

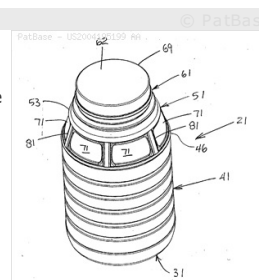
1) Family number: 31031284 (US2004195199 AA)

HOT FILL CONTAINER

Abstract: Source: US2004195199 AA A hot fill container is provided having a base, a body portion connected to the base, a shoulder portion connected to the body portion, and a neck portion connected to the shoulder portion. At least two panels in the shoulder portion are adapted to flex to accommodate pressure changes within the hot fill container. A longitudinal strut between each of the at least two panels provides longitudinal support to the neck portion.

Probable Assignee: GRAFCO PET TECHNOLOGIES

Earliest Publication Date: 20041007



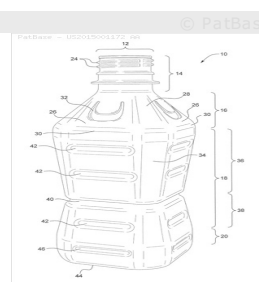
2) Family number: 54417740 (US2015001172 AA)

LOAD-BEARING AND VACUUM-RESISTANT CONTAINERS

Abstract: Source: US2015001172 AA Containers having improved load-bearing and vacuum-resistance features are provided. In a general embodiment, the present disclosure provides a container (10) having a shoulder (16) including four faces forming compound-radiused corners at intersections (28,30) with a body of the container. In another embodiment, the present disclosure provides a container having a shoulder (16) with four faces, at least two of the four faces having a cut-away (32) with a shape that is substantially U-shaped. The structural features of the present containers advantageously provide for improved compression capacity and vacuum-resistance when compared to similar containers currently on the market.

Probable Assignee: NESTLE SA

Earliest Publication Date: 20130801



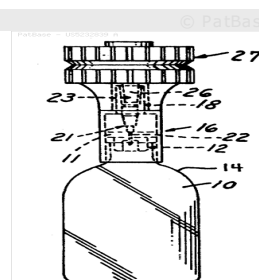
3) Family number: 9605245 (US5232839 A)

DETECTING MICROBIOLOGICAL GROWTH

Abstract: Source: US5232839 A In such a method and apparatus for detecting microbiological growth in a sealed sample container, pressure within the headspace of the container is monitored for detecting rate of change of such headspace pressure. Presence of microbiological growth within the container is indicated as a function of rate of change of headspace pressure. The rate of pressure change is compared with a standard rate for a family of microorganisms, and growth is indicated when the absolute value of the rate of pressure change (which may be positive or negative) exceeds the absolute value of the standard rate (which also may be positive or negative). For detecting microbiological growths which may have differing growth rates, absolute value of rate of pressure change is compared to a plurality of standard rates for differing families of microorganisms. At least some of the rates may be positive, corresponding to growth of gas-producing organisms, and at least some of the rates may be negative, corresponding to growth of gas-consuming organisms. In either case, microbiological growth in the test sample is indicated when absolute mathematical value of the rate of headspace pressure change exceeds absolute mathematical value of any of the standard rates.

Probable Assignee: TREK DIAGNOSTIC SYSTEMS INC

Earliest Publication Date: 19930803



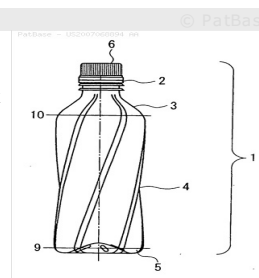
4) Family number: 31810076 (US2007068894 AA)

PLASTIC BOTTLES

Abstract: Source: US2007068894 AA Plastic bottles (1) which are characterized in that: they are composed of neck (2), shoulder (3), body (4) and bottom (5); the cross-sectional shape at the body (3) is a regular polygon, the number of angles of which is an even number of not less than 4 nor more than 32; each angle of the polygon is rounded off by an arc (8) whose radius is not longer than half the radius of a circle circumscribed about the cross-sectional shape at body (3); cross-sectional shapes have the same shape at any portion of body (3); circles circumscribed about the cross-sectional shapes are identical with one another; the circumscribed circles have a center on the vertical central axis of body (3); and the cross-sectional shape of body (3) rotates around said central axis in proportion to height along said central axis.

Probable Assignee: COCA COLA CO

Earliest Publication Date: 20050414



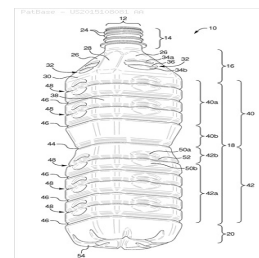
5) Family number: 55107133 (US2015108081 AA)

CONTAINERS HAVING IMPROVED VACUUM RESISTANCE

Abstract: Source: US2015108081 AA Containers having improved vacuum-resistance and aesthetic features are provided. In a general embodiment, the present disclosure provides a container (10) having a substantially rectangular-shaped body including at least one cut-away portion (32) on a first side of the body. The cut-away portion includes a panel (34) that is intersected by a horizontal rib (36) that extends along an outer perimeter of the container in a substantially horizontal plane. The structural features of the present containers advantageously provide for improved vacuum-resistance and consumer gripping when compared to similar containers currently on the market.

Probable Assignee: NESTLE SA

Earliest Publication Date: 20131107



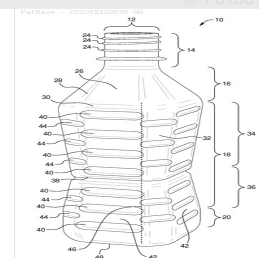
6) Family number: 55107135 (US2015129536 AA)

LIGHTWEIGHT, VACUUM-RESISTANT CONTAINERS HAVING OFFSET HORIZONTAL RIBS

Abstract: Source: US2015129536 AA Containers having improved vacuum-resistance and aesthetic features are provided. In a general embodiment, the present disclosure provides a container having a body with at least first (40) and second (44) interrupted horizontal ribs. The first interrupted, horizontal rib is located in a horizontal plane that is different from the horizontal plane occupied by the second, interrupted, horizontal rib, and the first and second interrupted, horizontal ribs are offset from each other. The ribs, or indentations, provided on the containers have an increased height when compared to similar, known containers. The structural features of the present containers advantageously provide for improved vacuum-resistance when compared to similar containers currently on the market.

Probable Assignee: NESTLE SA

Earliest Publication Date: 20131107



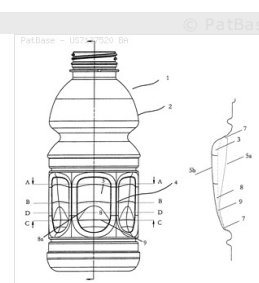
7) Family number: 23341661 (US7137520 BA)

CONTAINER HAVING PRESSURE RESPONSIVE PANELS

Abstract: Source: US7137520 BA A container, suitable as a hot-fill container, includes a controlled deflection flex panel which may invert and flex under pressure, such as hot-fill conditions, to avoid deformation and permanent buckling of the container. The flex panel includes an initiator portion which has a lesser projection than the remainder of the flex panel and initiates deflection of the flex panel.

