



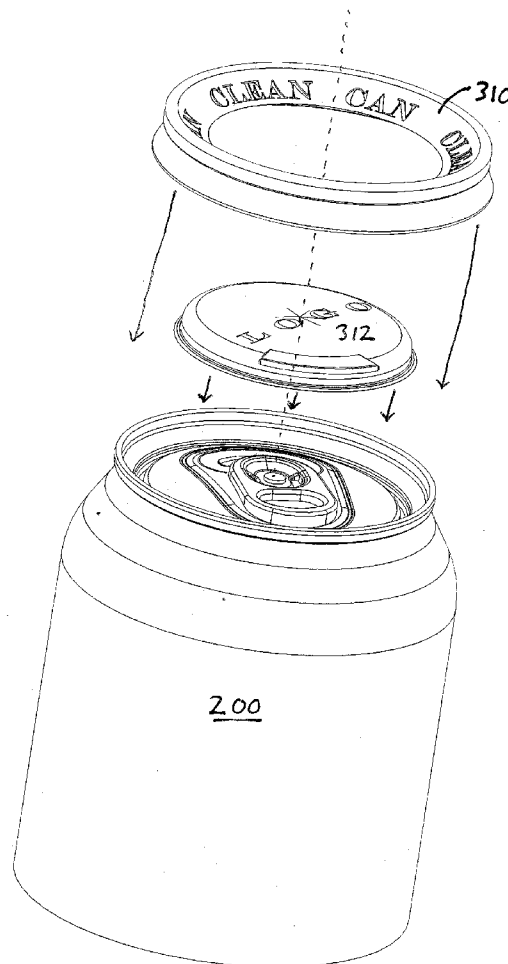
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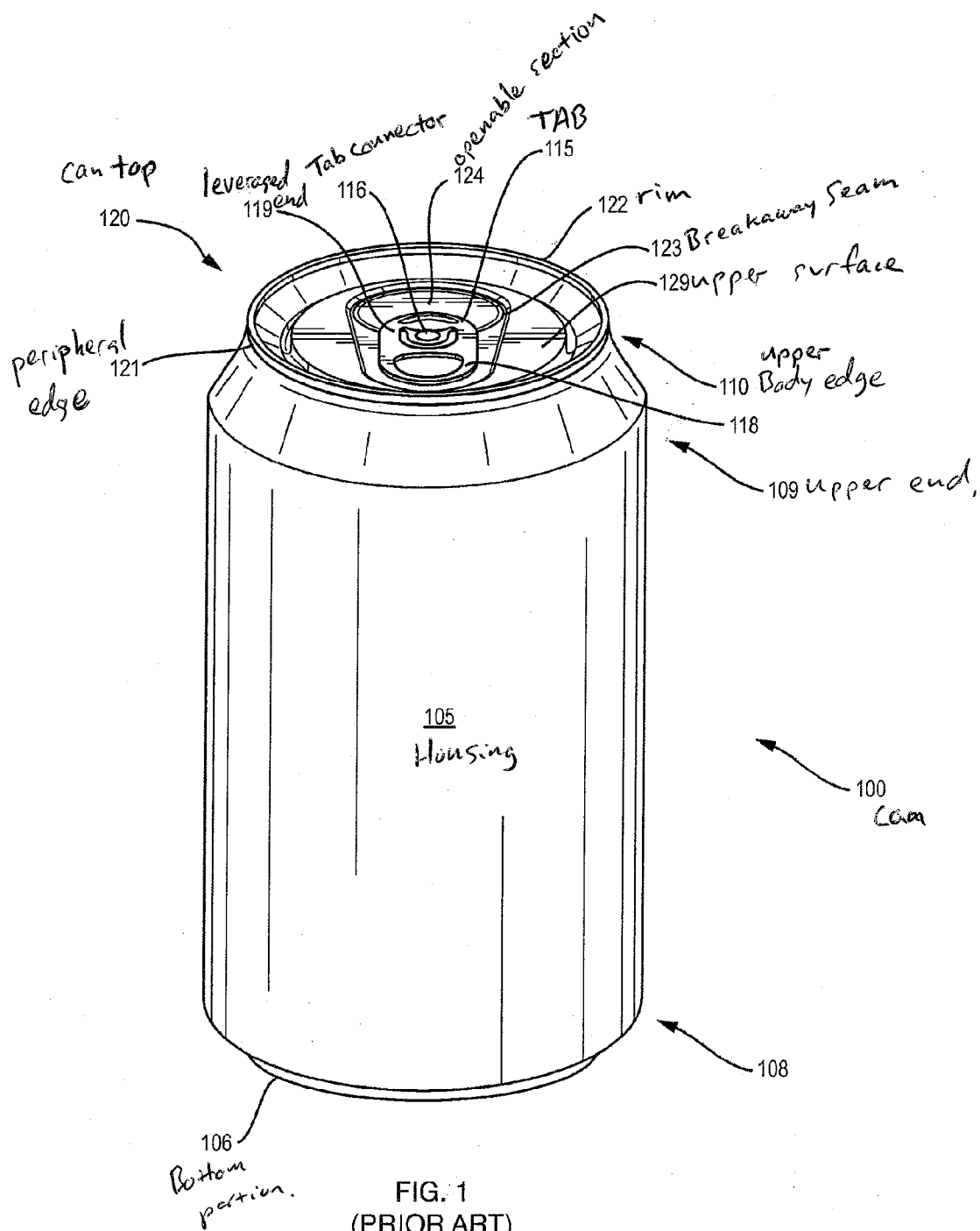
(19) **United States**(12) **Patent Application Publication**
Chapin(10) **Pub. No.: US 2015/0197366 A1**(43) **Pub. Date: Jul. 16, 2015**(54) **BEVERAGE CAN MARKETING DEVICE**
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(57)

ABSTRACT

A device that secures to a beverage can top includes a rim section that includes an inner edge that resides adjacent to the central panel of the can top. A central cover is secured to the can top at the inner edge of the rim section. The central cover extends over the top of a central panel of the can top and covers a tab and openable section of the can top. The central cover is removable from the rim section at a releasable boundary defined at the inner edge of the rim section. The underside of the central cover supports under-the-cover promotions that are not visible until removal of the central cover when the can is opened. When scannable codes are used, a computerized device can provide the GPS location of where the scan occurred to track GPS location of beverage can consumption by consumers and social media engagement.





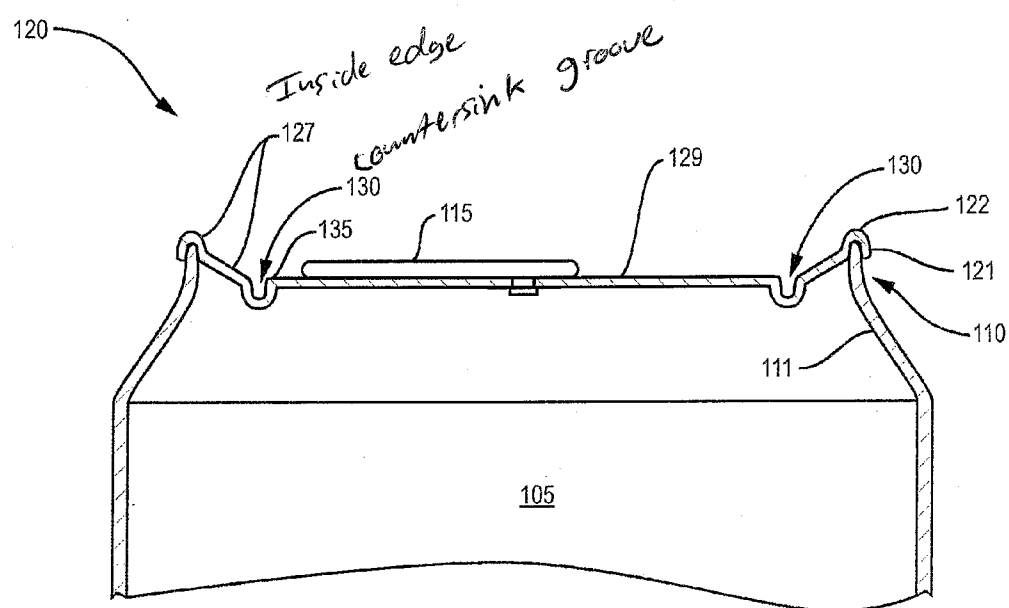


FIG. 2
(PRIOR ART)

