice around the beverage keg within the compartment, the housing also having a wall portion defining a partially opened rigid base member configured to support the compartment and provide a seat for at least a portion of the beverage keg, the rigid base member including an opening configured to receive a spout operatively associated with the beverage keg;

a sealing member configured to provide a substantially fluid tight seal between at least a portion of the beverage keg and the rigid base member when the beverage keg is positioned in the compartment of the housing and seated on the rigid base member; and

an anti-lift plug operatively associated with the housing, the anti-lift plug adapted to releasably couple to the spout of the beverage keg and contact a portion of the opening of the rigid base member such that the beverage keg is prevented from floating as the ice melts and as a beverage contained in beverage keg becomes progressively depleted during dispensing thereof.

2. A cooler according to claim **1**, wherein the housing includes a removable cover for closing the top of the housing to enclose the beverage keg in the compartment.

3. A cooler according to claim **1**, wherein the housing includes a pair of handles operatively coupled thereto.

4. A cooler according to claim **1**, wherein at least a portion of the housing is insulated.

5. A cooler according to claim **4**, wherein the at least a portion of the housing that is insulated is the compartment.

6. A cooler according to claim **1**, further comprising a housing plug configured to removably attach to the opening of the rigid base member and provide a substantially fluid tight seal thereto when the spout of the beverage keg is not received therein.

7. A cooler according to claim **1**, wherein the sealing member is operatively connected to the housing between the rigid base member and the compartment.

8. A cooler according to claim **1**, wherein the sealing member includes a lip that extends radially inwardly and along an inner periphery of at least one of the compartment and the rigid base member.

9. A cooler according to claim **1**, wherein the sealing member is slidably coupled to the sidewall of the housing via a detent and track configuration.

10. A keg cooler adapted for use with a beverage keg, the keg cooler comprising:

a housing having a sidewall portion defining an open compartment of a size larger than the beverage keg to provide space for ice around the keg within the compartment, the housing also having a wall portion defining a partially opened base member configured to support the compart-

ment and provide a seat for at least a portion of the beverage keg, the rigid base member including an opening configured to receive a spout operatively associated with the beverage keg;

a sealing member configured to provide a seal between at least a portion of the beverage keg and the rigid base member when the beverage keg is positioned in the compartment of the housing and seated on the rigid base member; and

an anti-lift plug operatively associated with the housing, the anti-lift plug configured to removably connect to the spout of the beverage keg and the rigid base member such that the beverage keg is prevented from floating during the dispensing of a beverage contained within the beverage keg.

11. A keg cooler according to claim **10**, wherein the housing includes a removable cover for closing the top of the housing to enclose the beverage keg in the compartment.

12. A keg cooler according to claim **10**, wherein the housing includes a pair of handles operatively coupled thereto.

13. A keg cooler according to claim **10**, wherein at least a portion of the housing is insulated.

14. A keg cooler according to claim **13**, wherein the at least a portion of the housing that is insulated is the compartment.

15. A keg cooler according to claim **10**, further comprising a housing plug configured to removably attach to the opening of the rigid base member and provide a substantially fluid tight seal thereto when the spout of the beverage keg is not received therein.

16. A keg cooler according to claim **10**, wherein the sealing member is operatively connected to the housing between the rigid base member and the compartment.

17. A keg cooler according to claim **10**, wherein the sealing member includes a lip that extends radially inwardly and along an inner periphery of at least one of the compartment and the rigid base member.

18. A keg cooler according to claim **10**, wherein the sealing member is slidably coupled to the sidewall of the housing via a detent and track configuration.

19. A cooler assembly adapted for use with a beverage keg, the cooler assembly comprising:

a housing defining an open compartment configured to receive the beverage keg therein and to provide a space for ice around the beverage keg, the housing having a wall portion defining a partially opened rigid base member configured to support the compartment and provide a seat for at least a portion of the beverage keg, the rigid base member including an opening configured to receive a spout operatively associated with the beverage keg;

a sealing member configured to provide a substantially fluid tight seal between at least a portion of the beverage keg and the rigid base member when the beverage keg is positioned in the compartment of the housing and seated on the rigid base member; and

an anti-lift plug adapted to releasably couple to the spout of the beverage keg, the anti-lift plug in operable communication with the housing such that the beverage keg is prevented from floating as the ice melts and as a beverage contained in beverage keg becomes progressively depleted during dispensing thereof.

* * * * *