Probable Assignee: DAVID MELROSE

Earliest Publication Date: 20000831



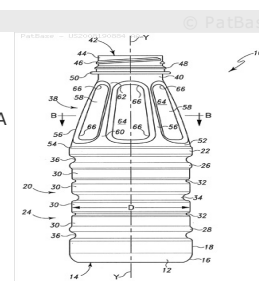
8) Family number: 42079609 (US2008190884 AA)

HOT-FILLABLE BOTTLE

Abstract: Source: US2008190884 AA A bottle having a base including an inwardly and upwardly projecting flexible surface within a generally continuous seating ring has a generally cylindrical wall extending upward from the base. A plurality of annular inwardly projecting, and vertically flexible rings extend about the cylindrical wall perimeter interrupting the cylindrical wall. At least one of rings projects inwardly more than some others of the rings to achieve a sidewall crush resistance that is at least as great as comparable bottles with thicker sidewalls. A shoulder portion, including a plurality of vertical ribs separating a plurality of vacuum responsive panels, extends upward from the cylindrical wall to a neck leading to a cappable opening. The vertical flexibility of the bottle sidewall reduces the amount of flexing required in the shoulder panels and base to accommodate the same vacuum development, and enhances the total amount of post capping vacuum development that can be accommodated by the bottle as a whole.

Probable Assignee: BALL CORP

Earliest Publication Date: 20080808



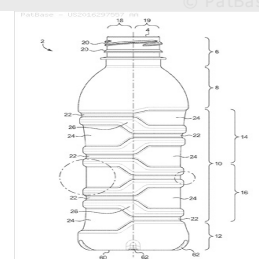
9) Family number: 59460917 (US2016297557 AA)

VACUUM-RESISTANT CONTAINERS HAVING OFFSET HORIZONTAL RIBS AND PANELS

Abstract: Source: US2016297557 AA Containers having improved vacuum-resistance and aesthetic features are provided. In a general embodiment, the present disclosure provides a body (10) including at least one indented rib (22) and at least one indented panel (24). The at least one indented rib and the at least one indented panel are continuous around a circumference of the body in a substantially horizontal plane to maintain an even vertical compression of the body. At the same time, the panels provide a substantially flat surface for a sleeve for the container. The invention is particularly adapted for lightweight containers.

Probable Assignee: NESTLE SA

Earliest Publication Date: 20150611



10) Family number: 76794683 (WO19228741 A1)

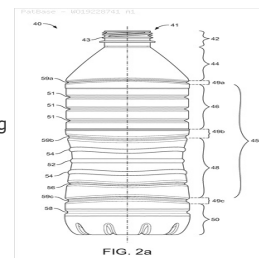
BOTTLE WITH GRIP PORTION

PatBase - WO19228741 A1

Abstract: Source: WO19228741 A1 The invention concerns a container (40), preferably a bottle, presenting a longitudinal axis comprising - a neck portion (42), - a shoulder portion (44) connected to the neck portion (42), - a body portion (45) comprising a label portion (46) and a grip portion (48) and connected to the shoulder portion (44) via a first connecting portion (49a), the label portion (46) and the grip portion (48) being connected together via a second connection portion (49b), and - a base portion (50) forming the bottom of the container (40) connected to the body portion via a third connecting portion (49c), wherein the grip portion (48) comprises at least one undulating bead (54).

Probable Assignee: NESTLE SA

Earliest Publication Date: 20191205



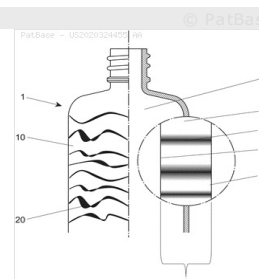
11) Family number: 81403146 (US2020324455 AA)

BLOW MOLDED ARTICLE WITH VISUAL EFFECTS

Abstract: Source: US2020324455 AA A blow molded monolayer article. The article has a hollow body defined by a wall. The wall has one or more regions comprising a first composition and one or more regions formed by a second composition.

Probable Assignee: PROCTER AND GAMBLE CO

Earliest Publication Date: 20201015



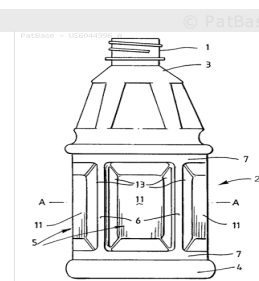
12) Family number: 8570535 (US6044996 A)

HOT FILL CONTAINER

Abstract: Source: US6044996 A PCT No. PCT/AU96/00641 Sec. 371 Date Jun. 29, 1998 Sec. 102(e) Date Jun. 29, 1998 PCT Filed Oct. 11, 1996 PCT Pub. No. WO97/14617 PCT Pub. Date Apr. 24, 1997A hot fill container formed from a polymeric material is disclosed. The container comprises a base (4), a body (2), and a neck (1), wherein the body (2) comprises an odd number of spaced-apart panels (5) that are responsive to internal pressure changes in the container. Hot fill bottles of a given capacity having an uneven number of deformable panels, e.g., five of a given wall thickness, unexpectedly accommodate significantly higher volume reductions before collapsing and distorting in an uncontrolled manner than known hot fill bottles of the same capacity having an even number of panels, e.g., six of the same wall thickness.

Probable Assignee: AMCOR LTD

Earliest Publication Date: 19970424



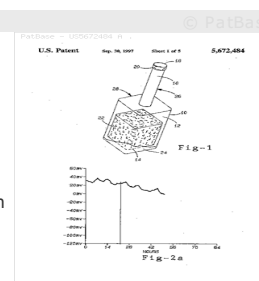
13) Family number: 11222222 (US5672484 A)

MICROBIOLOGICAL CULTURE BOTTLE, AND METHOD OF MAKING AND USING SAME

Abstract: Source: US5672484 A A container (10) adapted for use in the detection of aerobic microorganisms in a sample includes a non-toxic insert (22) disposed within the container (10) for supporting microorganisms adhered thereto and for increasing microbial exposure to oxygenated growth media to enhance microbial metabolism. A method for making the container (10) includes the steps of inserting a non-toxic insert (22) into the container (10) and adding growth media (14). Also, a method of detecting aerobic microbiological growth in a sealed sample container (10) having a headspace (16) and which contains a sample which may contain an unknown microorganism includes the steps of providing a sealed sample container (10) having a headspace (16) and non-toxic insert (22) saturated with microbiological growth media (24), inoculating the insert (22) within the sealed sample container (10), and monitoring metabolism in the container (10) as an indicator of the presence of microorganisms to detect microorganisms in the sample.