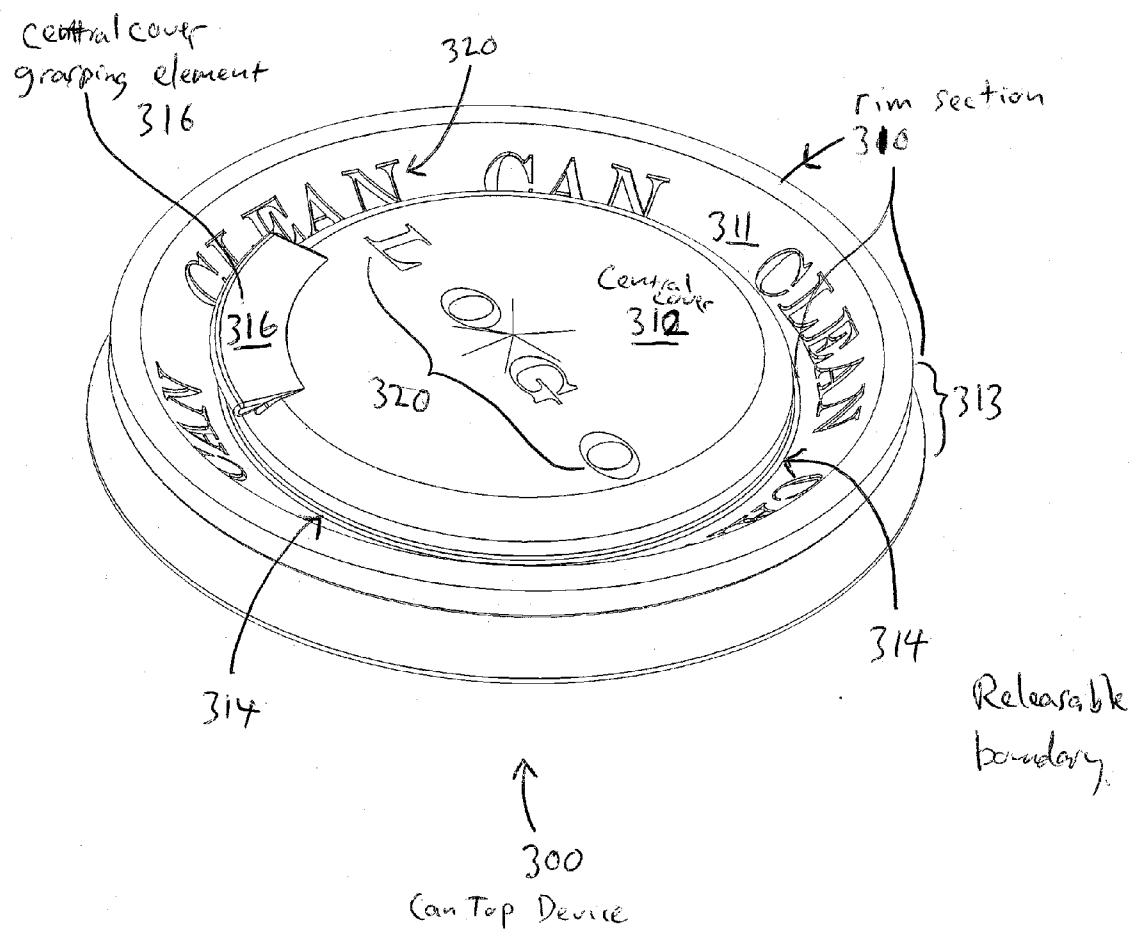


Fig. 3

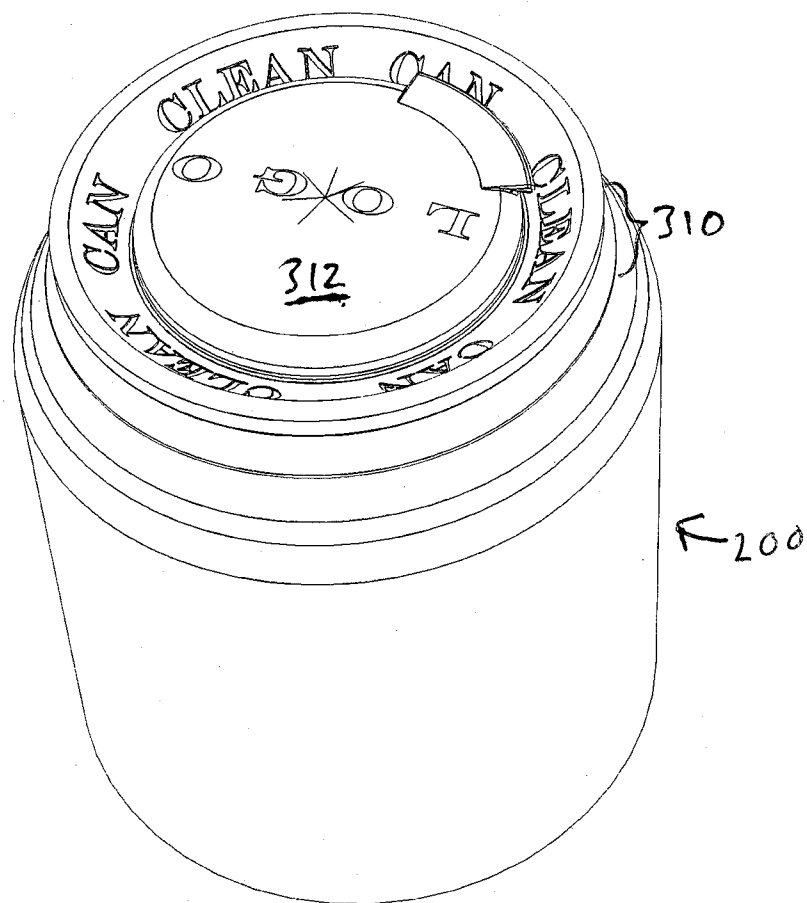


Fig. 4

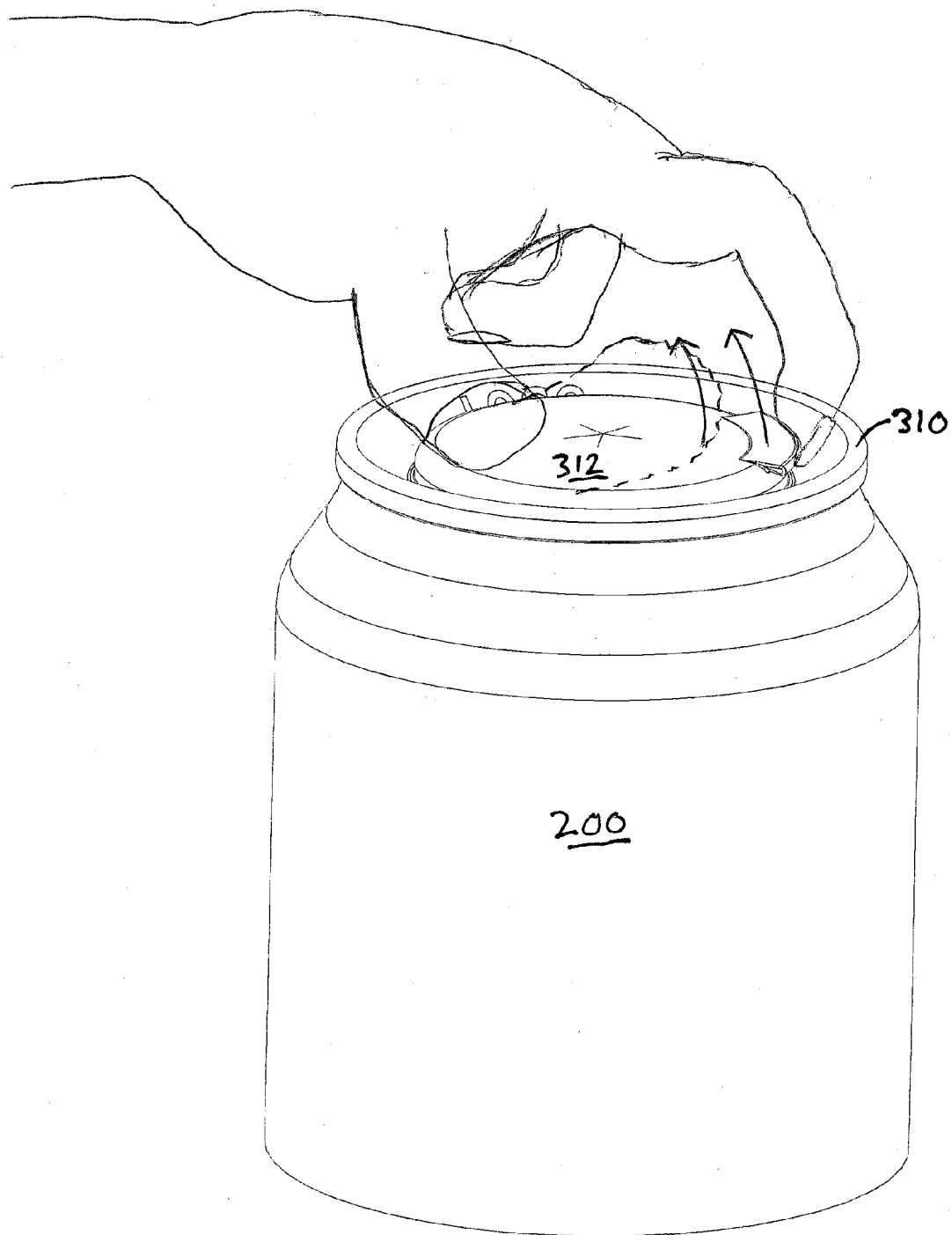


Fig. 5

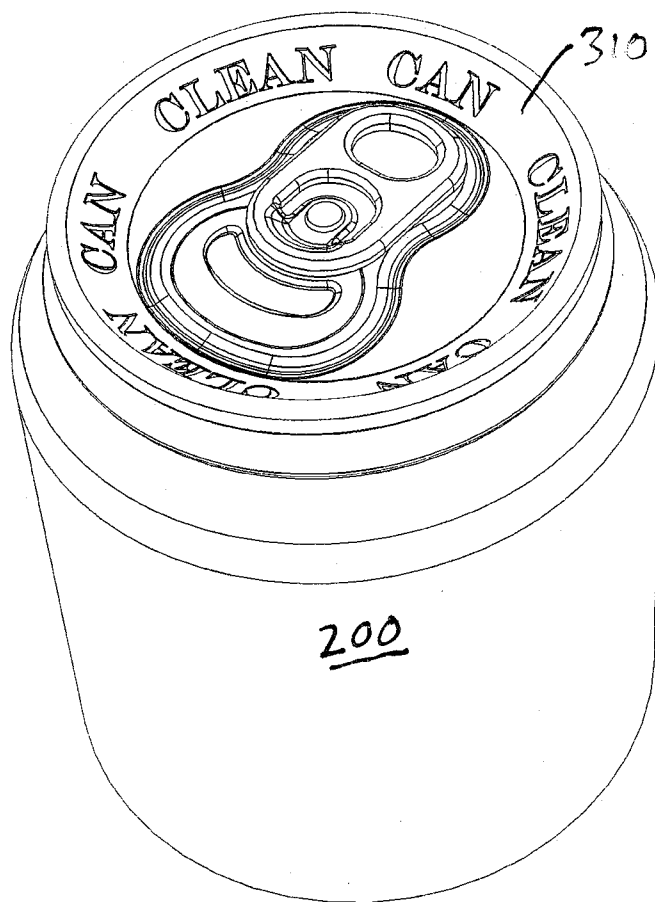


Fig. 6

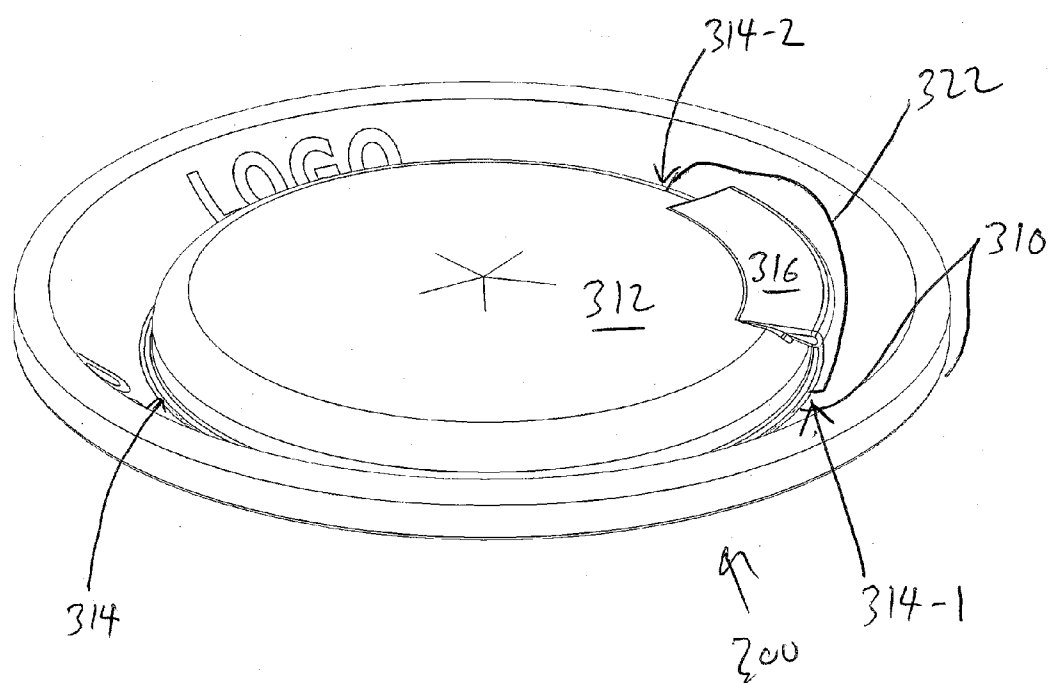


Fig. 7

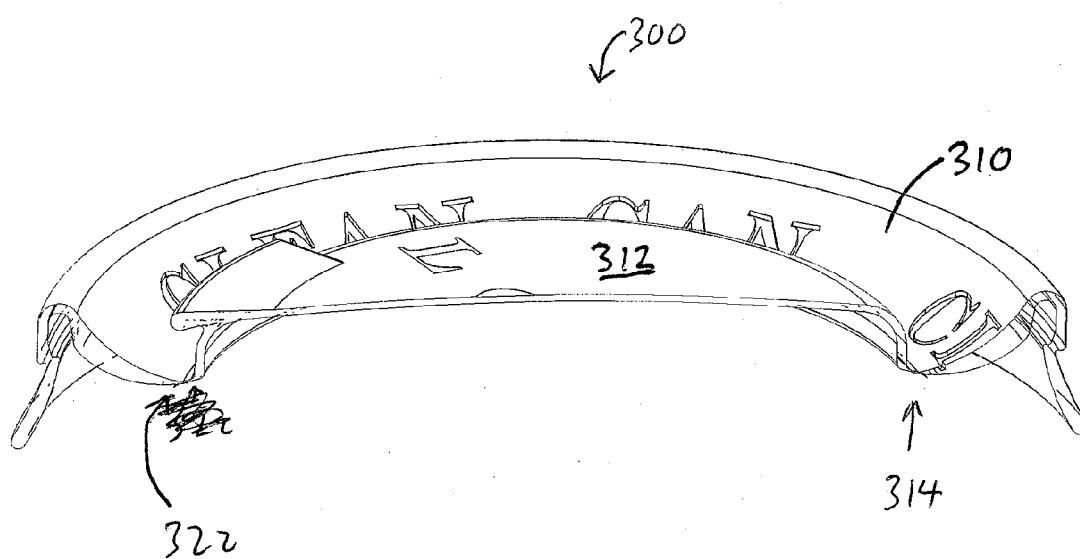


Fig. 8

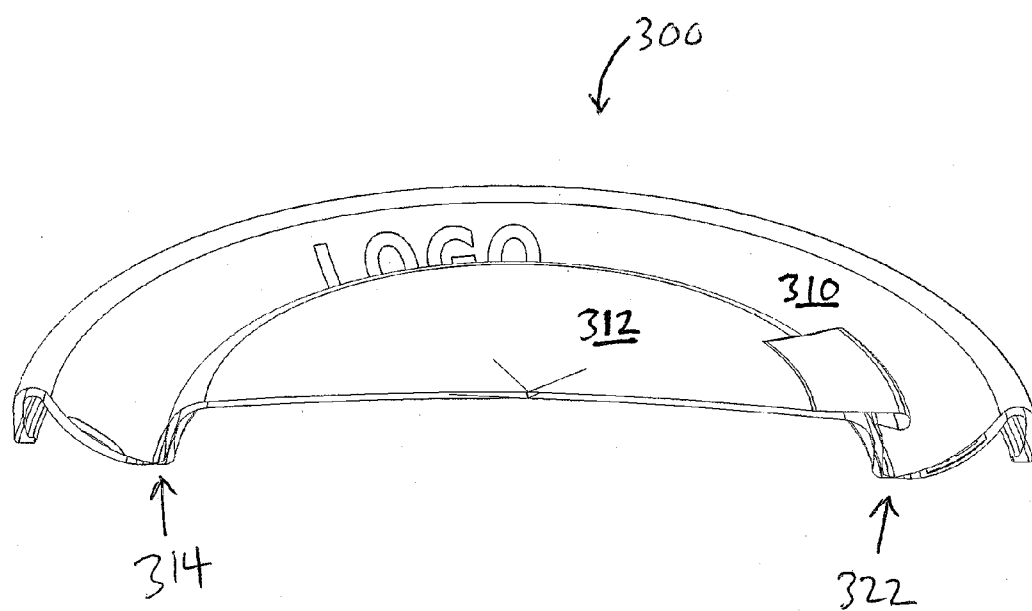


Fig. 9

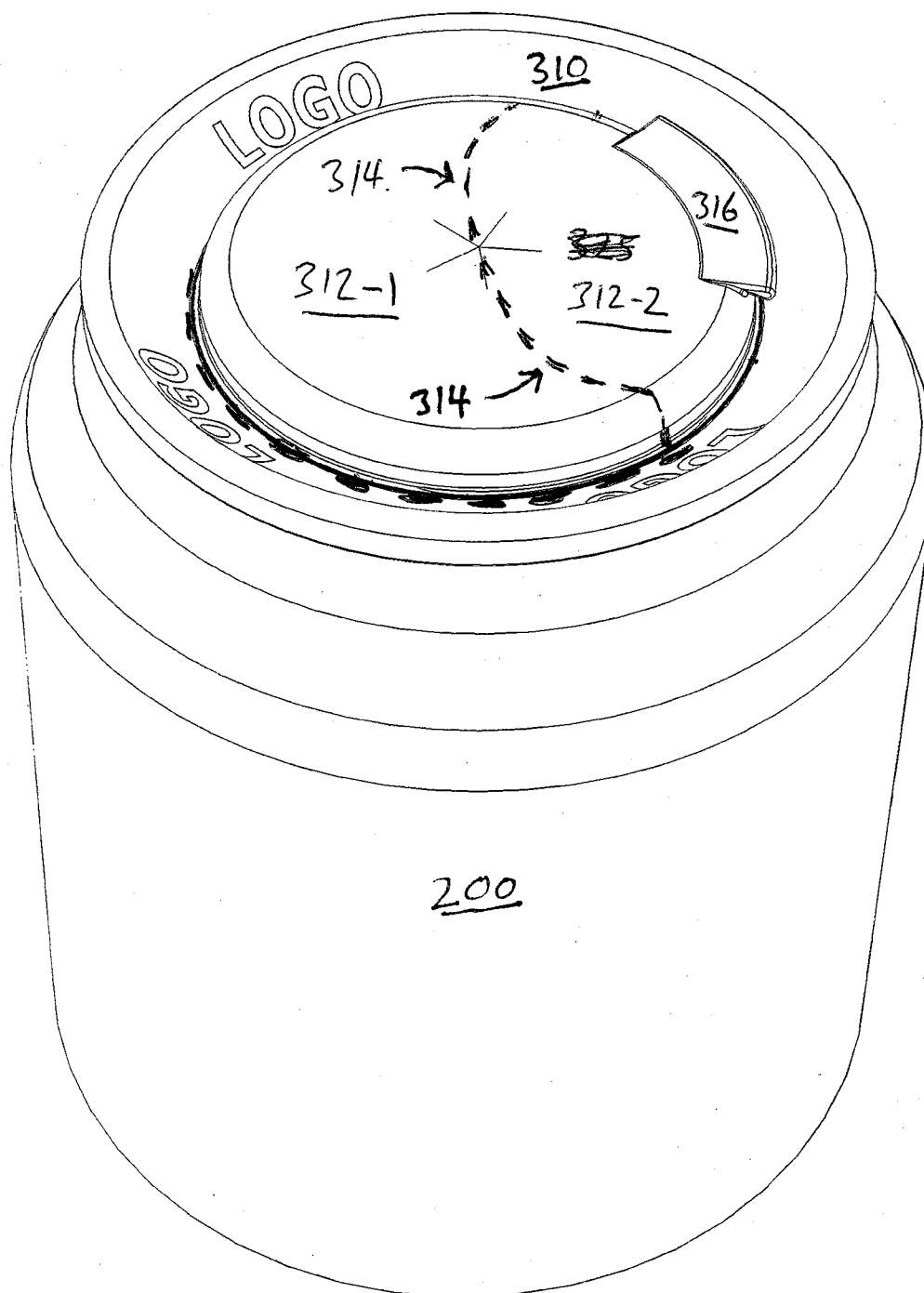


Fig. 10

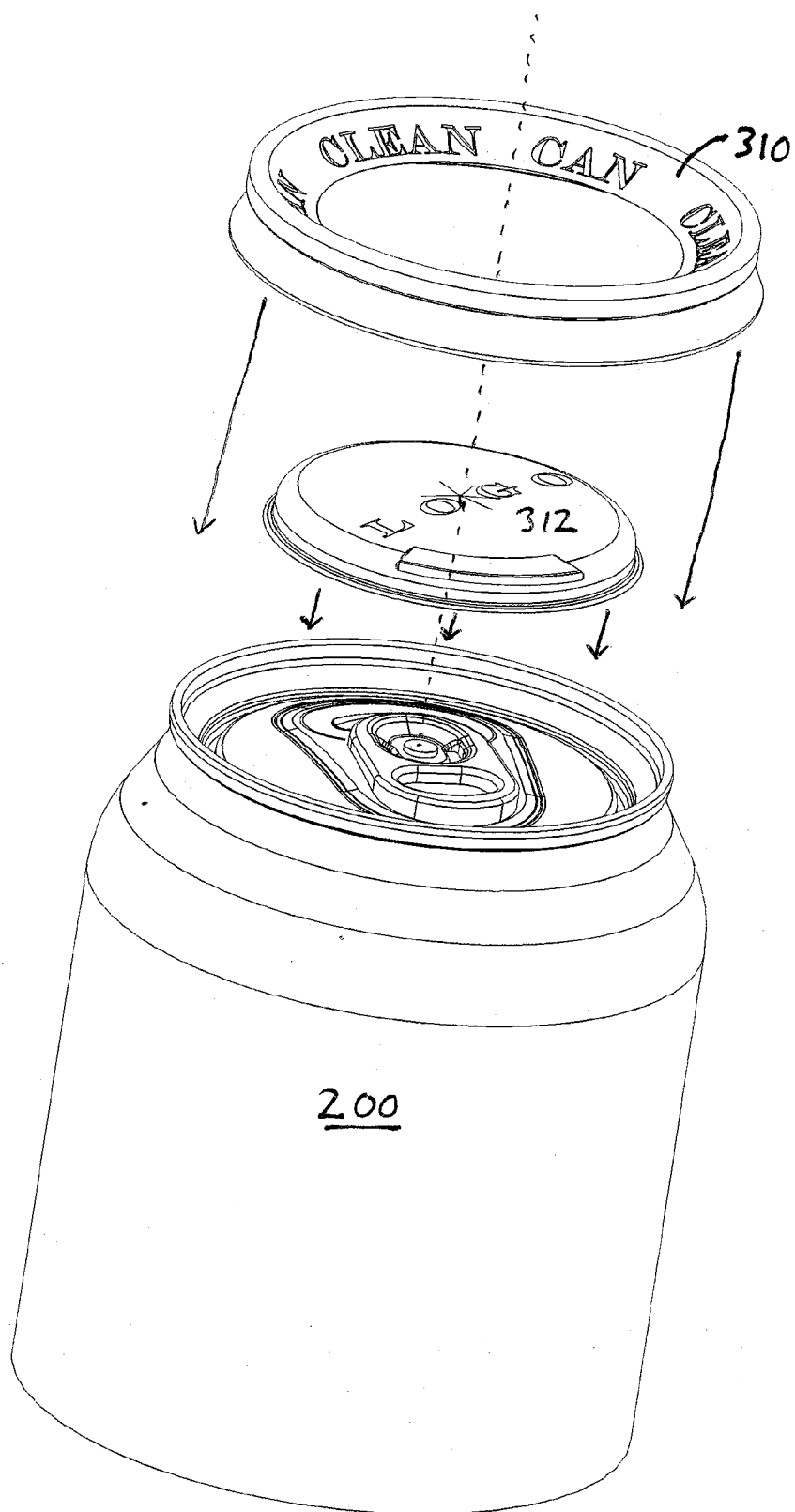


Fig. 11

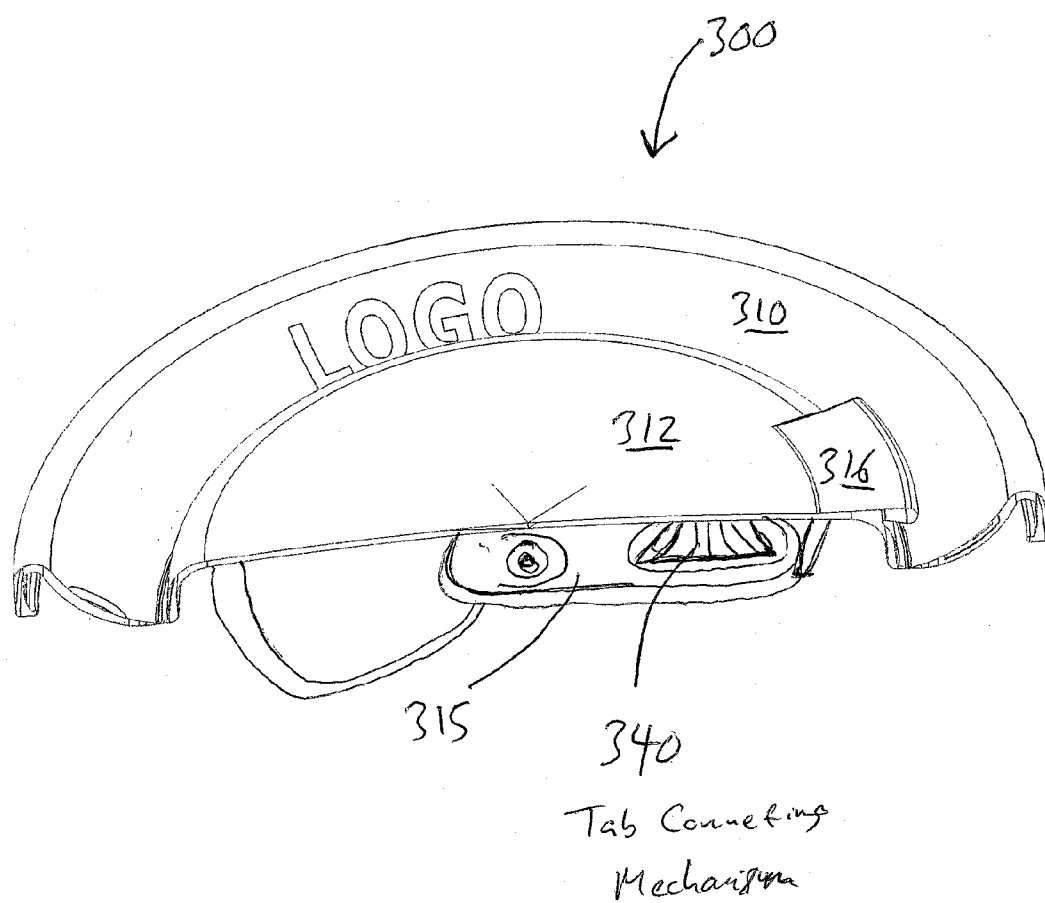


Fig. 12

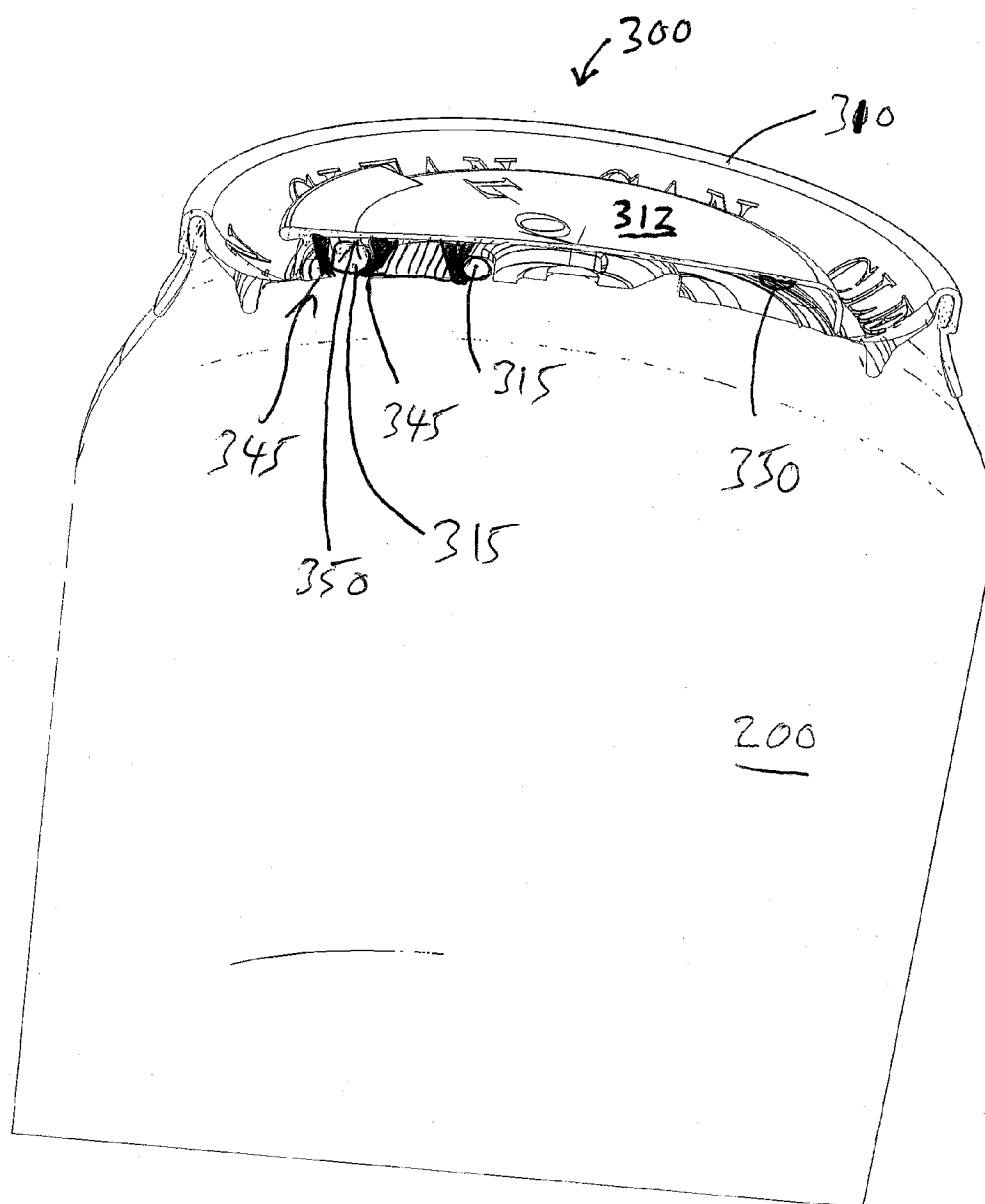


Fig. 13

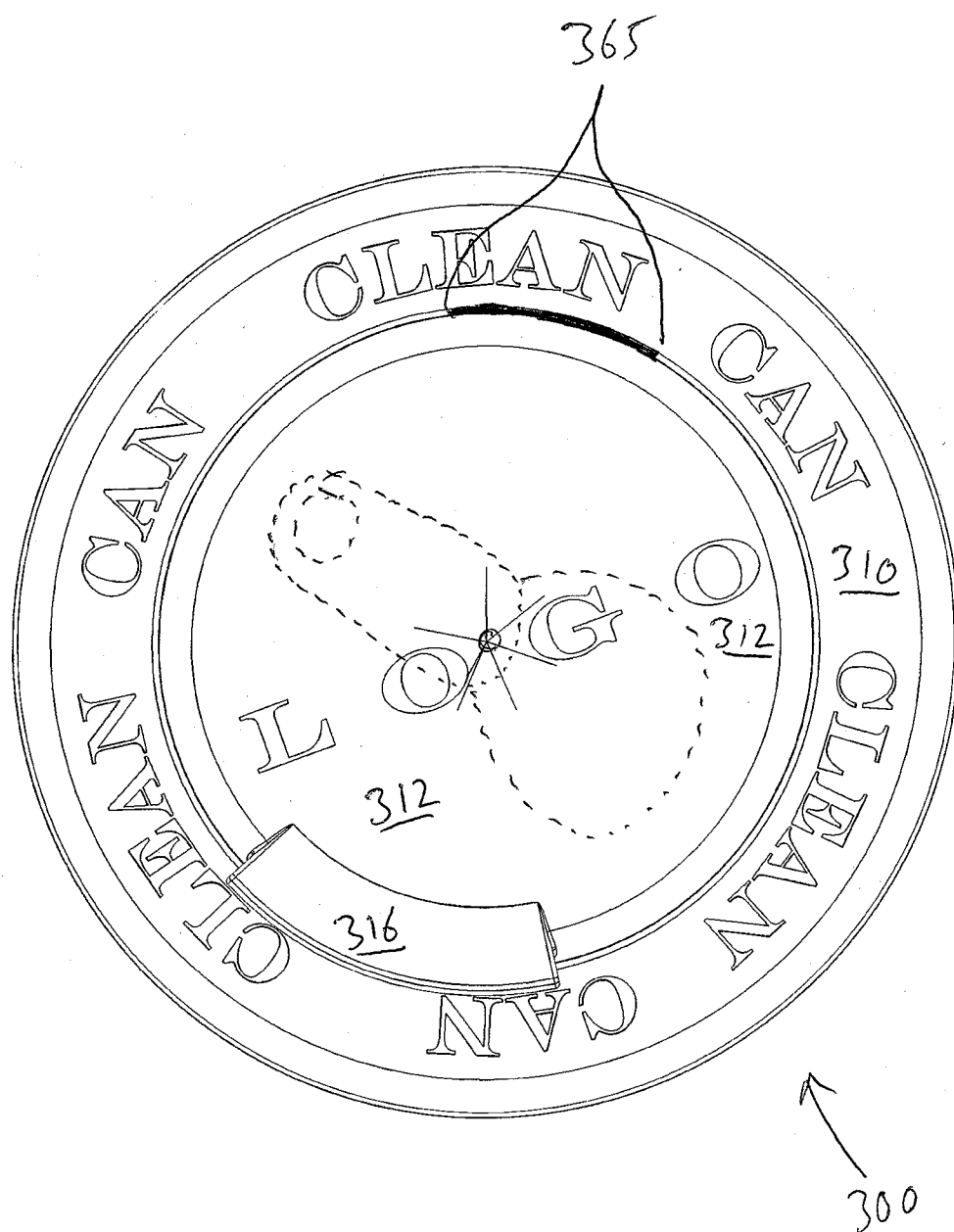
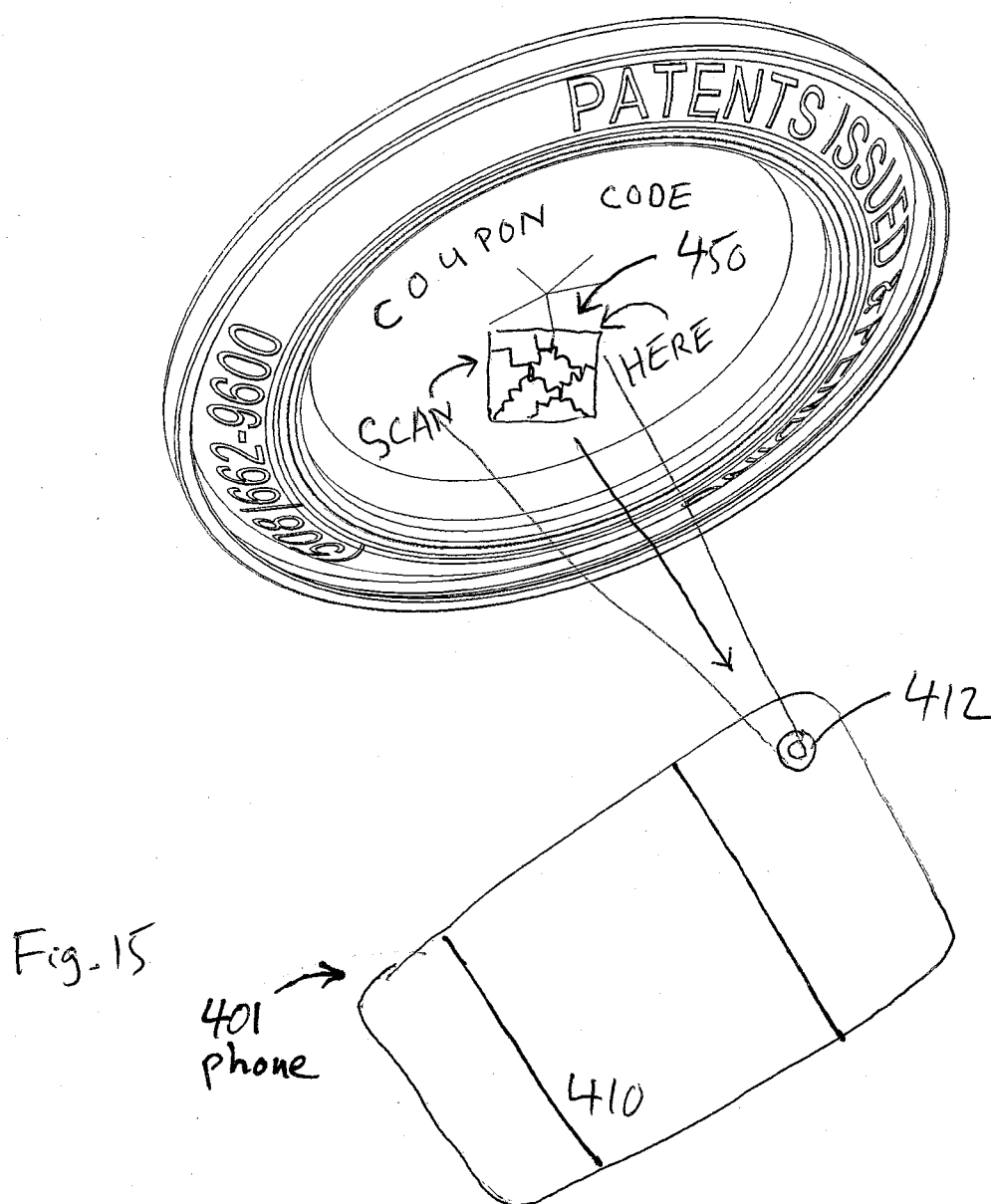
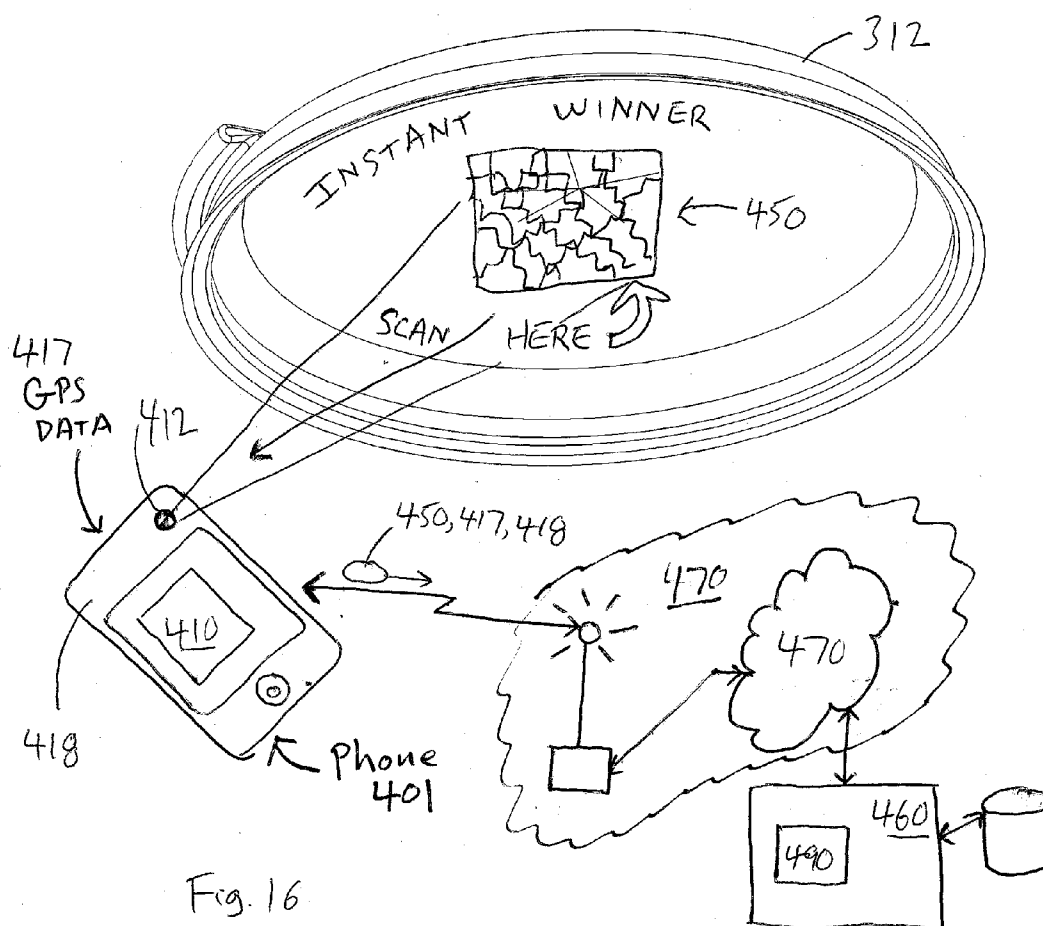


Fig. 14





BEVERAGE CAN MARKETING DEVICE WITH REMOVABLE CENTER COVER

CLAIM TO BENEFIT OF EARLIER FILED APPLICATION

[0001] This application claims the benefit of the filing date of earlier filed, co-pending, U.S. Provisional Application for Patent having Ser. No. 61/881,033, filed Sep. 23, 2013, entitled “Beverage Can Marketing Device With Removable Portion”, naming the same inventor