Probable Assignee: TREK DIAGNOSTIC SYSTEMS INC

Earliest Publication Date: 19950810



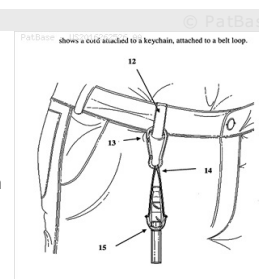
14) Family number: 63550969 (US2016262526 AA)

CRADLE HOLDER AND LANYARD APPARATUS TO SECURE ELECTRONIC CIGARETTE OR PERSONAL VAPORIZER

Abstract: Source: US2016262526 AA A lanyard style holder designed to secure a smokeless cigarette or personal vaporizer device around the neck, shoulder or waist of a user. A lanyard includes a holder cradle with multiple apertures configured to hold a smokeless cigarette device in the central aperture and corner apertures designed to couple a plurality of cords, thereby creating a loop. The loop is then placed around the neck or across the chest of a user wherein a smokeless cigarette device oriented upright is inserted into the central aperture.

Probable Assignee: VAPESLING LLC

Earliest Publication Date: 20160915



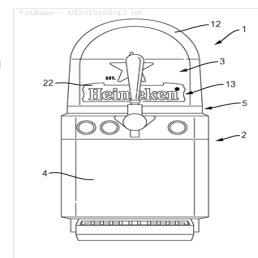
15) Family number: 68171399 (US2019169013 AA)

BEVERAGE DISPENSING ASSEMBLY AND BEVERAGE CONTAINER

Abstract: Source: US2019169013 AA Beverage dispensing assembly, comprising a dispenser and a beverage container, wherein the beverage container has a neck portion and a shoulder portion adjacent the neck portion, wherein the neck portion is provided with at least an outflow opening and at least one gas inlet opening and wherein the dispenser comprises a housing, wherein the housing is provided with a receptacle for receiving at least part of the container, wherein the container is positioned in the dispenser with the neck and shoulder portion facing downward, such that the neck portion and at least part of the shoulder portion are received in the receptacle, wherein part of the shoulder portion extends close to and/or is in contact with a wall of the receptacle, wherein preferably a lid is provided over the container, enclosing a part of the container extending outside the receptacle.

Probable Assignee: HEINEKEN SUPPLY CHAIN BV

Earliest Publication Date: 20180111



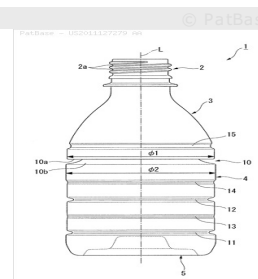
16) Family number: 44397153 (US2011127279 AA)

BOTTLE

Abstract: Source: US2011127279 AA Disclosed is a bottomed tubular bottle including an annular groove which is formed so as to be circumferentially and radially recessed inward along the outer peripheral surface of a body of the bottle with a bottle axis as a center and which contracts and deforms the body in the axial direction of the bottle when the internal pressure is reduced. The annular groove is recessed and formed by a first wall surface arranged on a mouth side of the bottle and a second wall surface arranged on a bottom side of the bottle. The body is formed so that the outer diameter on the bottom side is larger than the outer diameter on the mouth side with the annular groove interposed therebetween.

Probable Assignee: YOSHINO KOGYOSHO CO LTD

Earliest Publication Date: 20100218



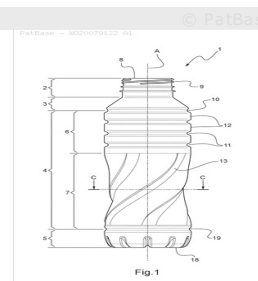
17) Family number: 78542277 (WO20079122 A1)

CONTAINER HAVING AN IMPROVED SIDE-LOAD DEFORMATION RESISTANCE

Abstract: Source: WO20079122 A1 The invention relates to a container (1), preferably a bottle, which extends along a main axis (A) and comprising a wall forming a neck portion (2), a shoulder portion (3) connected to the neck portion (2), a body portion (4) connected to the shoulder portion (3), the body portion (4) comprising a grip portion (7), and a base portion (5) forming the bottom of the container (1) and connected to the body portion (4). The grip portion (7) comprises, over at least the majority of its dimension along the main axis (A), a plurality of spiral ribs (13) formed by the wall of the container (1) and spiralling in parallel around the main axis (A). The spiral ribs drastically increase side stability, compression and twisting deformation resistance of the container, while they have a non-technical and appealing appearance.

Probable Assignee: NESTLE SA

Earliest Publication Date: 20200423



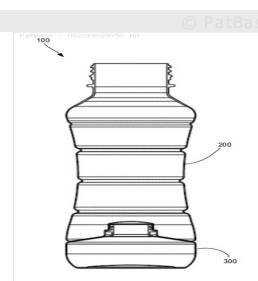
18) Family number: 68415186 (US2018029750 AA)

METHOD AND APPARATUS FOR BLOW-MOULDED STACKABLE RECEPTACLES

Abstract: Source: US2018029750 AA A blow-molded stackable receptacle comprises a first blow-molded component defining a first blow-molded component axial opening at a first end and an axial recess at a second end, wherein the axial recess is defined by a longitudinal wall comprising at least one ridge or tab and a second blow-molded component defining a second blow-molded component axial opening at a mating end, wherein the axial recess of the first blow-molded component is configured to receive the mating end of the second blow-molded component, wherein the at least one ridge or tab is configured to retain the mating end of the second blow-molded component. At least one method is further disclosed.

Probable Assignee: YUMIX LLC

Earliest Publication Date: 20180201



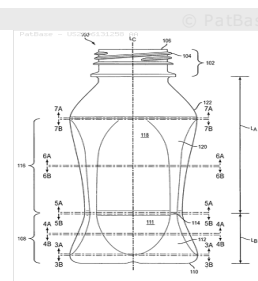
19) Family number: 33082025 (US2006131258 AA)

CONTAINER HAVING BROAD SHOULDER AND NARROW WAIST

Abstract: Source: US2006131258 AA The invention relates to a plastic container with a longitudinal axis, the container having a neck, shoulder, base and body portion. The neck has a longitudinal height and terminates at an opening, with the substantially circular base opposite the neck and adapted for maintaining the container in an upright position. The base has a rounded, positive slope portion of an increasing circumferential dimension transitioning into a decreasing circumferential dimension portion having a negative slope along the longitudinal axis and further transitioning from a circular rounded portion at the base to generally, longitudinal base panel portions with rounded, longitudinal base panel edges separating each of said flattened portions from each other at a waist. The waist has a circumferential dimension less than the base and is positioned between the body portion and the base. The body portion is positioned between the waist and the circular shoulder and has flexible, substantially flat longitudinal body panels and rounded, longitudinal body panel edges separating adjacent body panels from each other and merging with the longitudinal panel edges of said base. The longitudinal body edges increase in width as said body longitudinally merges with the circular shoulder portion, and the circular shoulder portion has a rounded portion transitioning into and merging with the body panels, and a sloping portion of reducing diameter merging with the neck.

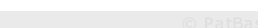
Probable Assignee: GRAHAM PACKAGING CO LP

Earliest Publication Date: 20060622



20) Family number: 44211634 (US2011108505 AA)

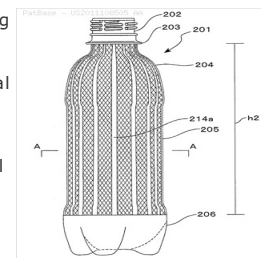
LAMINATED SYNTHETIC RESIN BOTTLE, INJECTION MOLDING DEVICE, AND PROCESS FOR MOLDING A LAMINATED PREFORM



Abstract: Source: US2011108505 AA A biaxially drawn, blow molded bottle characterized in that vertical connecting zones having no intermediate layer and having substrate layers welded directly with each other are formed in parallel in a circumferential direction and in a plural number along an axial direction of the bottle and are disposed on both right and left sides of each intermediate layer segment to be formed in this height range, and that horizontal connecting zones having no intermediate layer and having substrate layers welded directly with each other are also formed in parallel in an axial direction and in a plural number along a circumferential direction of the bottle and are disposed on both upper and lower sides of each intermediate layer segment to be formed, thus allowing the intermediate layer to be segmentalized in the circumferential and axial directions by both the vertical and horizontal connecting zones.

Probable Assignee: YOSHINO KOGYOSHO CO LTD

Earliest Publication Date: 20100107



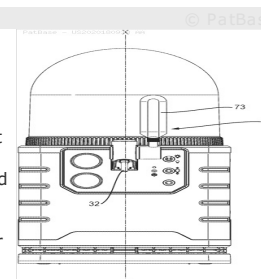
21) Family number: 71979093 (US2020180933 AA)

BEVERAGE DISPENSING ASSEMBLY AND BEVERAGE CONTAINER

Abstract: Source: US2020180933 AA Beverage dispensing assembly (1), comprising a dispenser (2) and a beverage container (3), wherein the beverage container (3) has a neck portion (7) and a shoulder portion (8) adjacent the neck portion (7), wherein the neck portion (7) is provided with at least an outflow opening and at least one gas inlet opening (9) and wherein the dispenser (2) comprises a housing (4), wherein the housing (4) is provided with a receptacle (5) for receiving at least part of the container (3), wherein the container (3) is positioned in the dispenser (2) with the neck and shoulder portion (7, 8) facing downward, such that the neck portion (7) and at least part of the shoulder portion (8) are received in the receptacle (5), wherein part of the shoulder portion (8) extends close to and/or is in contact with a wall of the receptacle (5), wherein preferably a lid (12) is provided over the container (3), enclosing a part of the container (3) extending outside the receptacle (5).

Probable Assignee: HEINEKEN SUPPLY CHAIN BV

Earliest Publication Date: 20181122



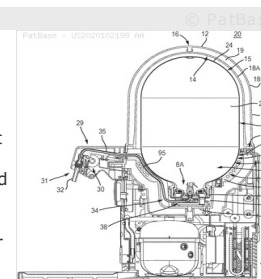
22) Family number: 71979092 (US2020102198 AA)

BEVERAGE DISPENSING ASSEMBLY AND BEVERAGE CONTAINER

Abstract: Source: US2020102198 AA Beverage dispensing assembly (1), comprising a dispenser (2) and a beverage container (3), wherein the beverage container (3) has a neck portion (7) and a shoulder portion (8) adjacent the neck portion (7), wherein the neck portion (7) is provided with at least an outflow opening and at least one gas inlet opening (9) and wherein the dispenser (2) comprises a housing (4), wherein the housing (4) is provided with a receptacle (5) for receiving at least part of the container (3), wherein the container (3) is positioned in the dispenser (2) with the neck (7) and shoulder portion (8) facing downward, such that the neck portion (7) and at least part of the shoulder portion (8) are received in the receptacle (5), wherein part of the shoulder portion (8) extends close to and/or is in contact with a wall of the receptacle (5), wherein preferably a lid (12) is provided over the container (3), enclosing a part of the container (3) extending outside the receptacle (5).

Probable Assignee: HEINEKEN SUPPLY CHAIN BV

Earliest Publication Date: 20181122



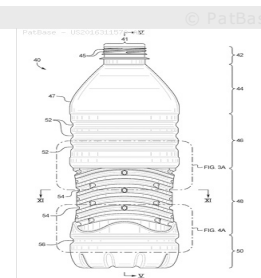
23) Family number: 63860319 (US2016311570 AA)

LIGHTWEIGHT CONTAINERS WITH IMPROVED LOAD RESISTANCE

Abstract: Source: US2016311570 AA Lightweight containers having improved stability and side- and top-loading features are provided. In a general embodiment, the present disclosure provides a first body portion with ribs having a constant depth and a constant width; a second body portion connected to the first body portion and having several undulating ribs, each undulating rib having a constant depth, a constant width, and at least one bridge member located within the width of its corresponding rib; and a third body portion connected to the second body portion and having at least one rib having a constant depth and a constant width. The structural features of the present containers advantageously provide for improved compression capacity and stability when compared to similar containers currently on the market.

Probable Assignee: NESTLE SA

Earliest Publication Date: 20161027



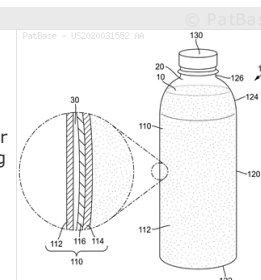
24) Family number: 77454038 (US2020031552 AA)

MULTI-LAYER BOTTLE

Abstract: Source: US2020031552 AA A multi-layer beverage container made is disclosed. An outer layer encloses an inner layer that is configured to shrink or flex to accommodate volume changes of a beverage inside the beverage container caused by a change in temperature of the beverage in the sealed beverage container. The inner layer is not attached to the outer layer through the majority of the beverage container, with attachment zones being located at selected areas of the outer layer. There is a space between the inner layer and the outer layer. A gas introduction system is provided in the space to maintain a desired gas pressure in the space. The set gas pressure allows outer layer to be designed without the need to resist deformation caused by reduced pressure due to changing volumes of the beverage.

Probable Assignee: PEPSICO INC

Earliest Publication Date: 20200130



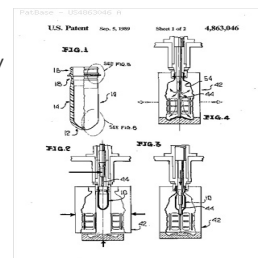
25) Family number: 15017727 (US4863046 A)

HOT FILL CONTAINER

Abstract: Source: US4863046 A A blow molded container which is formed of a polyester resin which has formation and shape characteristics wherein it may be hot filled with a liquid at a temperature on the order of 180 DEG -185 DEG F. with a maximum volumetric shrinkage of no greater than 1 percent. The container is formed from a specially configured injection molded preform which is initially stretched axially only on the order of 25 percent, after which the preform is inflated and blow molded within a blow mold to a configuration which resists vacuum collapse or paneling of the body.