as the present application. The entire disclosure, figures, photos, teachings and contents of the above-identified Patent Applications and or Issued Patents are hereby incorporated by reference in their entirety.

Incorporation by Reference Filed Co-Pending Applications

[0002] This application is related to the following earlier filed U.S. Applications for patent and/or issued patents, and shares common inventorship therewith:

[0003] 1) Provisional Application U.S. Ser. No. 61/254,274 filed in the U.S. Patent Office on Oct. 23, 2009 entitled “APPARATUS AND METHODS PROVIDING A CLEAN BEVERAGE CAN”, naming the same inventor as the present application.

[0004] 2) Provisional Application U.S. Ser. No. 61/351,258 filed Jun. 3, 2010 entitled “CLEAN METALLIC BEVERAGE CAN”, naming the same inventor as the present application.

[0005] 3) Provisional Application U.S. Ser. No. 61/406,120 filed before the present invention, but on the same day, Oct. 23, 2010 entitled “BEVERAGE CAN TOP GROOVE COVER AND MARKETING DEVICE”, and naming the same inventor as the present application.

[0006] 4) U.S. Utility Patent Application, U.S. Ser. No. 13/842,023 filed Mar. 15, 2013 entitled “BEVERAGE CAN MARKETING DEVICE”, naming the same inventor as the present application.

[0007] 5) Issued U.S. Utility Pat. No. 8,708,188 entitled “BEVERAGE CAN MARKETING DEVICE”, naming the same inventor as the present application.

[0008] 6) Issued U.S. Utility Pat. No. 8,534,490 entitled “BEVERAGE CAN MARKETING DEVICE”, naming the same inventor as the present application.

[0009] 7) Issued U.S. Design Pat. application D672,235 entitled “Countersink Groove Cover for a beverage can”, naming the same inventor as the present application.

[0010] 8) Issued U.S. Design Pat. application D658,980 entitled “Countersink Groove Cover for a beverage can”, naming the same inventor as the present application.

[0011] 9) Issued U.S. Design Pat. application D640,141 entitled “Countersink Groove Cover on a beverage can”

[0012] 10) PCT application PCT/US10/53881 filed Oct. 23, 2010, entitled “BEVERAGE CAN MARKETING DEVICE”, naming the same inventor as the present application.