Probable Assignee: GRAHAM PACKAGING PET TECHNOLOGIES INC

Earliest Publication Date: 19890629



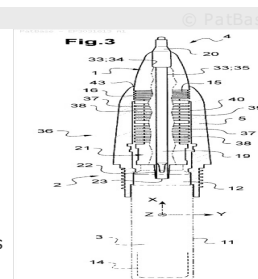
26) Family number: 62633588 (EP3031613 A1)

FELT TIPPED FEEDING ASSEMBLY AND WRITING INSTRUMENT FED FROM A STANDARD DISPOSABLE CARTRIDGE OF AQUEOUS INK

Abstract: Source: EP3031613 A1 The invention relates to a felt tipped feeding assembly (1) and writing instrument (2) fed from a standard disposable cartridge of aqueous ink (3). The writing instrument (2) includes the feeding assembly (1) that comprises at least: a writing point (4), a feeder and a hollow core (21) for connection to an ink container. An ink flow regulator (36) includes a cylindrical lengthwise bore (39) formed inside the writing instrument (2), e.g. calculated from fluid parameters of the water based ink like dynamic viscosity. The writing point (4) is integrated to a stem feeder (19) to form the frontwards end thereof; the ink container is a standard sized water based ink cartridge (3). The invention typically allows producing various types and shapes of writing instrument e.g. for drawing, marking and scriptural language, dedicated to various surfaces.

Probable Assignee: FLUIDWRITING LTD

Earliest Publication Date: 20160615



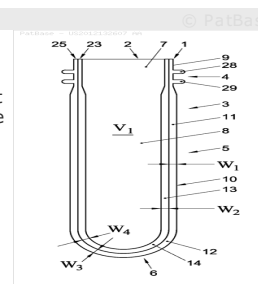
27) Family number: 48013901 (US2012132607 AA)

CONTAINER, PREFORM ASSEMBLY AND METHOD AND APPARATUS FOR FORMING CONTAINERS

Abstract: Source: US2012132607 AA Preform assembly (1) for blow moulding a container (20), comprising at least a first (2) and a second (3) preform, wherein the first preform (2) is positioned inside the second preform (3) before blow moulding the preforms into the container, wherein each preform has a body forming portion having a wall thickness of less than about 8 millimetres, preferably less than about 6 mm. A container blow moulded from the preform assembly and a method and an apparatus for forming the preform assembly are also disclosed.

Probable Assignee: HEINEKEN SUPPLY CHAIN BV

Earliest Publication Date: 20110104



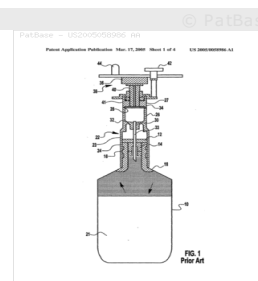
28) Family number: 31761821 (US2005058986 AA)

DETECTION OF MICROBIOLOGICAL GROWTH

Abstract: Source: US2005058986 AA According to the present invention, there is disclosed a method of stabilizing the output signal of a system that detects microbiological growth in a sealed sample container that contains a sample which may contain an unknown microorganism. One embodiment relates to a method of providing a sealed sample container which contains a fluid mixture of a culture broth, the sample, and at least one poisoning agent for stabilizing the base line pressure within a headspace above the fluid mixture in the sample container. By monitoring pressure changes within the headspace of the sealed sample container, the presence of microbiological growth within the sealed sample container as a function of the change of the pressure in the headspace is indicated.

Probable Assignee: TREK DIAGNOSTIC SYSTEMS INC

Earliest Publication Date: 20050317



29) Family number: 33122093 (US2006157438 AA)

PLASTIC CONTAINER WITH HORIZONTALLY ORIENTED PANELS

Abstract: Source: US2006157438 AA A molded polymeric container generally symmetric about a vertical axis includes at least two rows of panels disposed circumferentially around the body, the panels having central portions that are sufficiently flexible to be dimensionally responsive to changes in pressure within the container. At least one row of the panels has a margin having a horizontal width exceeding the vertical height, thus being laterally elongate with a height/width aspect ratio of less than one. The pressure responsive central portion of each laterally elongate panel is a smooth outwardly projecting dome from a peripheral root of a generally radially projecting wall defining the margins of circumferential rings and posts separating the panels. The outwardly projection domes of the laterally elongate panels can have a variety of shapes.

Probable Assignee: AMCOR RIGID PLASTICS USA INC

Earliest Publication Date: 20060720

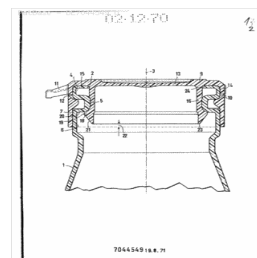


30) Family number: 16437652 (DE7044549 U)

Abstract: Source: DE7044549 U (Claim 1) Claims: 1 With a plastic fastener closed bottle, the closure has a cap that fits over the bottle opening and a seal against the inner wall of the neck has attached, the inside of the bottle down, preferably open cylinder, wherein the cylinder (16) one external bead (18) has, in which a distance from the mouth of the bottle inside the bottle have de-engages inner shoulder (5) of the bottleneck. Second

Probable Assignee: HOHENZOLLERN HUETTENVERWALT

Earliest Publication Date: 19710819



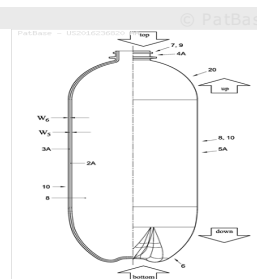
31) Family number: 56489095 (US2016236820 AA)

CONTAINER, PREFORM ASSEMBLY AND METHOD AND APPARATUS FOR FORMING CONTAINERS

Abstract: Source: US2016236820 AA Container comprising an inner container and an outer container with facing surfaces, wherein at least part of at least one of the facing surfaces has a surface roughness higher than about 0.1 Ra and/or wherein the difference in roughness of said facing surfaces is at least over a part more than about 0.1 Ra.

Probable Assignee: HEINEKEN SUPPLY CHAIN BV

Earliest Publication Date: 20140514



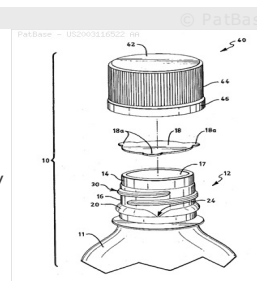
32) Family number: 28688909 (US2003116522 AA)

SELF-DRAINING CONTAINER NECK AND CLOSURE

Abstract: Source: US2003116522 AA A self-draining container neck and closure comprising a container neck having an upper sidewall portion and a lower sidewall portion, the upper sidewall portion being inset from the lower sidewall portion. The container neck also includes a tamper indicating bead having at least one draining notch therein. The instant invention also includes a closure having a plurality of drainage slots disposed in a spaced configuration. The closure is threadably connected to the container neck, the closure and container threads rotatably engage and provide a drainage path there between.

Probable Assignee: BERRY PLASTICS CORP

Earliest Publication Date: 20030626



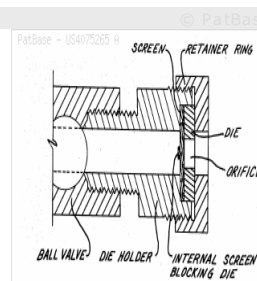
33) Family number: 6723796 (US4075265 A)

PROCESS FOR MAKING INSTANT SHAPED FOAMS

Abstract: Source: US4075265 A In a process for rapidly producing a substantially uniform, elongated, cellular thermoplastic article comprising rapidly discharging from a vessel a pressurized gel of a solid thermoplastic amorphous polymer and a gaseous solvent in an amount in the range of from about 25-100 percent by weight of said polymer, said solvent being capable of forming a flowable gel with the polymer when subjected to superatmospheric pressure, the improvement for shaping the article comprising restraining sufficiently the speed of flow of the gel from the vessel through a die to form the desired shaped article with the gel at ambient temperature in said vessel.

Probable Assignee: MONSANTO RES CORP

Earliest Publication Date: 19780221



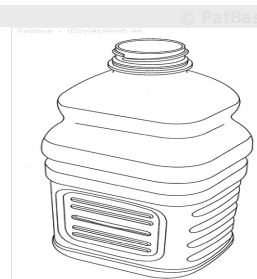
34) Family number: 30302331 (US2004164045 AA)

BASE HAVING A FLEXIBLE VACUUM AREA

Abstract: Source: US2004164045 AA A non-round base structure for a hot-fill plastic container provides the container with enhanced structural integrity. The base structure is roughly rectangular and is composed of a flexible vacuum absorbing area and a bearing edge which support the container in an upright position. The flexible vacuum absorbing area abates with a central ellipse shaped push-up, which is a concave surface. A series of ribs with an outward facing rounded edges are fashioned on the concave surface. The ribs extend outwardly from the center of the ellipse. The disclosed base structure enables the container to withstand the various forces encountered in filling, cooling and handling.

Probable Assignee: GRAHAM PACKAGING CO LP

Earliest Publication Date: 20040129



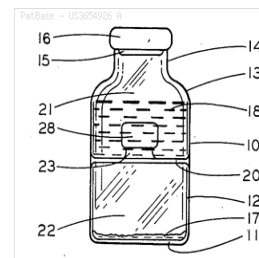
35) Family number: 442628 (US3654926 A)

MIXING VIAL

Abstract: Source: US3654926 A A pharmaceutical mixing vial having a separate axial compartments for storing dissimilar component medicaments, at least one of which comprises water suitable as a vehicle for injection. A wall between the compartments includes a needle-pierceable static seal or plug. In use, the operator having a hypodermic syringe invades the vial and takes up liquid in one compartment, transfers it to a different compartment for mixing there with the separate component, and in turn aspirates the dispenses the resulting mixture.

Probable Assignee: PARKE DAVIS AND CO





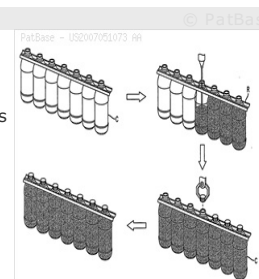
36) Family number: 46891883 (US2007051073 AA)

CONTAINER HANDLING SYSTEM

Abstract: Source: US2007051073 AA A system for processing a simplified plastic container (C) that is to be filled with a hot product includes the step of blow-molding parison to form a container body, where the container body has a neck, a base, a side surface relatively free of structural geometry that surrounds an interior of the container body and, prior to being filled with the hot product, a projection (12) extending from the container body. After the container body is filled with a hot product in a production line, the neck of the filled container body is capped with a cap and then, the container body is cooled. During the cooling operation, the hot product is contracted so that the projection extending from the container can be pushed (P) into the container body like a traditional push-up so that the resultant, filled and cooled container body is relatively free of structural geometry.

Probable Assignee: GRAHAM PACKAGING CO LP

Earliest Publication Date: 20070308



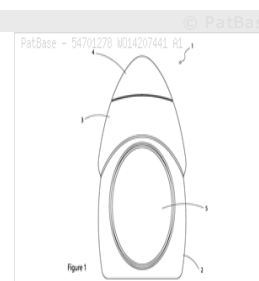
37) Family number: 54701278 (WO14207441 A1)

DEVICE FOR DISPENSING A SUBSTANCE

Abstract: Source: WO14207441 A1 A device (1) for controlled dispensing of a flowable substance comprising a chamber defined by at least one wall and having an outlet, wherein a portion of the at least one wall comprises a resilient diaphragm (5) operable to dispense a slug of the flowable substance from the chamber through the outlet.

Probable Assignee: BREEZE PRODUCT DESIGN LTD

Earliest Publication Date: 20141231



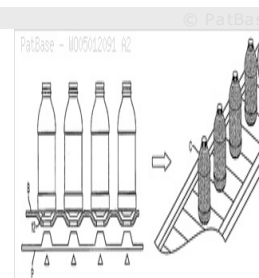
38) Family number: 46891821 (WO05012091 A2)

CONTAINER HANDLING SYSTEM

Abstract: Source: WO05012091 A2 A system for processing a simplified plastic container that is to be filled with a hot product includes the step of blow-molding parison to form a container body, where the container body has a neck, a base, a side surface relatively free of structural geometry that surrounds an interior of the container body and, prior to being filled with the hot product, a projection extending from the container body. After the container body is filled with a hot product in a production line, the neck of the filled container body is capped with a cap and then, the container body is cooled. During the cooling operation, the hot product is contracted so that the projection extending from the container can be pushed into the container body like a traditional push-up so that the resultant, filled and cooled container body is relatively free of structural geometry.

Probable Assignee: GRAHAM PACKAGING CO

Earliest Publication Date: 20050210



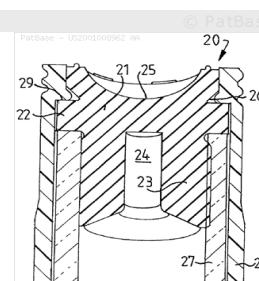
39) Family number: 28131548 (US2001008962 AA)

PREFILLED AMPOULES AND MANUFACTURE THEREOF

Abstract: Source: US2001008962 AA A syringe type ampoule having a) a barrel with a front end and a rear end defining an axis therebetween, the barrel having substantially constant cross-section between the front end and the rear end, at least the front end ending in an opening, b) a sealer attached to the front end and sealing the opening, c) at least one piston movably and sealingly arranged within the barrel and d) a sleeve extending along at least a part of the barrel, the sleeve having a front part and a rear part, the front part being connected to the sealer. The barrel has a front end terminating in an edge surrounding the opening, the edge having an outer circumference substantially equal to the barrel outer circumference. The invention relates to methods and means for manufacture of pre-filled such ampoules or other ampoules.