[0013] The entire teachings, disclosure, figures, and contents of the above-identified Patent Applications and or Issued Patents are hereby incorporated by reference in their entirety.

FIELD OF THE INVENTION

[0014] The present invention relates to a branding and marketing device that secures to a beverage can top. The device

includes a removable central cover or dome that peels away from a rim section. The rim section can remain in place to cover and eliminate the countersink groove found on beverage can tops, while providing continuation branding as the user drinks from the can. The removable central cover can provide under-the-cap like promotions to consumers and can enable a mobile app to scan a code on the underside of the central cover (not visible until the cover is removed) to allow real-time geo-location specific contests, promotions, giveaways and tracking of precisely where the beverage can is opened for consumption.

BACKGROUND

[0015] Conventional beverage cans such as aluminum, tin or steel cans are commonly used to package and contain a variety of carbonated, noncarbonated, and alcoholic and non-alcoholic liquid beverages. Examples of beverages or other consumables that are packaged in beverage cans include carbonated and noncarbonated soda, pop, fruit juice, water, mixers, alcoholic beverages such as beer and wine, and other consumable and even sometimes non-consumable liquids.

[0016] FIG. 1 provides an illustration of a typical conventional metallic beverage can 100. A typical beverage can container holds twelve fluid ounces of a liquid such as beer, juice or soda. Conventional can dimensions include heights, diameters and subtle features of the can such as tapering near the top vary and depend often on vendor choice, branding and marketing requirements. Details of the construction of a typical conventional modern beverage can are disclosed in an article/paper entitled “The Aluminum Beverage Can”, written by William F. Hosford and John L. Duncan that was published in the September 1994 issue of Scientific American Magazine, copyright 1994 by Scientific American, Inc. The entire contents of this paper is hereby incorporated by reference in its entirety. This paper shows various example details of conventional beverage can construction.

[0017] In FIG. 1, the typical beverage can 100 includes a can body 105 and a lid or can top 120 (as used herein, the term “can top” refers to a can lid used to cover a beverage can). The body 105 is formed from a piece of continuous metal such as aluminum alloy or steel or other metal that is drawn, ironed, extruded, stretched, pressed, molded, stamped or otherwise shaped into a cylindrical shape to form the body 105. The above referenced paper provides details on one example process of forming the can body or housing a cold forming and ironing process. Once formed, the can housing or body 105 includes a lower end 108 and an upper end 109. The lower end 108 typically tapers slightly inwards to form a base or bottom portion 106 of the can that typically tapers inwards at its lowermost end and is smaller in diameter at its base (the portion contacting a surface when the can is upright in position) than a middle area of the body 105. In many conventional can body designs, the upper end 109 or neck of the body 105 tapers slightly inward at a top of the body 105 and terminates at an upper body edge 110. The cylindrical-shaped outer surface of the body 105 typically includes decoration that provides a label on the metallic surface of the body that identifies a brand of liquid as well as the contents, ingredients, manufacturer of liquid contained within the can 100 and other information.

[0018] The can 100 shown in FIG. 1 is fully assembled, filled with liquid contents and “sealed”. Sealing the can is a process performed during a bottling or canning process when a manufacturer affixes a can top 120 to the upper body edge

110 after placing liquid contents into the can body **105**. In a conventional canning/bottling/seaming process, a canning machine (not shown in this figure) dispenses liquid into the body **105** and thereafter the same or a different machine affixes the can top **120** to the upper body edge **110** by crimping, seaming or pinching a peripheral edge **121** of the can top **120** around the upper body edge **110**, thus forming an airtight and liquid-tight seal between the can top **120** and the body **105**. This seam is sometimes referred to as a double seam and forms the rim at the top of the can. Manufacturers may make and sell can tops **120** and bodies **105** as separate individual items that are then combined as generally explained above during the canning process by a canning/bottling company or beverage/liquid manufacturer to form the can **100** as shown in FIG. 1.

[0019] Prior to canning or bottling, a conventional can top **120** (for example as shown in FIG. 1 sealed onto the can **100**) is formed using a can top press, chuck and/or mold(s) that stamp, roll, press or otherwise form a piece of metal such as aluminum alloy or steel into the desired shape of the can top **120**. Once formed, a conventional can top **120** includes a central panel area or upper surface **129** that provides a top or exterior side and that has an underside facing into the can (not shown in FIG. 1) opposite the upper surface **129** of the can top **120** (i.e. the underside of the can top is exposed to the liquid contents contained within the can **100**). The upper surface **129** of the can top **120** is substantially flat in some conventional can designs, and in other designs the upper surface **129** may have a slight curvature, domed or arced shape with a center region being slightly higher in elevation than an outer peripheral upper surface edge. The conventional can top **120** also includes a tab **115** affixed via a tab connector **116** to the upper surface **129** of the can top **120**. The tab connector **116** may be a rivet or spot weld located at or near a center region of the can top **120**. The tab **115** includes a lifting end **118** and a leveraged end **119**. The leveraged end **119** of the tab **115** is aligned over an openable section **124** defined by a breakaway seam **123** on the can top **120**. The openable section is commonly a circular or oval shaped region defined on the upper can top surface by being pressed, punched, scratched or etched into the upper surface **129** of the can top **120**. This openable section **124** includes a breakaway seam **123** in the upper surface **129** of the can top. The tab **115** and openable section **124** allow a person to open the can **100** to dispense (e.g. drink or pour into a container) the liquid contents of the beverage can **100**. Upon opening, the tab **115** remains affixed to the can top to minimize debris or garbage produced by cans that are sold and opened by consumers.

[0020] To open the can **100**, a person (not shown) inserts a fingertip, fingernail or other prying device under the lifting end **118** of the tab **115** (between the lifting end **118** and the upper surface **129** of the can top **120**) and applies an upward or lifting force to the lifting end **118** of the tab **115** up and away from the upper surface **129** of the can top **120**. In response to the raising the lifting end **118** in this manner, the tab **115** pivots at the tab connector **116** and the leveraged end **119** applies a downward force against the openable section **124** causing the openable section **124** to be forced downwards into the can housing **105** relative to the upper surface of the can top **120**. When enough force is applied, the openable section **124** breaks away from the can top **120** along the breakaway seam **123** and bends downwards and inwards into the inside of the can **100**. After opening the can **100** in this manner, the tab **115** remains fixed to the top surface **129** via

the rivet **116** and the openable section **124** remains connected to the can top **120** via a small region of the upper surface **129** of the can top that remains connected between the upper surface **129** and the openable section **124** (that is now depressed or bent down into the can body **105**). That is, the openable section **124** remains attached to the can top **120** since the breakaway seam **123** does not completely surround the openable section **124**. In this manner, the openable section **122** and tab **115** do not break off completely from the can top **120** and avoid becoming loose in the liquid contents of the can **100**.

[0021] Once the conventional can **100** has been opened by a person in this manner, a person is able to dispense liquid contents from the can **100** by tipping or tilting the can **100** sideways from its upward position toward the openable section **124** (that now provide a hole in the can) in order to pour liquid from the “now open” openable section **124**. The person may dispense the liquid contents of the can **100** into another beverage container such as a glass, cup, bowl or the like, or quite frequently the person may drink directly from the can **100** using his or her mouth.

[0022] U.S. Pat. No. 6,065,634 discloses some examples of conventional can top designs and also teaches and shows details of machinery to securely seal a can top to a can body using conventional techniques. This patent further shows details of an example seam between a can and can top. The entire teachings and contents of this reference patent are hereby incorporated herein by reference.

BRIEF DESCRIPTION

[0023] Conventional beverage can and beverage can top configurations such as those described above suffer from a variety of deficiencies. In particular, conventional beverage cans and beverage can tops such as the can **100** and can top **120** as shown in FIG. 1 are subject to contamination issues on their outer surfaces. Surfaces such as the upper surface **129** of the can lid or top **120** and the upper end **109** or neck of the can **100** are highly susceptible to exposure to substances that are contaminants or debris such as dirt, dust, grime, germs, bacteria, viruses, microbials, fungus, mold, toxins or other depositions. Exterior surfaces of conventional cans and can tops often become “dirty” or unsanitary from exposure to various environmental contaminants shortly after the canning process is complete. Additionally, liquid consumed either directly or indirectly from conventional beverage cans may become contaminated from debris or bacteria on the can tops due to the design of conventional beverage cans and can top or lids.

[0024] In particular, after the can top and body manufacturing and/or canning process is complete, a conventional can and can top are often exposed to a variety of unsanitary environments. Such unsanitary environments may exist during the conventional processes of can and/or can top manufacturing, filling (canning or bottling)/seaming, packaging and shipping, and while awaiting purchase by the consuming public (e.g., while sitting on supermarket shelves and/or in refrigerators or vending machines), and after purchase but before opening of a conventional can. These contaminants can be swept up in the flow of liquid over a conventional can top when dispensing the liquid from the can.

[0025] FIG. 2 shows a detailed cross-sectional, profile or cut-away side view of the cross sectional shape of one example design of a conventional can top **120**. Note that in FIG. 2, the coupling between the can top **120** and can body or housing **105** are shown only generally and details of the

double seam that form the rim **122** of the can are not shown in this figure. During a conventional canning/bottling process, a conventional canning machine (not shown in this figure) forms a rim **122** of the can top **120** by seaming an outside peripheral edge **121** of the can top **120** to the upper end of can body **105** to form a liquid and airtight seal between the can top **120** and the can body **105**. Once the top or lid **120** is seamed to the can housing or body **105** in this manner, the inside surfaces **111** of the can are protected from the outside environment by an airtight seal. To form the seal, the outside edge **121** of the rim may be folded and wrapped around and under the upper body edge **110** to form a double seam that creates the rim **122**. The circular rim **122** continues around the circumference of the can top **120**. The shape or profile (as shown in FIG. 2) of a conventional can top **129** also defines a well area or countersink groove **130** located just inside the rim **122**. Note that depending on the can top **120**, the slope, profile or angle of the inside edge **127** of rim **122** of the can top **120** can be greater or less than that illustrated in this example. Depending upon the manufacturer and process of forming the can top, can housing and seaming process, the exact profile and size of a beverage can housing **105** and top **120** may vary from this figure.

[0026] The countersink groove **130** defined by a conventional can top **120** is a recessed crevice-like area of open space defined between the inside edge **127** of the rim **122** of the can and an outer edge **135** of the upper surface **129** (i.e. the central panel **129**) of the can top (the outer edge **135** of this central panel **129** also generally defines the top inside edge of the groove **130**). The groove **130** dips down in elevation below the upper surface **129** of the can top at the peripheral or outer edge **135** of the upper surface **129** of the can top **120**. If a can **100** is positioned upright, the groove **130** is formed by the surface of the can top between an inside of the rim **122** (on the side of the rim facing the center of the can top) and dips or extends in elevation below the top surface **129** of the can top and ends where the upper surface of the can top begins (at the edge **135**). The bottom of the groove **130** is typically the lowest point in elevation on the entire can top surface. One purpose of providing this groove is to allow the can top **120** to not distort when the contents of the can are under pressure. Thus the groove **130** provides strength to the can top design and most conventional beverage cans in use today include a groove of this nature.

[0027] In conventional can and can top designs, the groove is problematic since the groove is a countersink area that is very susceptible to collecting debris such as dirt, dust, sand, or other particulate matter that may settle onto the cap top surface and that may fall into or be pushed or wiped into the groove **130**. As an example, many health conscious consumers who consume liquids from conventional beverage cans **100** have a desire to have the least amount of contamination possible in the liquid dispensed from the can **100**. In an attempt to clean the can top **120** of as much debris as possible, many consumers often wipe the top **120** of a conventional beverage can **100** with a cloth or with their fingers prior to opening the can. This wiping action may result in pushing or forcing debris and contaminants such as dust and dirt into the groove **130** defined by a conventional can top **120** just prior to opening of the can. Additionally, even if not wiped, any loose dirt or contaminants that reside on the top of the can may simply shake loose during handling and fall into the groove prior to opening the can. The groove **130** defined in a conven-

tional can top thus serves as a receptacle or collection area for much of the dirt and debris on a can top.

[0028] When dispensing (i.e. pouring) liquid contents from a conventional can from the openable section **124**, a person tilts the can so that the liquid contents within the can is able to flow or be poured from the openable section. This tilting action may cause debris that resides in the groove to roll, slide or otherwise move towards a portion of the groove **130** that is adjacent or close to the openable section **124** of the conventional can **100**. As the liquid contents flows out of the conventional can **100**, the liquid flows out of the opening **124** and over a portion of the upper surface **129** of the can top **120**, into and through the groove **130**, and then over and off of the outer edge rim **122** of the conventional can **100**. The turbulent flow of the liquid over this path may cause the liquid to pick up and transport debris from within the groove. Such debris or contaminants can be picked up by the flowing liquid and/or absorbed or dissolved into the liquid and transported for ingestion by the person consuming the liquid either directly or indirectly from the can. In general then, conventional cans and can tops provide for a less sanitary design and the groove **130** provides a receptacle for dirt and debris that is difficult to effectively clean. Further still, the presence of the groove **130** in the path of the liquid can introduce turbulent flow that causes extra release of carbonation within the liquid being poured from a conventional beverage can **100** prior to consumption. Thus the groove **130** in a conventional can and can top design can cause premature release of carbonation that can negatively impact the feeling and taste of the liquid as experienced by a person consuming the liquid.