Probable Assignee: PHARMACIA AB

Earliest Publication Date: 19990401



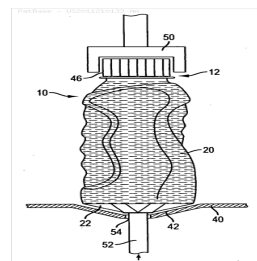
40) Family number: 49544926 (US2011210133 AA)

PRESSURE REINFORCED PLASTIC CONTAINER AND RELATED METHOD OF PROCESSING A PLASTIC CONTAINER

Abstract: Source: US2011210133 AA A plastic container comprises an upper portion including a finish adapted to receive a closure, a lower portion including a base, and a sidewall extending between the upper portion and the lower portion. The upper portion, the lower portion, and the sidewall define an interior volume for storing liquid contents. The plastic container further comprises a pressure panel located on the container and moveable between an initial position and an activated position. The pressure panel is located in the initial position prior to filling the container, and is moved to the activated position after filling and sealing the container. Moving the pressure panel from the initial position to the activated position reduces the internal volume of the container and creates a positive pressure inside the container. The positive pressure reinforces the sidewall. A method of processing a container is also disclosed.

Probable Assignee: CO2 PAC LTD

Earliest Publication Date: 20110901



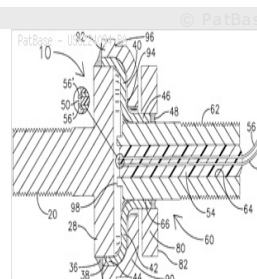
41) Family number: 30983587 (US6224094 BA)

FORCE SENSOR FOR SEAT OCCUPANT WEIGHT SENSOR

Abstract: Source: US6224094 BA A force sensor for sensing the weight of a vehicle seat occupant for a vehicle's occupant protection system has a pressure sensor responsive to hydraulic pressure resulting from axial force applied to the force sensor. A constant force spring in the form of a diaphragm with two flanges simultaneous functions as a seal, a constant force bias spring, an armature support resistant to radial forces and a piston for converting force to hydraulic pressure. Two studs receive applied force. An electrical insulator is sealed to the walls of a passage inside of one of the studs to provide electrical communication while sealing against liquid leakage. A pressure sensor is mounted on the electrical insulator and connected to electrical conductors in the insulator by stitch bonding. The diaphragm resists radial movement while allowing axial movement thereby making the sensor insensitive to radial forces. By being a constant force spring the diaphragm makes the sensor insensitive to temperature variations.

Probable Assignee: NORTON PETER

Earliest Publication Date: 20010501



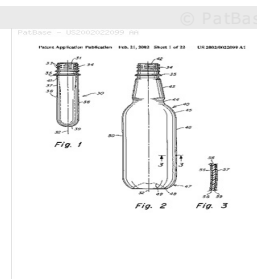
42) Family number: 28181033 (US2002022099 AA)

ENHANCED OXYGEN-SCAVENGING POLYMERS, AND PACKAGING MADE THEREFROM

Abstract: Source: US2002022099 AA Oxygen-scavenging polymers and packaging for holding oxygen-sensitive products. A heat treatment process has been found to significantly increase the oxygen-scavenging performance of the polymer. The enhanced scavenging polymer can be effectively incorporated into various packaging, including transparent multilayer containers for beer and juice. In one embodiment, a multilayer package made from the scavenger provides an actual reduction in oxygen content of a contents of the package, over a long period of time (e.g., 24 weeks). The package can be stored unfilled for an extended period (without significant loss of scavenging capability) and will scavenge substantially immediately upon filling with a liquid product. The package may incorporate a relatively low weight percentage of the scavenger, thus providing enhanced scavenging in a cost-effective manner.

Probable Assignee: GRAHAM PACKAGING PET TECHNOLOGIES INC

Earliest Publication Date: 19990802



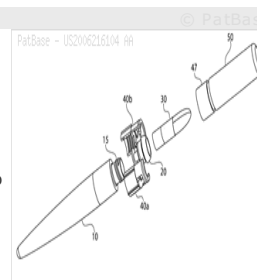
43) Family number: 33397270 (US2006216104 AA)

FLOW-THRU COSMETIC APPLICATOR PACKAGE

Abstract: Source: US2006216104 AA The present invention is a flow-thru cosmetic dispenser and applicator that comprises a means for controlling the flow of product from a reservoir to an applicator tip. The flow control means comprises wedge structures attached to biased hinges. The wedge structures move on the hinges in response to the removal or placement of a closure. The movement of the wedges alternately opens and pinches-off a deformable conduit in which the product flows. The invention includes means for converting any ordinary cosmetic container into a flow-thru container.

Probable Assignee: E L MANAGEMENT CORP

Earliest Publication Date: 20060928



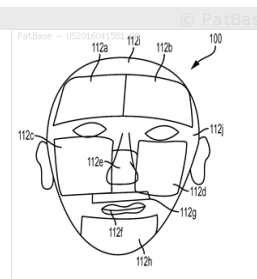
44) Family number: 61643609 (US2016041581 AA)

FLEXIBLE DISPLAY SCREEN SYSTEMS AND METHODS

Abstract: Source: US2016041581 AA A flexible display screen system and method includes an article that has a flexible material configured to cover at least a portion of a person's anatomy or at least a portion of an object. At least one flexible display screen is secured on the flexible material. A computer system is configured to provide image information for controlling a display of images on the flexible display screen. The computer system is configured to control the display of images on the flexible display screen in response to the sensor signal. The sensor may sense flexing of the flexible display screen or flexible material. Alternatively or in addition, the flexible display screen or flexible material may be controlled to flex, in response to the images displayed on the flexible display screen.

Probable Assignee: PICCIONELLI GREGORY A

Earliest Publication Date: 20160211



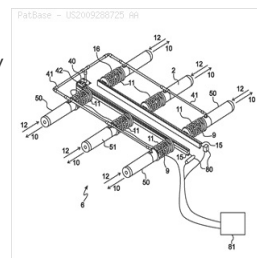
45) Family number: 44046386 (US2009288725 AA)

POSITION CONTROL APPARATUS AND METHODS

Abstract: Source: US2009288725 AA Particular embodiments of the inventive technology may be described as a position control apparatus that comprises a fluidic drive system configured to drive, with a single fluidic displacement, each of a plurality of positioners in a first relative direction; and a bias system that includes a plurality of biasers that bias the positioners in a direction that is opposite the first relative direction. In particular embodiments, and as but a few of the many possible design features, positioner actuators may be fluidically linked in parallel and with the fluid compressor, the positioner actuators may each include a piston; and a plurality of positioners may each be responsive to at least one of the pistons.