[0029] Embodiments disclosed herein provide methods and apparatus to reduce or inhibit the collection of debris on the outer surfaces of beverage cans and can tops, including the rim, groove area, as well as the upper can top surface. Mechanisms and techniques disclosed herein provide embodiments that reduce health risks, cleanliness and sanitary issues posed by designs of conventional beverage cans, can tops and methods of manufacture and use thereof.

[0030] Generally, embodiments disclosed herein reduce the ability of outer surfaces of a can top and body to collect, trap and/or support growth of debris or other contaminant substances. Embodiments disclosed herein thus provide "clean can" technology that reduces the ability of a can top, rim and upper can housing area to collect debris.

[0031] Issued U.S. Pat. No. 8,534,490, and issued U.S. Utility Pat. No. 8,708,188 are both invented by the same inventor as the present disclosure. These patents disclose a ring shaped device that secures to a beverage can top (applied either before double seaming the can top to the can housing, or applied after the can top is seamed to the housing). The devices provide a groove cover that essentially covers and removes the surface presence of the groove on the can top. Some embodiments in these patents extend over the rim of the can, while others secure to the can top. The devices can be applied before, during or after the canning operation and are able to remain on the can during shipping, and while opening and drinking from the can. Some versions are able to be removed prior to drinking, and some have portions that can be removed while some portions remain affixed to the can while opening and dispensing the liquid form the can.

[0032] The groove cover in these two patents can be placed over the groove (e.g. in the canning line while bottling the beverage in the can) and provides an upper groove cover surface that enables easy wiping of the exterior surfaces of the

can top. The groove cover of these patents provides an upper surface that slopes up the inside area of the rim and thus provides a nice seamless (e.g. no edges or corners to clean or trap dirt) transition to wipe dirt up and over the rim. Some embodiments of these two patents fill in the groove, while others reside totally above the groove. By filling in or covering or providing an upper surface that resides above the groove and providing a smoother and cleaner can top surface (as opposed to the presence of the groove on a conventional can top), a more health friendly can top results. The devices of these two patents also substantially reduce the metallic taste found in beverages packaged in aluminum beverage cans. This is because the devices of these two patents in many embodiments covers much of the aluminum that contacts a person's mouth while drinking from the can. The devices of these two patents also promote easier removal of contaminants that resides on the exterior can top surfaces. The devices of these two patents can include an antimicrobial (e.g. within the plastic) to reduce the growth of germs, and the the devices of these two patents can be made of biodegradable materials (e.g. biodegradable plastic) to be an environmentally friend (e.g. eco-friendly or green) product. The devices of these two patents does not limit the recycling process of cans, nor does it interfere with the six pack holder rings (commonly known as Hi-Cones in the Industry). The devices of these two patents device also do not interfere with stacking of the cans.

[0033] Embodiments disclosed herein include devices that secure to a beverage can top. One example embodiment of such a device includes a rim section having an upper surface that slopes downwards and radially inwards from an upper region of a rim of the can top towards a central panel of the can top. The upper surface of the rim section extends above and across at least a portion of a countersink groove defined by the can top. The rim section includes an inner edge that resides adjacent to the central panel of the can top. A central cover secures to the can top at the inner edge of the rim section. The central cover extends over the top of a central panel of the can top and covers a tab and openable section of the can top. The central cover is removable from the rim section at a releasable boundary defined at the inner edge of the rim section.

[0034] In another embodiment, the releasable boundary defined at the inner edge of the rim section is a tear away seam defined between the rim section and the central cover. In another embodiment the tear away seam is defined as a thin continuous connection joining the central cover to the inner edge of the rim section. In another embodiment the tear away seam is defined as either a perforated seam joining the central cover to the inner edge of the rim section, or a series of periodic connections that each joining the central cover to the inner edge of the rim section seam, or an adhesive that secures the central cover to the inner edge of the rim section.

[0035] In other embodiments, the central cover includes visible branding content on a top side of the central cover. In another embodiment the central cover includes visible information on an underside of the central cover. In another embodiment the visible information on the underside of the central cover is a scannable code that is operable to be scanned by a computerized device for transmission along with location information of the computerized device at a time of the scan to a remote computer system. This allows tracking of the geographic physical location of where beverage cans are opened. In another embodiment an upper surface of the rim section includes a visible branding message. In yet another embodiment, the visible information on the under-

side of the central cover can be a coupon providing a discount, or information to allow a consumer to participate in a contest, promotion, or customer loyalty program, or a code to allow a consumer to obtain digital content, such as a free download.

[0036] In another embodiment the central cover includes a grasping element that extends from the central cover to allow a user to pull on the central cover to remove the central cover from the can top while leaving the rim section secured to the can top. In another embodiment the grasping element can be a tab (e.g. a pull tab extending from the central panel), a ring, a tape-like material, or a cutaway or small finger opening in the central cover allowing grasping of the central cover for removal from the can top.

[0037] In another embodiment the rim section and the central cover are separate disconnected pieces of the device, and the central cover is secured to the can top by a physical fit between the inner edge of the rim section and an outer edge of the central cover prior to removal of the central panel from the can top. In another embodiment an outer edge of the central cover has a diameter that is slightly larger at at least one location that an inner diameter of an opening defined by the inner edge of the rim section. When the dome in in place on the can top, the outer edge of the central cover resides under the inner edge of the rim section prior to removal of the central cover from the can top. The central cover may be deformable during removal to allow the outer edge of the central cover to pass through an opening defined by the inner edge of the rim section. In another embodiment an outer edge of the central cover snaps onto the inner edge of the rim section to create the releasable boundary that between the rim section and the central cover that unsnaps to allow removal of the central cover from the rim section. In another embodiment, the central cover, after removal from the can top, can be snapped back onto the can top to rejoin the central cover and the rim section.

[0038] In another embodiment the central cover includes a tab connecting mechanism that temporality secures to a tab on the central panel of the can top when the central panel is placed on the can top. The tab connecting mechanism causes the tab on the can top to lift upwards from the central panel of the can top to open at least a portion of the openable section of the can top upon removal of the central cover from the device. In another embodiment the rim section secures to the can top by snapping onto an outside lower edge of the rim of the can top, the outside lower edge being formed on the can top during couple seaming of the can top to a can housing of the beverage can. In another embodiment the rim section secures to the can top along an upper inner edge of the rim of the can top and does not extend over the rim of the can top. In another embodiment the rim section and central cover are secured to the can top prior to double seaming the can top to a beverage can housing. In another embodiment the rim section and central cover are thermoformed to the can top. Thermoforming can allow the central cover to melt during formation to lay flush on the central panel of the can top and conform to the shape of the tab use to open the can. In yet another embodiment, the rim section and central cover are injection molded directly to the can top (where the can top serves to form part of the mold cavity. In another embodiment, the central cover is dome shaped and defines an area underneath the central cover the covers a tab and openable section of the central panel of the beverage can top.

[0039] Another embodiment provides a device that secures to a beverage can top. The device comprises a rim section that

secures to a rim area of a beverage can as well as a central cover coupled to the rim section along an inside edge of the rim section. The central cover covers an openable section and tab area of the beverage can top. The central cover is removable from the beverage can to allow opening of the openable section of the beverage can while the rim section remains in place on the can top after removal of the central cover.

[0040] It is to be understood that these are example embodiments only and are not intended to be limiting of the embodiments disclosed herein.

DESCRIPTION OF THE FIGURES

[0041] The foregoing and other objects, features, and advantages of the invention will be apparent from the following more particular description of preferred embodiments herein, examples of which are illustrated in the accompanying drawings in which like reference characters refer to the same parts throughout the different views. The drawings are not necessarily to scale, with emphasis instead being placed upon illustrating the embodiments, principles, concepts, and variations, etc. disclosed herein.

[0042] FIG. 1 illustrates an example of a conventional beverage can.

[0043] FIG. 2 illustrates an example of a cross sectional view of a can top double seamed to a beverage can housing.

[0044] FIG. 3 illustrates a beverage can marketing device with a removable central cover in accordance with one example embodiment.

[0045] FIG. 4 illustrates a beverage can marketing device with a removable central cover secured to a beverage can in accordance with one example embodiment.

[0046] FIG. 5 illustrates an example of removal of the central cover of a beverage can marketing device by a user's finger in accordance with one example embodiment.

[0047] FIG. 6 illustrates an example of a beverage can marketing device after removal of the central cover in accordance with one example embodiment.

[0048] FIG. 7 illustrates a detailed view of a beverage can marketing device with a removable central cover in accordance with one example embodiment.

[0049] FIG. 8 illustrates a cross sectional view of a beverage can marketing device with a removable central cover in accordance with one example embodiment.

[0050] FIG. 9 illustrates a cross sectional view of a beverage can marketing device with a removable central cover in accordance with another example embodiment.

[0051] FIG. 10 illustrates a beverage can having a beverage can marketing device with a removable center cover and perforated seam to allow removal of the central cover from a rim section of the device in accordance with one example embodiment.

[0052] FIG. 11 illustrates how the rim section and the central cover can be separate disconnected pieces of the beverage can marketing device and how the rim section can hold the central cover in place on a beverage can top in accordance with one example embodiment.

[0053] FIG. 12 illustrates a cross sectional view of a beverage can marketing device where the removable central cover includes an example tab connecting mechanism that temporality secures within an opening defined by the tab on the central panel of the can top in accordance with another example embodiment.

[0054] FIG. 13 illustrates a cross sectional view of a beverage can marketing device where the removable central

cover includes an example alternative tab connecting mechanism that temporality secures to one or more portions of the tab on the central panel of the can top in accordance with another example embodiment.

[0055] FIG. 14 illustrates one example of a beverage can marketing device that provides a less than full connection between an inner edge of the rim section and the central cover in accordance with one example embodiment to allow easy removal of the central cover.

[0056] FIG. 15 illustrates how the underside of the removable center cover can include visible information on the underside of the central cover that can include a scannable code that is operable to be scanned by a computerized device in accordance with one example embodiment.

[0057] FIG. 16 illustrates how the scannable code scanned by the computerized device can be transmitted to a remote computer system along with location information to identify a location of opening of the beverage can when the removable central cover is removed and scanned by the computerized device such as a cell phone in accordance with one example embodiment.

DETAILED DESCRIPTION

[0058] FIG. 3 shows a can top device 300 configured in accordance with one example embodiment of the present invention. FIG. 4 shows a beverage can 200 (e.g. a soda can, beer can or other beverage can) on which the can device 300 from FIG. 3 is installed.

[0059] The can top device 300 in FIGS. 3 and 4 includes a rim section 310 and a removable central cover 312. The rim section 310 is operable to be secured to the top of a beverage can 200 (as shown in FIG. 4) by snapping onto the rim of the can. The rim section 310 in this example includes an outer surface that begins at the lower edge of an outer skirt 313. The outer surface of the rim section 310 in this example extends up an outside area of the beverage can, over the rim, and slopes downwards towards the central panel of the beverage can top and over a countersink groove inside the rim of the beverage can top. The rim section 310 ends at an inner edge that joins in this example to an outer lower edge of the removable central cover 312 to form a releasable boundary 314 between the rim section 310 and the central cover 312.

[0060] The central cover 312 is a circular dome-like structure in this example. The central cover 312 begins at the inner edge of the rim section 310 (at the releasable boundary 314) and includes an upper surface that extends upwards and over the top of the central panel of the beverage can top. In this manner, the central cover 312 extends over and covers the upper surface of the central panel of the beverage can top and covers the tab and openable section of the beverage can to keep these areas clean. By covering the entire can top, the device 300 prevents any debris from contacting the upper surface of the beverage can top, thus resulting in a clean can top.

[0061] The central cover 312 includes a grasping element 316 which, in this example, is formed as an integral part of the central cover 312. The grasping element 316 is a small tab or ledge in this example that extends horizontally outward from an upper area of the central cover 312. The grasping element 316 may extend any distance around the perimeter of the central cover 312. In the illustrated examples, the grasping element 316 extends approximately $\frac{1}{8}$ of the distance around the central cover 312 thus providing enough from for a consumer to insert one or two fingers under the grasping element

316 in order to remove the central cover **312**. In an alternative embodiment, the grasping element **316** can extend entire circumference of the upper region of the central cover **312** and thus the central cover **312** can be pulled and removed from any direction of position when holding a beverage can.

[0062] As shown in FIG. 5, the grasping element **316**, which is a tab in this example, enables a consumer to use a top of his or her finger(s) placed adjacent to and slightly under the grasping element **316** to pull upwards on the grasping element **316** with force. This upward pulling action on the grasping element **316** causes separation of the central cover **312** from the rim section **310** along the releasable boundary **314**. To enable this separation between the central panel **312** and the inner edge of the rim section **310** to occur, the releasable boundary **314** may be formed, for example, of thin plastic material extending around the lower circular edge of the central cover **312** and the circular inner edge of the rim section **310**. In this manner, the releasable boundary **314** is thin enough that, upon upward force of the grasping element **316**, the releasable boundary **314** is able to break away and tear away enabling removal of the central cover **312**.

[0063] While the grasping element is shown as a tab in this example, it can be provided in other shapes and configurations. For example, the grasping element may be a tape-like structure that lies flat and is lightly adhered to the sloping surface of the rim section, and may extend as a pullable tab that extends up the sloped upper surface and over the rim. When a consumer purchases the can, he or she can grasp this tab like piece of tape (that can extend over the rim and down a portion of the outside of the rim section (and even down a portion of the side of the can. When doing so, the consumer can pull this tape-like tab to unstick its backside from the outer surface of the rim section. This tape-like tab connects to the base of the central cover and upon pulling this tape-like tab upwards, the releasable boundary **314** begins to break-away and tear, thus enabling removal of the central cover **312**. The tape-like removing tab can remain affixed to the central cover **312** after removal. In another embodiment, the releasable boundary is provided by an adhesive that extends around the perimeter of the base of the central cover **312**, and when the consumer removes the central panel **312**, they can replace it back onto the can top and the adhesive can re-stick or re-bond the central cover back in place substantially in its original position prior to removal.