Probable Assignee: FLEXIBILITY ENGINEERING LLC

Earliest Publication Date: 20091126



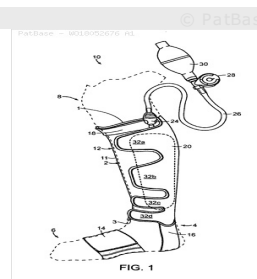
46) Family number: 68953566 (WO18052676 A1)

THERAPEUTIC COMPRESSION APPARATUS AND METHODS OF USE

Abstract: Source: WO18052676 A1 A therapeutic compression apparatus for providing pressure to a limb or other body part including a bladder assembly having at least one bladder within, a primary wrap and/or a secondary wrap. The primary wrap includes an inflation port to connect to an inflation means which provides either constant or varying pressure within the bladder and a check valve is included in the inflation port and/or inflation means.

Probable Assignee: SUN SCIENT INC

Earliest Publication Date: 20180322



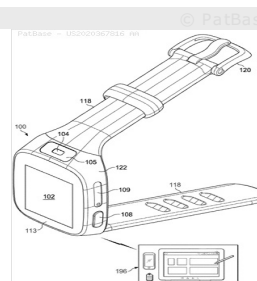
47) Family number: 77826246 (US2020367816 AA)

SMARTWATCH AND HYDRATION MONITOR

Abstract: Source: US2020367816 AA A system, method, and smartwatch for measuring hydration of a user. One or more optical and conductivity tests for a user are performed utilizing a smartwatch. Measurements are compiled from the testing. The measurements are analyzed to generate hydration information regarding the user.

Probable Assignee: VITALTECH PROPERTIES LLC

Earliest Publication Date: 20200227



blanket or mat, for example, to the right and to the left under the buttocks or U-shaped, and may be used in particular in the upper parts of the thigh can be placed, however, the slipping, the extra U-shaped device has the advantage that the distance of its parts, hardly changed while sitting experience. The inflatable device has the advantage that it is not inflated so that they can occupy small space may take virtually anywhere, also referred to as a pedestrian. Optionally, for example, U-shaped, for example, pumps with small integrated inflatable seat cushion instead of separate sub-device in another part device, which is one type of clothing, e.g., a pair of trousers, as described further below, may be integrated. Optional pumping apparatus, in accordance with less execution system, it may be integrated battery, which may include, for example, externally via devices with electromagnetic radiation, and/or may be recharged with an integrated energy source, e.g., solar cell coating, the use of kinetic energy, since it is not always when sitting still, and from this movement with devices and energy can be stored and provided in the battery obtained, and, if necessary, the device without current by hand. In the seating, a power supply may also be integrated, which - as described - in turn may be powered, for example by means of cables or, for example, by means of energy harvesting at a swivel chair at rotational movement of the chair, On- or off- or other adjustment possibilities of the chair, in the event of movement of a chair, for example from the rotations of rollers, on which the legs of the chair to the ground up, with the energy, not only can the U-shaped device be powered but also, by way of example, a massage of the back, upon request, or the swivel chair, the energy can be adjusted as desired or remotely controlled. Means coupled may be approximately as a substitute, e.g., a neck cushion device is seated on the seat. Instead of U-shaped device may have a varied form, for example in the form of a straight shape, which may be used only under the buttocks. The device on the seat may be too tight storage or pinches in particular of soft parts prevent further, many seats for large passenger seats may be so low, adversely increased. The inflatable seat support device causes more balancing motions in completing tasks in the seats, particularly muscular fitness, non-inflatable version may be relaxed, relaxing seats allow it may primarily be applied. The U-shape of the seat support device can allow you can sit relaxed times further to the rear of the buttocks - relaxed, reclining - time forward, wherein the two buttocks jaws only on the front part, the parallel portions of the U-shape, are located in the back sometimes ajar and - as far as pleasant, in particular not at a back door ajar, thereby back lots may be trained, for example, U-shaped etc...the seat support device, in a further embodiment a bicycle seat. There are bicycle saddles, from separate shells for the two saturated steep, which has the advantage over common-fifths with central part, that there is no pressure in the middle region, conceivable squeezing of soft tissue can be prevented. Disadvantage of a saddle with two separate shells for the two saturated steep is that the advantage of a front middle portion, namely that it is not possible to easily from the saddle slipping, because the center part this i.allg. is prevented. Inventive saddle is characterized in that it has two separate shells for the two buttocks flanges that no central portion, for example, conceivable soft parts may not be crushed, but with the addition of further forward a central part (the bottom is connected later to the saddle and/or further below) is connected to the wheel, and this additional central part further from may prevent that could easily from the saddle slipping. A further embodiment is that instead of two shells, a U-shaped saddle shape similar to that of the inventive U-shaped seat support is present. Part of the device, for example, at nighttime soft wadenkraempfen comprising preferably device, e.g., a fabric, e.g. approximately 50cm long, about 15cm wide and about 3cm high, e.g. for work and/or to relax while standing or sitting under the front parts of the feet or shoes. When daily, especially in the evening, some minutes the feet in this expanded position, this may be in particular in the case of patients experience severe enough to prevent painful nighttime Wadenkraempfen. This can be followed by one and/or the feet to sit in, e.g., as long as it is healthy, while for work completed, i.e. it saves time. Alternatively, an oblique to the toes toward rising increase in one embodiment of the invention. Footwear, or under a common fixed footwear, which is a few minutes, in particular, prior to go to bed, preferably may be a variable shape, it may be higher than at the rear alternately toes, or at a higher than on the other side, this can be controlled by means of engine-integrated mini computer or via Wi-fi via program or via Kraempfen App may be controlled, for example, to the side of lower legs, etc...All devices of the invention may experience according to prevent users on sale, for example with personally relaxing image motifs or, for example, a heart in heart region disorders in the inventive soft devices, resulting, for example, dementia patients, for which purpose they can be used to remember, or, e.g., according to Choice of users, in some cases with lettering, e.g. name of the user, or "re-lax", "expands", "Sport-Ierin" or "athletes", etc., in particular terms, which are explained in the description of the NutzerIn.Patient, inventive footwear -a kind of footwear, optionally with locally variable height, resulting, for example, at nighttime wadenkraempfen by tags, in particular in the evening some minutes adjusted increase from under the toes may cause no wadenkraempfe automatically according to experience more lateral kraempfe occur at the lower part of the leg likewise no longer laterally, e.g. by increasing the device under the sole has an actuator system and fixing screws, having e.g. a bottom surface located on the bottom of this shoe plant including variable straight and angled in different directions, the invention may secure footwear is above the sole, on The foot rests of a front fixed part, which like at fixed footwear, e.g., someone else on the toe protects the toe, which in particular for example in the case of toe nails could lead to diseases (growth of nails, inflammations, etc.), and for remaining portion preferably as at Sandals open air at the feet, for example in the case of faster healing disorders and weld toes accumulation, humidity, for example, which in turn may prevent infections be prevented to toe, etc.).

Probable Assignee: AGNOTOS ANDREAS

Earliest Publication Date: 20200213