[0064] In another example embodiment, the releasable boundary **314** may be formed as a perforation between the central cover **312** and the rim section **310**. Upon upward force of the grasping element **316**, the perforated releasable boundary **314** tears along the perforation at the inner edge of the rim section thus enabling removal of the central cover **312** from the rim section **310**. In these examples, during removal of the central cover **312**, the rim section **310** remains affixed to the rim of the beverage can upon which the device **300** is secured.

[0065] FIG. 6 shows the appearance of the beverage can containing the rim section **310** after removal of the central cover **312**. As demonstrated by the above description of a beverage can containing the device **300**, when a consumer purchases a beverage can, the entire can top of the beverage can is covered and free from dirt and debris due to the presence of the device **300**. When the consumer desires to open the beverage can to consume its contents, he or she can remove the central cover **312** as described above to expose the central panel of the can top. The consumer can operate the tab to open the openable section on the can top while the rim

section **310** of the device **300** remains affixed to the can. The rim section **310** thus provides continuous branding and marketing to the consumer while consuming the beverage due to the visible information **320** on the rim section **310**. Additionally, since the rim section **310** remains affixed to the can when a consumer opens the can and when the consumer dispenses the liquid from the can, the liquid does not pass into the countersink groove of the can top that exists below the upper surface of the rim section **310**. The smooth sloped upper surface of the rim section **310** produces a less turbulent flow when pouring the liquid from the can. For carbonated beverages the decreased turbulence can reduce the loss of carbonation when pouring from the can and can increase taste when drinking directly from the can.

[0066] In other embodiments, the rim section **310** can include a flavoring that is picked up by the flow of liquid from the openable section as it passes over the rim section (e.g. during pouring from the can). The flavoring can mix with the liquid to enable a consumer to experience a different taste for the liquid. In still other embodiments, the device **300** can include thermochromic material that can change color based on temperature. This can enable the device **300** to indicate whether or not the can is cold, warm or hot.

[0067] FIG. 7 shows a slightly different version of the device **600** that does not include the side skirt that extends below the outside of the can. As shown in the example in FIG. 7, the releasable boundary **314** extends around the lower perimeter of the removable central cover **312** less than the entire circumference of the lower edge of the central cover **312**. That is, the releasable boundary **314** includes a beginning **314-1** and an end **314-2**. In this example, the releasable boundary **314** extends between the beginning **314-1** and the end **314-2**. The region outside of the beginning **314-1** and the end **314-2** defines a disconnected region **322** at the base of the central cover **312** that is in proximity to (e.g. that is below) the grasping element **316**. That is, in this example the lower outer edge of the central cover **312** that is in proximity to the grasping element **316** does not couple to the inside edge of the rim section **310**. In this embodiment, when a consumer grasps the grasping element **316** in order to remove the central cover **312**, because the outer lower edge of the central cover **312** in proximity to the grasping element **316** does not couple to the region of the inner edge of the rim section **310** that is also in proximity to the grasping element **316**, there is less upwards resistance when pulling upwards on the grasping element **316** since there is no connection between central cover **312** and the inner edge of the rim section **310** in this disconnected region **322**. This enables easier upward lifting and removal and subsequent disconnect of the central cover **312** from the rim section **310**. This also enables the beginning and end of the releasable boundary **314** to begin to tear easier upon upward lifting of the grasping element **16** than if the releasable boundary **314** is fully connected around the entire circumference of the base of the central cover **312**.

[0068] As a specific example of an embodiment of the device **300** that includes this disconnected region **322**, the perforated edge or thin plastic region that forms the releasable boundary **314** around the lower perimeter of the central cover **312** can extend approximately 300° around the base of the central cover **312**, while the remaining 60° of the circumference of the base of the central cover **312** can remain disconnected from the inside edge of the rim section **310** thus forming the disconnected region **322**. It is to be understood that these degree distances are given by way of example only and

that changes to these dimensions are contemplated within the scope of embodiments of the invention.

[0069] FIGS. 8 and 9 show cross sectional views of example embodiments of the invention as described above and show more particularly the placement of connected regions of the releasable boundary 314 and the disconnected region 322 as described above.

[0070] FIGS. 8 and 9 also show an example cross sectional profile of the central cover 312. It is to be understood that this profile, which is dome-like in this example, is not meant to be limiting. In particular, in alternative embodiments the central cover 312 can be shaped in a lower profile manner to define a region to accept the tab that is riveted to the central panel of the beverage can top. In this configuration, when placing the device 300 on the beverage can top, the central cover 312 defines a tab region and needs to be rotationally oriented or aligned with the tab on the can top. The tab region defined in the central cover 312 can receive the tab of the beverage can top in this manner (i.e. when properly aligned) to provide a low profile central cover 213.

[0071] In the illustrated configurations described and shown thus far, it is noted that no particular rotational orientation is required when securing the device 300 to a beverage can top. That is, the device can be rotationally oriented with the grasping element 16 in any direction relative to the circular shape of the beverage can top and the dome shaped central cover 312 provides enough clearance in any orientation to provide sufficient space for the tab of the beverage can top to reside underneath the central cover 312. It is also noted that the height of the central cover 312 and existence of the grasping element 316 do not interfere with stacking of the beverage cans equipped with the device 300. Additionally, in an alternative embodiment of the invention, instead of having a grasping element 316 that protrudes as a small ledge from the top of central cover 312, the grasping element 16 can be a small recess or indentation within the central cover 312 enabling, for example, a consumer to place his or her fingernail or tip of their finger in the recess or indentation to enable the consumer to pool upwardly on the central cover 312 facilitating its removal.

[0072] In another alternative configuration, the central cover 312 can include a section on its upper surface and an outer upper peripheral edge that is open (e.g. a small opening or slot). That is, the central cover 312 can define a small opening, slot or hole that has no material present thus enabling a consumer to place his or her fingers into the slot or hole and pull upwardly on the central cover 312 to facilitate its removal. In this example, the grasping element 316 would be the defined opening located on the upper surface of the central cover 312 somewhere along its upper outer peripheral edge. Such an opening the can facilitate insertion of a fingernail or fingertip to remove the central cover 312.

[0073] FIG. 10 illustrates an alternative configuration in which the central cover 312 does not get fully removed when a consumer pulls upward on the grasping element 316. In particular, in this example, the releasable boundary 314 is defined up and across a portion of the central cover 312/only a portion (e.g., approximately 1/2 of) central cover is removed when lifting in the grasping elementary 16. As shown in FIG. 10, in this configuration central cover 312 includes a removable portion 312-2 and a fixed portion 312-1 that remains in place after pulling on the grasping elementary 16. This configuration can be useful and beverage can designs that provide for a push opening in the can top that does not require lifting

of a tab rather, requires a user to depress a portion of the central panel of the beverage can top downwards to open the beverage can.

[0074] FIG. 11 illustrates an alternative configuration of a beverage can top cover device 300 in which the device is composed of two separate parts. In particular, the device 300 includes the central cover 312 which is placed onto the beverage can top in order to cover the openable section and tab of the beverage can top prior to placement of the rim section 310. The central cover 312 in this configuration can be self-centering within the opening defined by the inner edge of the rim section 310. The outer lower base of the central cover 312 can have a diameter that is slightly larger than a diameter of the hole defined by the lower inner edge of the ring section 310. In this manner, when the central cover 312 is placed onto the beverage can top and the rim section 310 is placed over the rim of the can, the central cover 312 self-centers within the hole defined by the rim section 310 and is held in place for the rim section 310 with the rim section snaps onto the beverage can top. This embodiment provides for the ability to manufacture and brand the rim section 310 separately from the central cover 312. By producing these parts separately and then mating them together during placement onto the beverage can, a beverage manufacture can provide separate branding and marketing messages on each of the central cover 312 and the rim section 310. For example, the central panel 312 may provide for branding and marketing of a sports team, hotel, airline or other franchise as a tie-in to beverage sales while the rim section 310 provides branding for the beverage brand itself. This enables a beverage manufacture to provide for different central cover 312 that provides branding for different geographic regions or for smaller manufacturing runs of the central cover 312 for a particular event while keeping the rim section 310 consistent with the beverage brand nationwide. These are provided as examples only and it will be apparent to advertising and marketing executives of the many possibilities available for branding and marketing provided by the combination of the rim section 310 and central cover 312.

[0075] FIG. 12 illustrates a beverage can top covering device 300 configured in accordance with another embodiment of the invention in which the central cover 312 includes a tab connecting mechanism 340 that is operable to couple to the tab 315 of the central panel of the beverage can top of the beverage can during placement or installation of the device 300 onto the beverage can. In particular, the tab connecting mechanism 340 in this example configuration extends downwards from the underside of the central cover 312 in order to rigidly insert within an opening defined in the tab 315. Upon insertion of the tab connecting mechanism 340 rigidly into the tab opening of the tab 315, the tab connecting mechanism 340 secures to the tab 315. In the illustrated configuration, the tab connecting mechanism 340 includes a base portion that is slightly wider in diameter than the inside diameter of the opening defined in the tab 315. When the device 300 is oriented with the tab and is pressed onto the beverage can top, the base of the tab connecting mechanism 340 is aligned with the opening defined in the tab 315 and this base portion compresses slightly during pressing of the device 300 onto the can top and the base is forced through the opening defined in the tab 315. After passing through the opening defined in the tab 315, the base portion of the tab connecting mechanism 340 expands within the opening and resides just under the tab. This design can benefit from a tab that is optimally designed

with an opening to accommodate coupling of the tab connecting mechanism for a secure connection between the central cover 312 and the tab 315. In this manner, when a consumer pulls upwardly on the grasping element 316, the tab connecting mechanism 340 concurrently pulls upwardly on the tab 315 in order to begin the process of opening the openable section defined in the beverage can top. In this manner, when a consumer begins removal of the central panel 312, the consumer simultaneously begins opening of the openable section of the can top. This mechanism may be beneficial to avoid consumers from attempting to remove and steal the central cover 312 prior to purchase of the beverage can in a store because attempted removal of the central cover 312 will result in the breaking of the seal of the openable section of the can top due to the upward lifting of the tab 315 (from its connection to the tab connecting mechanism 340). Under the cap like promotions can thus be provided since information on the underside of the central cover is not accessible until the can is at least partially opened. The tab connecting mechanism 340 can be arranged so as to separate from the tab when pulled upward, thus leaving the can slightly opened, while allowing removal of the dome from the tab.

[0076] FIG. 13 illustrates an alternative embodiment of a tab connecting mechanism 340. In FIG. 13, when the device 300 is installed onto the beverage can top, the tab connecting mechanism 340 includes fingers 345 that extends downwards from the underside of the central cover 312. These fingers are positioned and aligned in order to receive and surround the end of the tab 315 of the beverage can top that a consumer's finger would lift in order to open the beverage can. These tab connecting fingers essentially snap onto and around the end of the tab. Subsequently, when a consumer grasps the grasping element 316 in order to remove the central cover 312, the fingers pull upwards on the end of the tab thus causing partial opening of the beverage can and subsequent separation of the central panel from the tab.

[0077] In an alternative configuration, to secure a portion of the underside of the central cover 312 to a portion of the tab 315, a ring of adhesive 350 (e.g., a food grade epoxy) can be placed on the underside of the central cover 312 prior to installation of the device 300 onto a beverage can 200. This adhesive ring 350 can be sized with a diameter to coincide with aligning of the radially outmost portion of the top of the tab 315 on the top of the beverage can. In this manner, when the device 300 is installed on the beverage can top, a certain section of the adhesive ring will come into contact with the radially outmost portion of the top of the tab 315. When the adhesive dries to this section of the tab 315, the underside of the central cover 312 is effectively temporarily secured to the top of the tab 315. Accordingly, when a consumer pulls on the central cover 312 for removal, the portion that is adhered to the top of the tab 315 pulls upwards on the tab 315 causing the can to partially open. The adhesive can be of a variety that will allow the central cover 312 to be removed from (i.e. broken off of) the tab 315 with sufficient force thus removing the central cover 312 without interfering with consuming the beverage from the can. When the central panel is pulled upwards via the grasping element 316, the angle of lift of the tab as compared to the central panel are different since the tab pivots on a central rivet on the can top while the central panel peels away and upwards. This divergent angle (between the panel and the tab) that increases as the central panel is lifted more and more upwards can provide the necessary force to cause the connecting mechanism 340 to separate from the tab

during the lifting procedure of the central panel, but this separate can occur after the tab has been lifted enough to cause the openable section to be broken on the can top, thus effectively opening the can. The user may be required to further lift the tab after separation and removal of the central panel to fully open the openable section to obtain access to the liquid contents of the can.

[0078] FIG. 14 illustrates an alternative configuration of a device 300 for covering a beverage can top in which the central panel 312 provides for a releasable boundary 314 that does not fully extend around the entire inside perimeter of the inside edge of the rim section 310. Instead, a small section of the material in between the central cover 312 in the rim section 310 forms a connected boundary 365 that can remain in place after opening of the central cover 312. The connected boundary 365 thus allows the central cover 312 to remain secured and affixed to the beverage can even after opening of the central cover 312 to expose the openable section on the can top. As illustrated by dotted lines in FIG. 14, the tab and the openable section (that reside under the central cover 213) can be oriented orthogonally to the grasping element 316 thus enabling the central cover 312 to open off to the side of the opening in the beverage can top while the central cover 312 hinges on the connected boundary. In this manner, a consumer can open the central cover 312 which hinges on the connected boundary 365, then open the can using the tab, and the central cover does not become a separate piece of disposable waste, but rather stays with the can.

[0079] In yet another configuration, the boundary between the central cover 312 and the inside edge of the rim section 310 can include a seal mechanism allowing the central cover 312 can be reached secured in place after removal or opening. That is, in this configuration, the releasable boundary 314 can be a resealable boundary that is releasable for some period of time to enable the consumer to open and drink from or pour the contents of the beverage can out and thereafter the consumer can reseal the central cover 312 back down onto the rim section 310. This configuration can prevent spillage of the liquid within the can is a consumer does not empty the entire contents. It will be apparent to those skilled in the art that there be me may be many types of resealable seams that can be utilized to reconnect the central cover 312 to the rim section 310. As an example, a Ziploc type connector seam can be used between the central cover 312 in the rim section 310 that enables the consumer to press the central cover 312 back into place on the rim section 310. Another example connector would be a magnetic connection between the central cover 312 in the rim section 310 in which the central cover 312 secure itself by having a small metallic ring installed within its base that would be magnetically attracted to a magnetic portion of the rim section 310 located along the inside edge of the rim selection. Another alternative arrangement would be a resealable adhesive will between the central cover 312 in the rim section 310 that enables the central cover to be stuck back down onto the rim section 310 after removal. A food grade re-sticking adhesive can be used for this purpose.

[0080] FIGS. 15 and 16 illustrate an alternative configuration of a device 300 in accordance with example embodiments of the invention in which a portion of the device includes information on an underside of either the rim section 310 or the central cover 312. The information can be used to provide contests, giveaways, promotions, coupons, discounts, customer loyalty programs or the like or for other uses as may be seen fit by a beverage company.

[0081] In this example, the underside of the central cover 312 includes promotion information 450 such as a coupon code or scannable QR code, bar code, game code, or numeric or alpha numeric code or message. A consumer purchases a beverage can containing the device 300 and can either remove the entire device 300 itself or can remove the central cover 312 as explained previously and can thereafter use his or her mobile device's 410 camera 412 to scan the QR code on the underside of the device 300. In doing so, the scan application 410 operating within the mobile device can transmit the scanned QR code along with information such as GPS data 417 and time of day, date and/or user identification 418 to a server 460 on a computer network 470 such as the Internet. The server 460 can operate a customer loyalty and tracking application 490 to receive the scanned code 450 and other information (417, 418) and perform a database lookup to determine whether or not the consumer scan the code is an instant winner of a game, contest or promotion. Other information that can be identified with the time and date that the scan to place. The QR code for 50 could include information to identify the particular production date of the beverage and thus beverage companies could identify the amount of time that takes place between the time of production of a beverage and the actual consumption date of the beverage.

[0082] In this manner, the device 300 provides the ability to for the consumer to remove some or all of the device such as the central cover 312 in order to reveal information enabling a consumer to participate in customer loyalty programs provided by beverage companies or other third-party companies. This allows the device 300 configured in accordance with embodiments of the invention to provide Coke rewards-like functionality as provided by the Coca-Cola Corporation using bottle caps, but for beverage cans. Coke and Coca-Cola are registered Trademarks of Coca-Cola Corporation. By providing a removable central cover 312, the device 300 can also provide coupons, giveaways or other content on the underside of the central cover 312 thus increasing consumer interest in a given beverage brand that contains the device 300. When a consumer scans information for 50, and transmit this information to the server 460, information such as GPS data 417 can identify exactly where geographically the information was scanned. Since consumers typically remove the central cover 312 and scan the information 450 just prior to opening the beverage can, this would enable beverage companies to identify the specific geographic location where the can was opened and consumed, as well as the time and date and identity of the consumer performing the scan of the central cover 312. The server computer system can thus track information concerning where beverage cans are opened for consumption. This can be compared with demographic information for these geographic locations to provide valuable insight for beverage marketing purposes.

[0083] In example embodiments, upper surfaces of both the rim section 310 and central cover 312 can include visible information 320 such as logos (e.g., beverage company logos, sports team logos, or any other logo for a product or service), trademarks, brand names, or other marketing or promotional information. The information 320 can be embossed in or on the device (e.g. raised lettering), embedded in the device or printed on the device, or formed when the device is injection molded (molded in the plastic) or provided for in any other visible manner (e.g. printed on the device 300) so that consumers purchasing a beverage can containing the device 300 can see the visible information 320. The device thus provides

an excellent branding and marketing surface over the entire beverage can top, while also keeping the can top clean and free of external debris, dust, germs, bacteria, etc. The device 300 can include an antimicrobial embedded in its material (e.g. antimicrobial contained within the plastic, or sprayed on) to inhibit the growth of germs and bacteria. The device 300 can be made from biodegradable material such as a cellulose plastic that can break down quickly when recycled. The device 300 can be manufactured in large quantities in an inexpensive manner and can be applied in an automated manner quickly in a canning line just after the beverage can top is double sealed to the can housing (e.g. just after filling the can with the beverage or other liquid).

[0084] It is also to be understood that any of the configurations the device identified and the '490 patent can be equipped with a central cover 312 as explained in the present disclosure. Accordingly, while the present disclosure shows figures containing a device that goes over the rim of the beverage can top, it is to be understood that versions of the device that are adhered to an inside edge of the rim of a can top can also be produced that have a central panel 312 along with the features and functionality described herein. Such a configuration could be glued in or otherwise adhered to the beverage can top and would not extend over the rim of the can.

[0085] In another configuration, the device itself could be formed on the beverage can top by directly injection molding plastic to the beverage can. In such configurations, the can itself would serve as a portion of the surface for the injection mold. In other words, an injection mold had could be lowered onto the can to produce a rim cover portion 310 the injection molding liquid plastic onto the beverage can itself which hardens to form the rim section 310. The rim section injection molded directly onto the can top in this manner could include a rich or channel defined along the inside edge of the rim section. This channel could receive the lower edge of the central panel 312 that could snap into the channel. Central panel would thus be placed onto the can after placement of the rim section 310 (either by injection molding or snapping onto the can or otherwise adhering onto the can top). In one configuration, the rim section 310 can also include an inside edge that is operable to receive and secure the lower edge of the central cover 312 within a groove, channel or other fixation mechanism such as snap fitting. The central cover 312 could thus be snap onto the rim section 310 after applying the rim section 310 to the beverage can top.

[0086] Still further configurations, the central cover 312 and/or the rim section 310 can be manufactured from will a clear or transparent material thus enabling the consumer to see some or a portion of the tab, openable section or other region of the beverage can top through the device 300.

[0087] It is to be understood that an important aspect of the certain embodiments disclosed herein is that the when the device 300 is placed onto a beverage can top, the rim section 310 can secure in a fixed manner to the rim of the can (e.g. as disclosed in the '490 patent). In most embodiments, this rim section is not intended to be removed during opening and drinking or dispensing liquid from the can. The central panel 312 is removable as explained above, leaving the rim section 310 behind and in place on the can top. After removal, the rim section 310 provides the inner edge (that defines a central opening) that resides in close proximity to, or lies directly on top of a portion of the central panel of the beverage can top at a location that is in proximity to the openable section of the beverage can top. The inner edge of the rim section thus

remains flush against the central panel of the beverage can top after removal of the central cover **312**, thus providing the benefits of the rim section as described in the '490 patent. The central panel combined with the rim section enables the entire can top to be covered and protected from debris, dirt, germs, etc. After removing of the central panel **312**, the consumer may still chose to wipe the upper can top surface, and the upwardly sloped surface of the rim section will assist in easy wiping and removal of any dust or dirt that may have settled onto the sloped surface of the rim section.

[0088] In an alternative embodiment, the central cover **312** is adhered to the beverage can top via an adhesive and the base of the central cover **312** is shaped to conform to the shape and profile of the sloped surface of the rim section **310**. In this configuration, the base of the central cover **312** can cover a majority of the portion of the sloped surface of the rim section **310** when installed (e.g. via an adhesive). When removing the central cover **312**, the adhesive backing of the underside of the central cover enables the base of the central panel to peel away and expose the sloped surface of the rim section. This configuration enables the central cover **312** to cover not only the central panel of the beverage can top (i.e. the tab and openable sections), but also to cover and protect from debris the sloped upper surface of the rim section that slopes upwards towards the top of the rim of the beverage can.

[0089] By providing a unique packaging device as explained herein for beverage cans, the device serves an important purpose of package differentiation in the beverage can industry. The device provides an eye-catching packaging addition to beverage cans to increase sales and steal market share from competitors do not use the device. Additionally, the device provides a cleaner drinking experience for the health conscious consumer.

[0090] While this invention has been particularly shown and described with references to preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the present application as defined by the appended claims. Such variations are intended to be covered by the scope of this present application. As such, the foregoing description of embodiments of the present application is not intended to be limiting.

What is claimed is:

1. A device that secures to a beverage can top, the device comprising:

a rim section having an upper surface that slopes downwards and radially inwards from an upper region of a rim of the can top towards a central panel of the can top, the upper surface of the rim section extending above and across at least a portion of a countersink groove defined by the can top, the rim section including an inner edge that resides adjacent to the central panel of the can top; and

a central cover secured to the can top at the inner edge of the rim section, the central cover extending over the top of a central panel of the can top and covering a tab and openable section of the can top; the central cover being removable from the rim section at a releasable boundary defined at the inner edge of the rim section.

2. The device of claim 1 wherein the releasable boundary defined at the inner edge of the rim section is a tear away seam defined between the rim section and the central cover.

3. The device of claim 2 wherein the tear away seam is defined as a thin continuous connection joining the central cover to the inner edge of the rim section.

4. The device of claim 2 wherein the tear away seam is defined as at least one of:

a perforated seam joining the central cover to the inner edge of the rim section;

a series of periodic connections that each joining the central cover to the inner edge of the rim section seam; and an adhesive that secures the central cover to the inner edge of the rim section.

5. The device of claim 1 wherein the central cover includes visible branding content on a top side of the central cover.

6. The device of claim 1 wherein the central cover includes visible information on an underside of the central cover, the visible information not being viewable when the device is secured to the can top until removal of the central cover.

7. The device of claim 6 wherein the visible information on the underside of the central cover is a scannable code that is operable to be scanned by a computerized device for transmission along with location information of the computerized device at a time of the scan to a remote computer system.

8. The device of claim 1 wherein an upper surface of the rim section includes a visible branding message.

9. The device of claim 6 wherein the visible information on the underside of the central cover is at least one of:

a coupon providing a discount;

Information to allow a consumer to participate in a contest, promotion, or customer loyalty program; and

a code to allow a consumer to obtain digital content.

10. The device of claim 1 wherein the central cover includes a grasping element that extends from the central cover to allow a user to pull on the central cover to remove the central cover from the can top while leaving the rim section secured to the can top.

11. The device of claim 10 wherein the grasping element is at least one of a tab, a ring, a tape-like material, and a cutaway in the central cover allowing grasping of the central cover for removal from the can top.

12. The device of claim 1 wherein the rim section and the central cover are separate disconnected pieces of the device, and wherein the central cover is secured to the can top by a physical fit between the inner edge of the rim section and an outer edge of the central cover prior to removal of the central panel from the can top.

13. The device of claim 12 wherein an outer edge of the central cover has a diameter that is slightly larger at at least one location than an inner diameter of an opening defined by the inner edge of the rim section, the outer edge of the central cover residing under the inner edge of the rim section prior to removal of the central cover from the can top, the central cover being deformable during removal to allow the outer edge of the central cover to pass through an opening defined by the inner edge of the rim section.

14. The device of claim 12 wherein an outer edge of the central cover snaps onto the inner edge of the rim section to create the releasable boundary that between the rim section and the central cover that unsnaps to allow removal of the central cover from the rim section.

15. The device of claim 14 wherein the central cover, after removal from the can top, can be snapped back onto the can top to rejoin the central cover and the rim section.

16. The device of claim 1 wherein the central cover includes a tab connecting mechanism that temporality

secures to a tab on the central panel of the can top when the central panel is placed on the can top, the tab connecting mechanism causing the tab on the can top to lift upwards from the central panel of the can top to open at least a portion of the openable section of the can top upon removal of the central cover from the device.

17. The device of claim **1** wherein the rim section secures to the can top by snapping onto an outside lower edge of the rim of the can top, the outside lower edge being formed on the can top during couple seaming of the can top to a can housing of the beverage can.

18. The device of claim **1** wherein the rim section secures to the can top along an upper inner edge of the rim of the can top and does not extend over the rim of the can top.

19. The device of claim **1** wherein the rim section and central cover are secured to the can top prior to double seaming the can top to a beverage can housing.

20. The device of claim **1** wherein the rim section and central cover are thermoformed to the can top.

21. The device of claim **1** wherein rim section and central cover are injection molded to the can top.

22. The device of claim **1** wherein the central cover is dome shaped and defines an area underneath the central cover the covers a tab and openable section of the central panel of the beverage can top.

23. A device the secures to a beverage can top, the device comprising: a rim section that secures to a rim area of a beverage can; a central cover coupled to the rim section along an inside edge of the rim section, the central cover covering an openable section and tab area of the beverage can top, the central cover being removable from the beverage can to allow opening of the openable section of the beverage can while the rim section remains in place on the can top after removal of the central cover, the central cover including visible information on an underside of the central cover, the visible information not being viewable when the device is secured to the can top until removal of the central cover.

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